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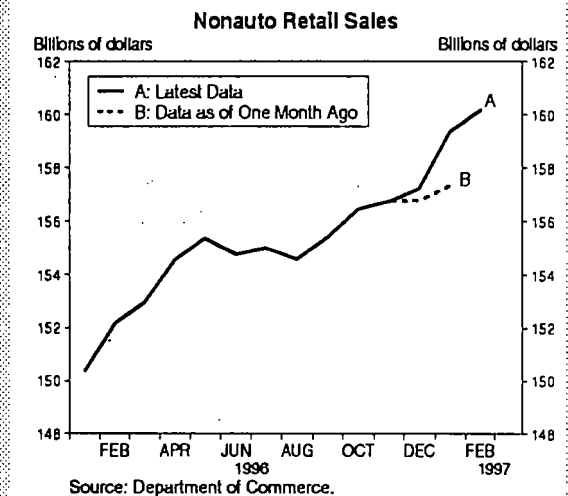
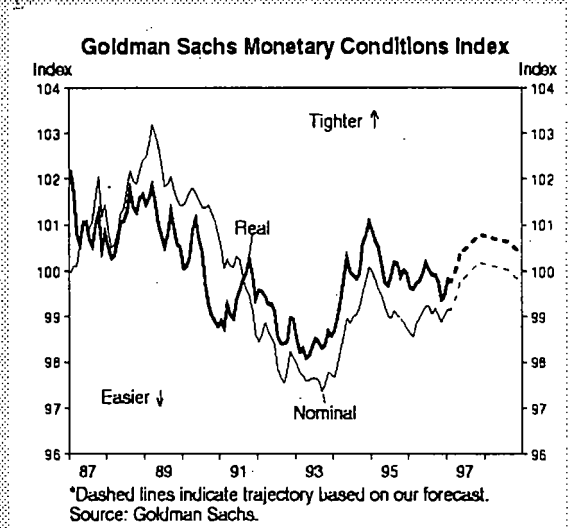
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**Goldman  
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# U.S. Economics Analyst

## Five Reasons to Expect Prompt Fed Tightening

- We continue to expect a 25-basis-point tightening of monetary policy at the March 25 FOMC meeting. Chairman Greenspan's assessment that inflation risks are increasingly skewed to the upside coupled with his commitment to a preemptive interest rate strategy suggest that the central bank will finally act on the policy bias they have maintained consistently since last July.
- There are five specific pillars supporting our judgment that rates must rise: (1) Real growth remains solidly above trend; (2) This strength is likely to persist; (3) Monetary policy does not appear tight at present; (4) Wages already are displaying a gradual acceleration; and (5) Higher pay awards are apt to cause a modest pickup in core price inflation.
- Current circumstances differ notably from those present when the Fed chose not to tighten last September. In particular, data on retail purchases in January and February were exceptionally strong, implying that overall real personal consumption growth has accelerated further this quarter, to about 4.5% at an annual rate. Six months ago, by contrast, consumption gains had all but stalled.
- Robust consumer activity reports have led us to revise upward our estimate for annualized first quarter GDP growth, from 2.6% to 3.5%. In addition, strong demand has pushed inventory-to-sales ratios down even further, despite solid production gains. This bodes for a continuation of relatively brisk growth later this year.



## Trade Recommendations

- Close out long June '97/June '98 Eurodollar futures calendar spread positions.
- Shift outright short Eurodollar positions from the December 1997 to the June 1997 contract. Set stops at 94.30 with a target of 93.75.

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**Issue No: 97/11  
March 14, 1997**

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## I. Weekly Wrapup

### Economic and Market Overview

Investors in U.S. securities markets remained uneasy this week, faced with uncertainty about the prospects for Fed tightening at the March 25<sup>th</sup> FOMC meeting. The disquietude made for volatile trading, and ultimately caused downward adjustments in both bond and stock prices. By week's end, bond investors had pegged the chances of a March rate hike at approximately 50%, a probability assessment that we view as still too low.

Data during the week underscored the view that economic momentum is building and that household demand is firmly rooted. February retail sales figures suggest that spending thus far this quarter has been quite a bit stronger than previously thought. Revisions to January retail data reveal growth in that month of 1.5% overall and 1.4% in the nonauto group, versus earlier estimates of 0.6% and 0.4%, respectively. These January gains were then supplemented by a solid pace of sales growth in February, at 0.8% overall and 0.5% excluding motor vehicles. These data have pulled the trend pace of real spending in the first quarter up to about 4.5%, causing us to raise our sights for GDP growth in that period to 3.5% (annual rate), versus 2.6% previously.

With such healthy demand conditions as a backdrop, industrial production rose 0.5% in February, despite a 3.5% decline in utility output that reflects unseasonably warm weather. Manufacturing output posted a 0.8% rise, bringing the factory utilization rate to 82.5%, one of the highest readings of the last fifteen months. Still, solid output gains were unable

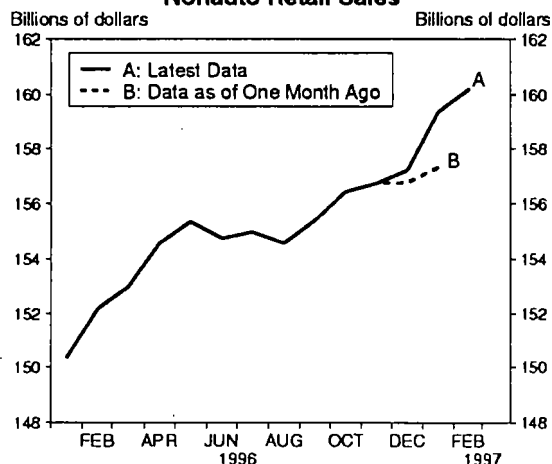
to match the rapid pace of sales, resulting in sharply lower inventory-to-sales ratios. In the retail arena, for example, nonauto goods stocks stand at their lowest level relative to sales since late 1983.

Despite clear strength in both demand and production, domestic goods pricing remains strikingly restrained. In February, large declines in food and energy quotes, alongside only small changes in other areas, caused the producer price index to decline 0.4% overall and 0.1% in the core.

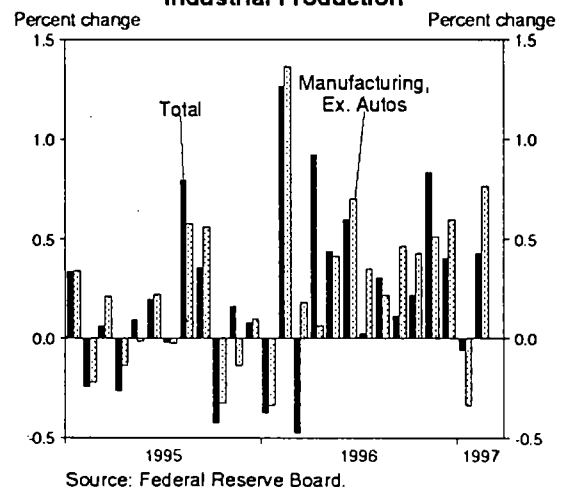
### Federal Reserve Policy

In the runup to the March 25<sup>th</sup> FOMC meeting, commentary by Federal Reserve officials will likely be scrutinized even more closely than usual. A recent remark by Robert McTeer, President of the Federal Reserve Bank of Dallas, suggesting that the Fed is not yet ready to raise interest rates was given much attention. Yet, as discussed on pages 4-6, it is important to remain focused on Chairman Greenspan's statements, as he has been shown to hold enormous sway in molding Fed policy. For instance, while it was clear last fall that a number of regional Fed bank presidents were inclined toward a rate rise, no hike materialized, suggesting that the Chairman remained unconvinced of the need to tighten policy. Now, by contrast, official comments from the Fed chief convey a growing concern about the inflationary risks inherent in several developments, including gains in financial asset markets and continued momentum in economic activity. Moreover, Dr. Greenspan has agreed to testify before the Joint Economic Committee on March 20<sup>th</sup>, just five days

**Nonauto Retail Sales**



**Industrial Production**





prior to the FOMC meeting. It is worth recalling that this was precisely the forum he used in January 1994 to prepare financial markets for an imminent tightening of policy.

### Fiscal and Political Developments

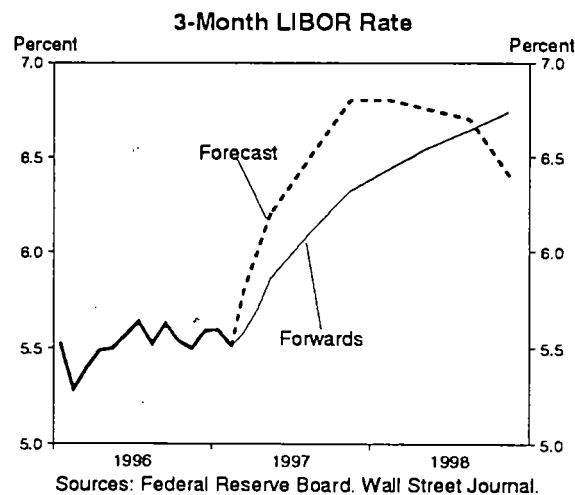
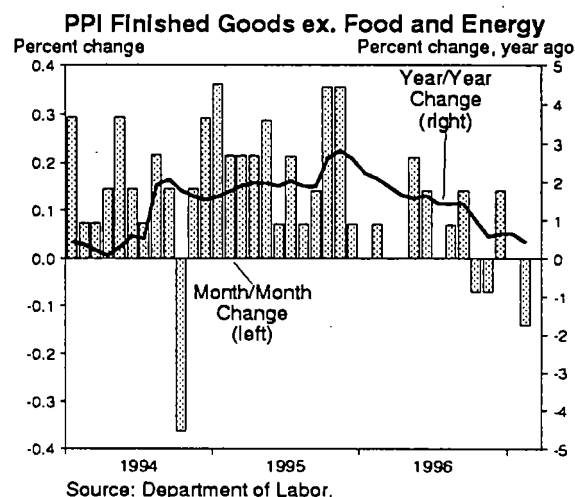
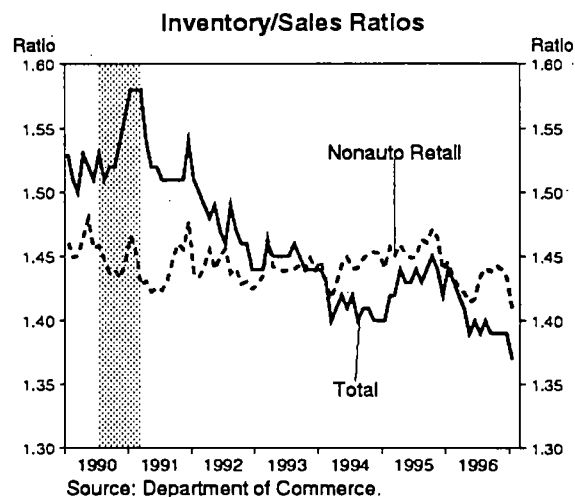
Budget talks between Congress and the White House have hit the rocks in recent days, and may prove difficult to salvage. The atmosphere began to deteriorate last week when the Congressional Budget Office announced that its calculations imply a much larger-than-expected deficit in fiscal 2002 under the Clinton administration's plan. Then, in a second serious blow, the Administration backed away from the idea of a panel to specify future downward adjustments to the Consumer Price Index. This decision makes it much harder to plug the wide gap between White House and CBO budget estimates. It also has angered key lawmakers, who were counting on President Clinton to lend some political cover for their efforts in this highly sensitive area, which touches on both Social Security benefits and income tax brackets. These developments have further deepened the distrust that congressional officials hold for any fiscal dealings with this White House, elevating the risk that the leadership will forego further efforts at a bipartisan accord in favor of writing their own budget in a piecemeal fashion.

### Market Outlook and Comments on Value

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

With a rate rise likely to occur at the FOMC meeting just 11 days from now, we recommend closing long positions in the June '97/June '98 Eurodollar futures calendar spread. If the Fed tightens this month, the June 1997 Euros should weaken significantly as market participants begin discounting a high probability of one or more additional rate hikes before the end of summer. In fact, we now would advocate shifting short positions in December 1997 Euro contracts forward into June 1997 Euros, on the basis that the market still assigns a lower probability to a swift tightening than we believe is appropriate.

At this point, we prefer to stay uncommitted in the bond sector, although our preference remains to look for an opportunity to get short. Bond yields have already risen a great deal in recent weeks, but may continue to escalate as investors gain a fuller appreciation for the degree of upward momentum the U.S. economy presently enjoys.





## II. Five Reasons To Expect Prompt Fed Tightening

Federal Reserve officials appear poised to initiate a credit tightening very soon, probably at the March 25 FOMC meeting. In his latest monetary policy report to Congress, Chairman Greenspan was clear in stating that the risks on inflation are tilted to the upside, and that interest rate increases must be undertaken before price pressures become visible, given long lags in their effects on business conditions.

In our view, the time for such a program of monetary restraint has arrived. There are five principal grounds for this conclusion: (1) U.S. economic growth has been maintained at a solid above-trend pace in recent months; (2) Leading indicators of business activity suggest that similarly robust expansion will persist for some time; (3) The behavior of interest-sensitive economic sectors and pricing in financial asset markets imply an unrestrictive monetary posture at present; (4) An upward trend in labor costs is increasingly evident; and (5) Stronger compensation gains are likely to slowly leak into pricing decisions.

Factors which deterred central bankers from hiking rates last summer and fall have gradually fallen away. Whereas final demand—and consumer spending in particular—slumped in the third quarter of 1996, the latest signals on domestic spending have been strong. With the formal bias toward tightening already 8 1/2 months old, it is not clear what would be gained from delaying action another eight weeks.

### Five Reasons For The Fed To Tighten Soon

#### 1. Economic Growth Remains Well Above Trend

Upward momentum in business activity has continued this quarter, led by broad gains in final demand. In particular, the pace of consumer spending seems to be intensifying. In the wake of sturdy preliminary consumption figures from January and an exceptionally robust February retail sales report, personal consumption looks likely to climb about 4.5% at an annual rate this quarter, following a 3.4% fourth-period increase. The strength in spending is well supported by trends in jobs and income as well as buoyant consumer confidence. Over the past three months payroll employment has expanded an average of 272,000, versus 193,000 per month in the prior half year. Declining unemployment claims reinforce the impression of a pickup in net hiring, which has bolstered the pace of real income gains. Meanwhile, all major consumer polls

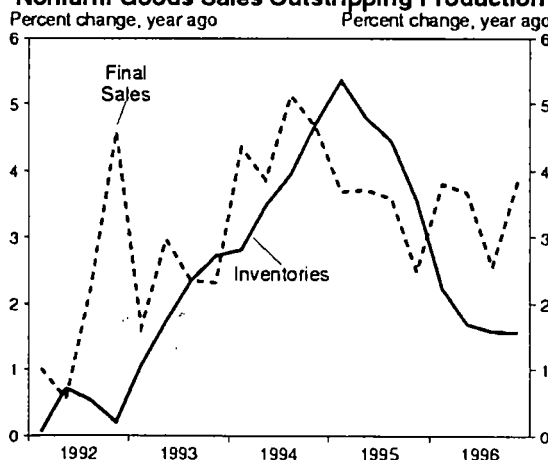
show the most optimistic attitudes about job availability and medium-term finances in years.

Other sectors of the economy also appear to be sturdy. Business fixed investment should remain on a positive course given high profitability and rising utilization rates. Consistent with this outlook, new orders for capital goods other than aircraft jumped 3.9% in January, reversing declines in the prior two months, and real nonresidential private construction outlays in January were already 1.4% (not annualized) above the fourth-quarter average. The housing industry continues to display surprising strength, as new single-family home sales in the past three months were the highest in over a decade.

#### 2. Leading Indicators Imply Continued Strength

There are good reasons to believe that GDP will sustain this momentum for quite some time. In particular, unfilled order backlogs are swelling and inventories are unusually lean. Order backlogs surged 0.9% in January and are 6.2% higher than a year ago, while real nonfarm stocks accumulated at only a \$18.4 billion annual rate last quarter, revised down from the initial estimate of \$31.9 billion. The gap between year-to-year growth in sales and inventories of nonfarm goods is at the widest point in four years. Purchasing managers, moreover, have indicated that these trends intensified in February; their national index of new orders leaped to 57.7%, while inventories dropped to 41.2%, toward the bottom end of the range seen since

#### Nonfarm Goods Sales Outstripping Production



Source: Department of Commerce.



late 1991. Stock levels are very low for homebuilders as well; the seasonally-adjusted supply of unsold new units dropped 10.8% between July and January, and the supply of new dwellings is about 20% below the normal 6.0-6.5 month range.

Longer-leading indicators such as the performance of equity prices and broad monetary aggregates also point toward a maintenance of solid broad expansion. The Standard and Poor's 500 stock index has risen 22.9% in the past 12 months and soared 71.6% since the beginning of 1995. Annualized growth over the past six months in M2 and M3, meanwhile, has quickened to 5.4% and 8.3%, respectively.

### 3. Scant Evidence of Monetary Restraint

Neither activity developments in the most interest sensitive economic areas (such as housing and durable-goods consumption) nor the current status of financial asset valuations are suggestive of a restrictive credit environment in the U.S. Despite weak economic growth abroad, federal fiscal restraint, and a drag from inventory investment, the economy has grown 3.2% over the past four quarters. Business and financial market sectors that are most closely associated with monetary policy have all performed in precisely the opposite way one would expect if policy were restrictive. Housing demand is up, stock prices have exploded upward, and yield spreads between Treasury debt and that of non-investment-grade corporations are very thin.

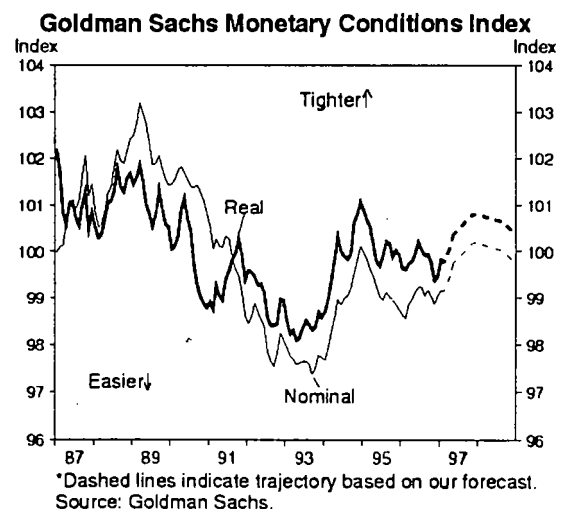
To be sure, the differential between the Federal funds rate and the trailing 12-month change in core retail prices—now 2.75%—is about 1% wider than a 40-year historical average. This spread, however, is very volatile over time, with one standard deviation around the mean since 1960 equal to 2.2 percent. This means that the current reading is less than half of a standard deviation above the mean, hardly a difference of statistical significance. In addition, there are good reasons why this spread should be wider today than the average in the 1950s and 1960s. Financial deregulation and global interlinked capital markets imply somewhat higher U.S. real interest rates than in the more tightly regulated earlier eras, while higher share prices have reduced the equity cost of capital, a consequence of which should be an offsetting increase in equilibrium real interest rates. Finally, it would

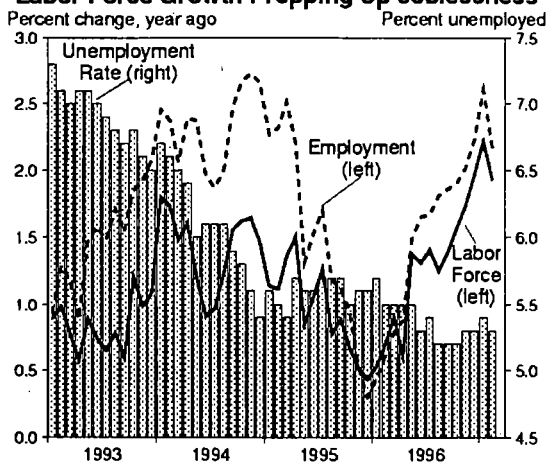
be dangerous to assume that the level of real interest rates associated with neutrality is invariant within the business cycle. When utilization rates and confidence are high, a wider spread between interest rates and inflation may be needed to keep economic growth on a trend path.

Consistent with these interpretations, the Goldman Sachs Monetary Conditions Index for the U.S. is still hovering at close to a neutral level. Assuming our forecasts for money-market rates and bond yields over the next year prove accurate, the GSMCI will move into restrictive territory, but not to the degree experienced during either of the last two major tightening episodes (1988-1989 and 1994-1995).

### 4. Wage Pressures Already Are Apparent

Both average hourly earnings and the employment cost index for wages and salaries are slowly gaining speed, suggesting that the labor market has tightened beyond the point at which labor costs can be expected to hold steady. Moreover, if the economy continues to expand faster than its long-term average the unemployment rate is likely to decline further, intensifying strains on labor resources. This would risk an even faster acceleration in the pace of pay awards. Throughout 1996, the decline in joblessness was retarded by an unusually rapid growth in the labor force (2.0% over the 12 months ending last December). Unfortunately, it is doubtful that this will continue, because the number of discouraged workers available to augment the labor supply has fallen quickly, reducing the pool of potential re-entrants.



**Goldman  
Sachs****Labor Force Growth Propping Up Joblessness****5. Labor Costs Likely To Push Up Core Inflation**

If the pace of wage inflation continues to increase, it appears inevitable that some of these cost pressures will leak into prices, for three reasons. First, productivity trends almost never improve late in a business expansion, by which time the highest-quality resources have already been absorbed. Thus, it will be difficult to enhance output per hour so as to neutralize the upward pressure on unit labor costs from compensation gains. Second, special factors that helped suppress inflation in 1996, such as rapidly declining computer prices and falling medical care inflation, are not likely to persist to the same degree in 1997. Third, much of the improvement in the core CPI over the past two years has been an illusion created by changes in the Bureau of Labor Statistics methodology that lowered the inflation rate but did not apply retroactively.

**Current Period Different From Last Fall**

Last September, Chairman Greenspan and the rest of the FOMC elected to keep rates steady despite widespread expectations of a rate rise. Conditions at that time, however, were significantly different than at present, particularly with regard to trends in consumer activity and other key demand components. To be sure, Fed policy makers have retained an official expectation that GDP growth will slow substantially, toward a 2.0% annual rate from the recent 3.0%-3.5% average—the same view they held last summer. The major difference between now and then is that consumer outlay growth has remained vigorous, whereas such demand virtually stalled in the third period. Taking this together with the unexpected rebound in spending last quarter, there

should be much less comfort now with the forecast of an early return to trend growth. Additionally, the potential for an improvement in economic conditions overseas seems improved versus six months ago, with activity reports from the European continent as well as Japan displaying a modestly firmer tone.

**Further Delay Difficult To Justify**

Against this background, in our view it will be difficult for the FOMC members to provide a clear and convincing rationale for leaving short-term interest rates unchanged another eight weeks (the next scheduled policy gathering is on May 21). This is particularly true because Fed officials have already expressed a bias toward policy tightening for 8 1/2 months without taking any action. According to our records, this marks by far the longest period in the modern era of effective interest rate targeting (which began in late 1982) that the central bank has expressed a consistent policy leaning without changing rates; indeed, the previous record was less than half the duration of the current interval.

**Periods of Fed Policy Bias Without Action  
(1983-Date)**

| Period                      | Formal Bias Toward | No. of Days |
|-----------------------------|--------------------|-------------|
| Feb 9 - May 23, 1983        | Easing             | 104         |
| Nov 15, 1983 - Jan 30, 1984 | Tightening         | 77          |
| Feb 11 - Apr 8, 1987        | Tightening         | 56          |
| Aug 16 - Nov 22, 1988       | Tightening         | 99          |
| Aug 22 - Oct 15, 1989       | Easing             | 55          |
| Aug 21 - Oct 28, 1990       | Easing             | 69          |
| Feb 5 - Apr 8, 1992         | Easing             | 64          |
| Oct 6 - Dec 22, 1992        | Easing             | 78          |
| May 18 - Aug 16, 1993       | Tightening         | 91          |
| July 3, 1996 - Date         | Tightening         | 255         |

Only five days ahead of the FOMC meeting, on Thursday, March 20, Chairman Greenspan will deliver yet another set of remarks to lawmakers, this time at a Joint Economic Committee hearing. It is our expectation that he will repeat, or perhaps even heighten, his warnings about the potential for an early rate hike, just as he did in front of the same panel on January 31, 1994, four days before the last tightening round was commenced.

**Bill Dudley****John Youngdahl**



## Key U.S. Economic Data

|                                            | Latest Monthly Data |         |         |         | 6 Mo  | 12 Mo | Next    |
|--------------------------------------------|---------------------|---------|---------|---------|-------|-------|---------|
|                                            | '97 Feb             | '97 Jan | '96 Dec | '96 Nov | Trend | Trend | Release |
| Nonfarm Payrolls (ch. Thousands)           | 339                 | 247     | 231     | 181     | 210   | 228   | Apr 4   |
| Unemployment Rate (%)                      | 5.3                 | 5.4     | 5.3     | 5.3     | 5.3   | 5.3   |         |
| Index of Hours Worked (% ch)               | 2.7                 | -1.6    | 0.8     | 0.8     | 5.8   | 3.9   |         |
| Average Hourly Earnings (% ch)             | 0.2                 | 0.2     | 0.4     | 0.8     | 3.7   | 3.8   |         |
| Producer price finished goods index (% ch) | -0.4                | -0.3    | 0.6     | 0.1     | 1.4   | 2.2   | Apr 11  |
| Excluding food and energy                  | -0.1                | 0.0     | 0.1     | -0.1    | 0.0   | 0.4   |         |
| Consumer price index (% ch)                | --                  | 0.1     | 0.3     | 0.3     | 2.9   | 3.0   | Mar 19  |
| Excluding food and energy (% ch)           | --                  | 0.1     | 0.2     | 0.2     | 2.3   | 2.5   |         |
| Retail sales (% ch)                        | 0.8                 | 1.5     | 0.5     | -0.1    | 8.6   | 5.1   | Apr 11  |
| Excluding motor vehicles (% ch)            | 0.5                 | 1.4     | 0.3     | 0.2     | 7.4   | 5.4   |         |
| Industrial Production (% ch)               | 0.4                 | -0.1    | 0.4     | 0.8     | 3.9   | 3.8   | Apr 16  |
| Manufacturing                              | 0.8                 | -0.3    | 0.6     | 0.8     | 4.5   | 4.3   |         |
| Capacity utilization (%)                   | 83.3                | 83.2    | 83.5    | 83.4    | 83.2  | 83.2  | Apr 16  |
| Manufacturing                              | 82.5                | 82.1    | 82.5    | 82.4    | 82.3  | 82.2  |         |
| Housing Starts (annual rate, thousands)    | --                  | 1350    | 1323    | 1486    | 1425  | 1466  | Mar 18  |
| Single-family                              | --                  | 1108    | 1005    | 1133    | 1120  | 1150  |         |
| Trade balance (billions, monthly)          | --                  | --      | -10.3   | -7.9    | -10.0 | -9.4  | Mar 20  |
| Merchandise                                | --                  | --      | -16.6   | -14.3   | -16.1 | -15.5 |         |
| Factory Orders (% ch)                      | --                  | 2.5     | -1.5    | -0.5    | 3.8   | 5.2   | Apr 2   |
| Durable Goods                              | --                  | 3.6     | -1.8    | -1.7    | 2.8   | 4.5   | Mar 26  |
| Personal Income (% ch)                     | --                  | 0.3     | 0.7     | 0.6     | 5.9   | 6.1   | Mar 31  |
| Wages and Salaries                         | --                  | -0.1    | 1.1     | 0.8     | 6.7   | 6.9   |         |
| Purchasing Managers' Index (%)             | 53.1                | 52.0    | 53.8    | 52.4    | 52.2  | 51.3  | Apr 1   |
| Consumer Sentiment U Mich (Feb 66=100)     | 99.7                | 97.4    | 96.9    | 99.2    | 97.4  | 95.2  | Mar 28  |
| Conference Board (1985=100)                | 118.4               | 118.7   | 114.2   | 109.5   | 113.3 | 108.8 | Mar 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

- Fed Chairman Greenspan will deliver one more round of congressional testimony prior to the March 25 FOMC meeting, this time before the Joint Economic Committee (March 20). He is unlikely to temper, and may well intensify, his warnings about the possibility of an early monetary tightening.
- Consumer prices are expected to rise 0.2%, both overall and excluding the food and energy groups (March 19). The core figure should be held down somewhat by a decline in apparel quotes.
- The trade deficit likely widened again in January, in part reflecting a reversal of the statistically suspect narrowing posted early in the fourth quarter of last year (March 20). The January surge in wholesale inventories hints that imports are reaccelerating.
- Housing starts should record strong gains for February for several reasons, including warm weather, robust new home sales volumes, low stocks of unsold dwellings, and a rebound from flood-depressed activity in the West (March 18).

### Economic Releases and Other Events

| Date       | Time  | Indicator                     | Estimate    |             | Last Report |
|------------|-------|-------------------------------|-------------|-------------|-------------|
|            |       |                               | GS          | Consensus   |             |
| Tue Mar 18 | 8:30  | Housing Starts (Feb)          | +12.0%      | +5.2%       | +2.0%       |
| Wed Mar 19 | 8:30  | Consumer Price Index (Feb)    | +0.2%       | +0.2%       | +0.1%       |
|            |       | Excluding Food & Energy       | +0.2%       | +0.2%       | +0.1%       |
| Thu Mar 20 | 8:30  | Trade Balance (Jan)           | -\$11.6 Bil | -\$10.3 Bil | -\$10.3 Bil |
|            | 10:00 | Philadelphia Fed Survey (Mar) | +15.0%      | +18.0%      | +17.4%      |
| Fri Mar 21 | 2:00  | Federal Budget Balance (Feb)  | -\$47.5 Bil | -\$43.0 Bil | -\$44.3 Bil |

- Homebuilders' Survey (Mon, Mar 17)
- Treasury Announces 2- and 5-Year Notes (Tue, Mar 19 - 2:30)
- Greenspan Testifies to the Joint Economic Committee (Thu, Mar 20 - 10:00)
- Import and Export Prices (Fri, Mar 21 - 10:00)
- Treasury Announces 1-Year Bill (Fri, Mar 21 - 2:30)

### Interest Rates: Forecast vs. Forward Yields:

|              | 3 mo | 6 mo | 12 mo |
|--------------|------|------|-------|
| LIBOR 3 mo   | 5.8% | 6.2% | 6.8%  |
| Forward      | 5.8  | 6.1  | 6.4   |
| 2 Yr T-Note  | 6.2  | 6.5  | 7.0   |
| Forward      | 6.4  | 6.5  | 6.7   |
| 10 Yr T-Note | 6.7  | 7.0  | 7.2   |
| Forward      | 6.8  | 6.8  | 6.9   |

### Key Numbers in the Business Outlook

|                    | 1996  | 1997 |      | 1996  | 1997E |
|--------------------|-------|------|------|-------|-------|
|                    | Q4    | Q1E  | Q2E  |       |       |
| Real GDP           | 3.9%  | 3.5% | 3.4% | 2.4%  | 3.3%  |
| Ind. Prod., Mfg.   | 4.6   | 3.8  | 4.6  | 2.8   | 4.5   |
| CPI                | 3.3   | 3.6  | 2.8  | 2.9   | 3.2   |
| After-Tax Profits* | 10.9E | 6.9  | 7.4  | 15.1E | 5.0   |
| Unemployment       | 5.3   | 5.3  | 5.1  | 5.4   | 5.1   |

\* Excluding inventory profits; adjusted for depreciation distortions.

TO: Gene Sperling  
White House

FROM: Gaia Federiconi  
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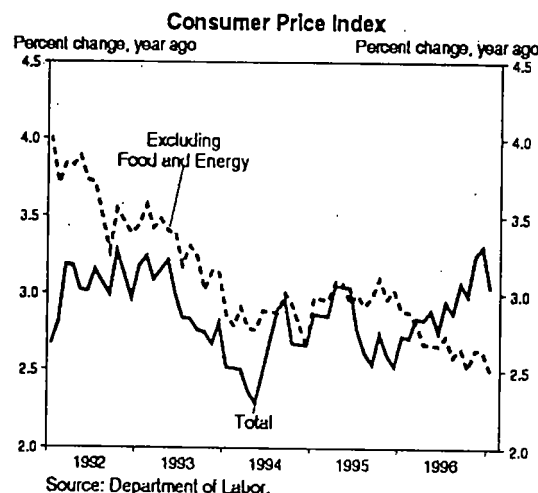
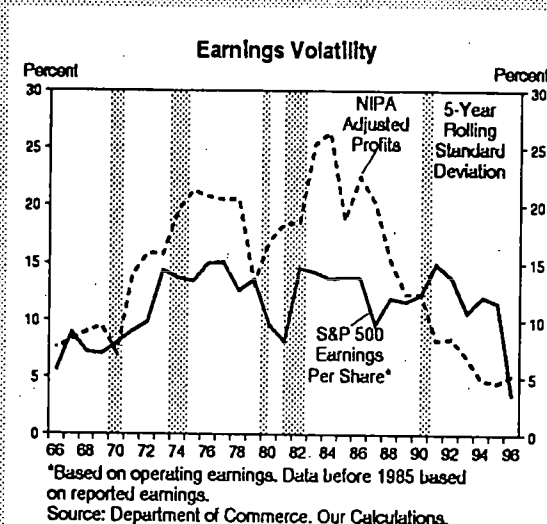
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## The Equity Risk Premium and the Brave New Business Cycle

- Structural changes in the economy such as just-in-time inventory management and financial market deregulation have generated a brave new business cycle—one characterized by longer economic expansions and less frequent recessions.
- This development, in turn, has led to lower earnings volatility and improved earnings visibility, which has reduced the relative volatility of equity prices versus bonds.
- Thus, the narrowing of the equity risk premium that has helped to generate the sharp advance in equity prices over the past few years has a more solid foundation than commonly perceived. Support for a narrower equity risk premium also calls into question the conventional wisdom that the U.S. equity market is overvalued.
- The economic news continues to have a relatively firm tone, with initial claims indicating a tight labor market and retail chain store surveys revealing a rebound in consumer spending.
- At the same time, the inflation news remains remarkably good. The modest 0.1% uptick in consumer prices in January, both overall and excluding food and energy, means that Fed policymakers still lack the "smoking gun" to justify a tightening of monetary policy.
- In this regard, Chairman Greenspan's Humphrey-Hawkins testimony on Wednesday, Feb 26, will be scrutinized for clues about his inclinations towards the timing and magnitude of any potential future monetary policy tightening.



### Trade Recommendations

- Stay long the June '97/June '98 Eurodollar future calendar spread, with a stop on a close below 35 basis points and a target of 90 basis points.
- Stay short December 1997 Euro futures, moving stop down to a close above 94.15 from 94.25.

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**Issue No: 97/8  
February 21, 1997**

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# I. Weekly Wrapup

## Economic and Market Overview

Despite surprisingly slim retail price gains in January, U.S. bond and share prices have sagged over recent days amid concerns that Chairman Greenspan will shortly send another cautionary message about the monetary policy outlook. By themselves, the latest inflation statistics suggest no pressure for an early credit tightening, as the consumer price index edged up only 0.1% last month both overall and excluding the food and energy components. At 2.5%, the year-to-year change in the core CPI marks another new low for this business expansion, reinforcing impressions of a benign pricing environment.

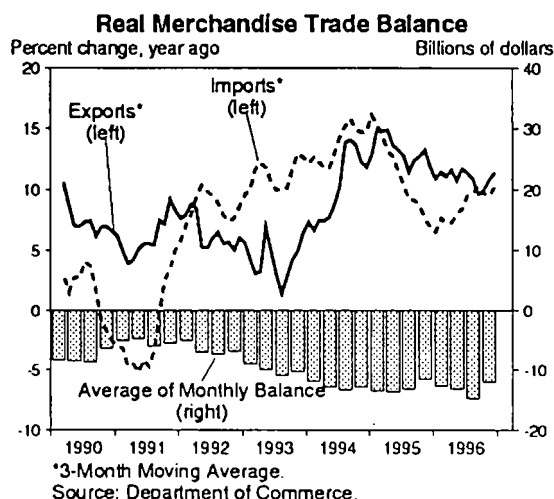
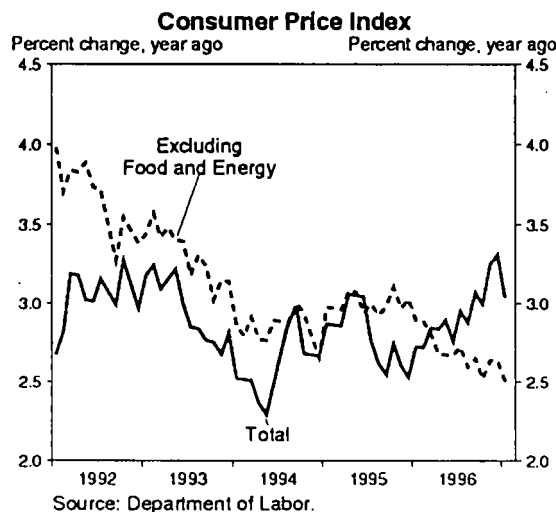
Economic activity, however, appears to have retained significant positive momentum in the first weeks of the new year. While housing starts rose only 2.0% in January after an 11.0% plunge the prior month, new construction likely has been suppressed temporarily by unseasonably cold temperatures in much of the country. A lean stock of unsold new dwellings, favorable mortgage financing terms, and a recent rise in traffic at housing developments all bode well for a rebound in starts before long. A widening of the trade gap in December, to \$10.3 billion, was not surprising given the very low deficits recorded in October and November, as well as a previously-reported surge in petroleum imports. Meanwhile, there are numerous indications that strong hiring patterns have persisted this quarter. Weekly initial jobless claims hovered below 310,000 during the first half of February, exceptionally low readings for a period without holidays or other obvious distorting influences. Consistent with this sign of a reduced

layoff rate, manufacturers in the Philadelphia and Kansas City Fed bank surveys reported a sharp rise in expectations for employment growth over the next six months. The firmness in the labor markets also appears to be lending support to consumer spending. Both the Johnson Redbook and the Mitsubishi chain store sales surveys showed sizable advances in the latest week.

## Federal Reserve Policy

Low and stable current inflation trends make it doubtful that Chairman Greenspan will signal an imminent interest rate hike when he testifies before the Senate and House Banking Committees on February 26 and 27, respectively. It is likely, though, that he will once again warn against an assumption that wage and price gains will stay subdued indefinitely in an environment where labor supplies are stretched very thin and economic growth is proceeding at a relatively rapid pace. Any remarks by Greenspan that underscore concerns about a relaxation of nontraditional restraints on wage awards would be a sign that he and other top Fed officials are creeping closer to a decision to apply the monetary brakes.

The FOMC's forecasts of real GDP growth in 1997 probably will be a bit firmer than those published on a tentative basis last July, which centered around 2.0%, while the central tendency expectation for the CPI is unlikely to be any lower than the preliminary 2.75%-3.0% forecast published last summer. The stronger-than-expected outturn for the economy last year and the well-balanced character of recent output



gains seem to have undermined the earlier widespread belief at the central bank that growth would swiftly revert to historical averages.

### Fiscal and Political Developments

U.S. Treasury borrowing in the first half of 1997 should be very light, about \$30 billion on a net basis. That would be far below the amounts actually raised from the market in the same periods of 1995 (\$99.8 billion) and 1996 (\$51.5 billion). With funding needs so sharply reduced, and a new auction cycle underway for inflation-indexed securities, Treasury debt managers are likely to continue reducing their offerings of more traditional notes and bonds. Supplies of Treasury bills, moreover, can be expected to continue to shrink until the middle of next quarter.

When Congress returns to session, more critical scrutiny of the Clinton budget plan appears likely. Republicans in Congress may take a less friendly tone in their comments. But this will mainly reflect tactics to drive a good bargain rather than a fracturing of the consensus to strike a balanced budget deal in 1997. Support for a balanced budget amendment continues to slide, with Senator Tim Johnson, a Democrat from South Dakota, who had voted for the amendment when he was a member of the House, announcing his unwillingness to back the Republican proposal.

### 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 monetary policy tightening in 1997 is much more likely than what is priced into the market. However, given the good CPI report for January, the prospects for a tightening at the March FOMC meeting are fading. To reflect our more bearish than consensus view, we would remain long our June '97/June '98 Euro future calendar spread with a target of 90 basis points and a stop on a close below 35 basis points. We also would remain short the Dec '97 Euro future with a target of 93.50. We would move our stop down to a close above 94.15, from 94.25 to reflect a somewhat more cautious stance given the risks that Fed tightening may be pushed off at least until the May FOMC meeting.

On the long end of the curve, we remain neutral for the time being. If there were a substantial relief rally following Chairman Greenspan's testimony, we would consider establishing a short position.

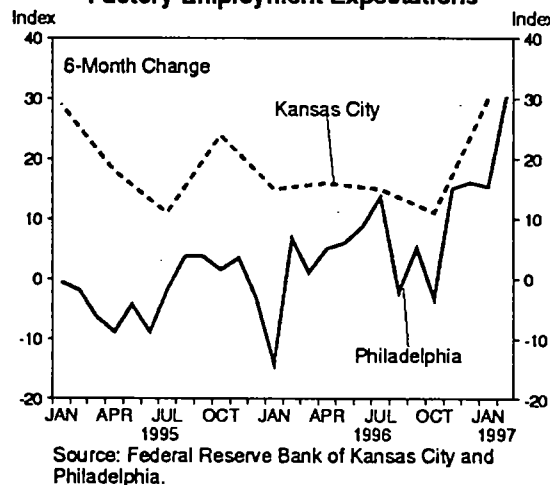
### FOMC "Central Tendency" Projections (Issued July 18, 1996)

|                                         | 1996<br>(Estimated) | 1996<br>(Actual) | 1997<br>(Tentative Est.) |
|-----------------------------------------|---------------------|------------------|--------------------------|
| Nominal GDP <sup>1</sup>                | 5.0%-5.5%           | 5.2%             | 4.25%-5.0%               |
| Real GDP <sup>1</sup>                   | 2.5%-2.75%          | 3.4%             | 1.75%-2.25%              |
| Consumer Price Index <sup>1</sup>       | 3.0%-3.25%          | 3.2%             | 2.75%-3.0%               |
| Civilian Unemployment Rate <sup>2</sup> | About 5.5%          | 5.3%             | 5.5%-5.75%               |

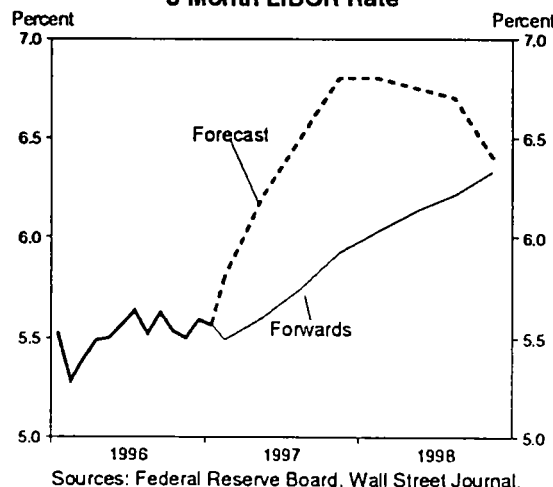
<sup>1</sup> Change on fourth-quarter to fourth-quarter comparison.

<sup>2</sup> Average level in the fourth quarter.

### Factory Employment Expectations



### 3-Month LIBOR Rate



## II. The Equity Risk Premium and the Brave New Business Cycle<sup>1</sup>

The business cycle has changed in ways that have extended the length of economic expansions and reduced the frequency of recession.<sup>2</sup> As a result, corporate earnings and equity prices have become less volatile. These developments have made equity investing less risky and are consistent with a shrinking equity risk premium—the excess expected return demanded by investors to invest in U.S. equities versus Treasury bonds. This suggests that the sharp and sustained appreciation of equity prices in recent years has a more solid foundation than generally realized. As shown below, a shrinking risk premium implies higher equity prices.

### The Equity Risk Premium and Equity Prices

Following convention, we define the equity risk premium as the difference in expected total return from investing in equities versus government bonds. It represents the excess return that investors expect from holding equities versus bonds ex ante (but may not realize ex post).

Equity prices are very sensitive to the level of the equity risk premium demanded by investors. Thus, seemingly small changes in the equity risk premium can lead to large changes in equity prices over time. This can best be illustrated by a simple example. Suppose that 10-year Treasury notes yield 6% and that the equity risk premium is 3%. This implies an expected equity return of 9%. Assuming a 2% dividend yield and no change in the price/earnings ratio, this implies expected earnings growth and capital appreciation of 7% per year. Now suppose that the equity risk premium shrinks to 2.5% and all else remains equal. In this case, the dividend yield must fall to 1.5% to reduce the total expected return to 8.5% per year (6% 10-year note yield plus 2.5% equity risk premium). Equity prices must rise by 33% to push the dividend yield down to 1.5%.<sup>3</sup>

<sup>1</sup> Many thanks to Abby Cohen, Steve Einhorn, and Patty Shangkuan for their assistance and useful suggestions and comments in preparation of this article.

<sup>2</sup> See *The Brave New Business Cycle: No Recession In Sight*, January 1997 for details.

<sup>3</sup> All else will probably not be equal, and the differences will tend to dampen the rise in equities prices. For example, as equity prices rise, companies will issue more equity and less debt, and this will push the equity risk premium back up a bit as additional investors will have to be induced to buy equities. Similarly, the rise

This example illustrates that equity prices are very sensitive to changes in the size of the equity risk premium. Thus, secular changes in the nature of the business cycle do not have to shrink the equity risk premium much to push equity prices sharply higher.

Although the equity risk premium is easy to define, it is difficult to measure. Actual returns on equities versus bonds are not necessarily a good guide because the ex post results can differ sharply from ex ante expectations. This could occur for several reasons. First, the world could simply evolve differently than expected, with earnings and economic performance either stronger or weaker than anticipated, with a resultant impact on equity prices and ex post returns. Second, if the size of the equity risk premium is changing, that shift itself will affect the level of equity prices and influence the relative returns on equities versus bonds.

One might assume that errors in expectations would tend to cancel out over time, causing convergence between expected and actual returns. Unfortunately, even if this were the case, the measurement problem would remain. At best, the resulting estimate would only measure the average risk premium over time. It would not provide an accurate estimate of the current risk premium if the risk premium were not stable.

These measurement problems are currently very much in evidence. To see this, consider that over the past ten years, the average annual return on large-cap U.S. equities has exceeded the average annual return on long-term government bonds by about 6% per year. If the equity risk premium were really that high, that would imply nearly a 13% expected annual return from equities, more than double the expected growth rate of nominal GDP. Because that rate of return would imply a rapid and continuous rise in the ratio of equity market capitalization to GDP, such a result is implausible. More likely, the current equity risk premium is not 6%, but instead is much lower.

While we cannot measure the equity risk premium well, most evidence indicates that it has been

in equities prices will tend to reduce the cost of capital, stimulating investment, and potentially reducing the profitability of new investment. However, the basic point that equity prices are very sensitive to modest changes in the risk premium still remains valid.

shrinking. For example, (see chart below) the price/earnings ratio (calculated using operating earnings) for the S&P 500 index has been trending upward for more than a decade. If the risk premium were stable, it should have been trendless across business cycles and shrinking within each business cycle as the amount of excess slack in the economy were exhausted. Similarly, the ratio of the S&P 500 dividend yield to T-bill rates has been trending unevenly downward for decades, which also is consistent with shrinkage of the equity risk premium over time.

The performance of other assets relative to Treasury bonds also is consistent with a shrinking equity risk premium. For example, the spread between B-rated corporate bonds and Treasury bonds shrank sharply last year. As high-yield bonds are generally considered to have equity-like characteristics to some

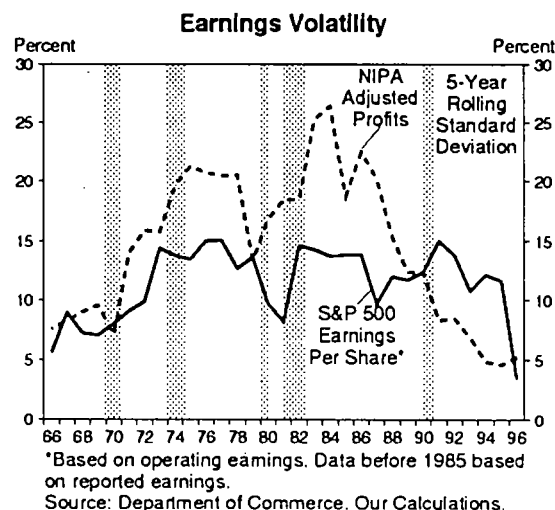
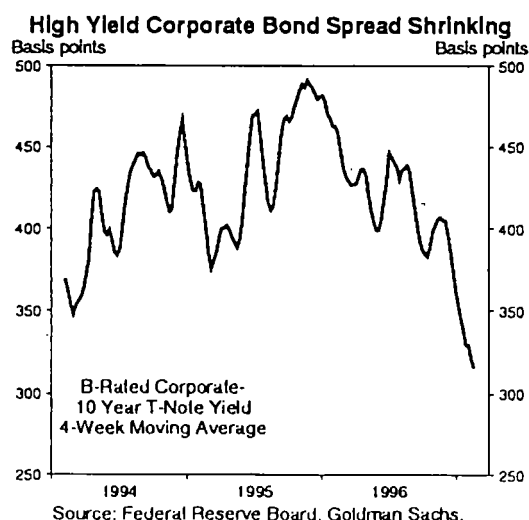
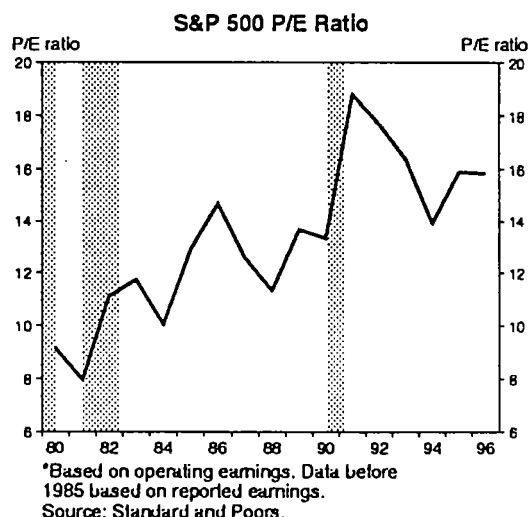
degree (e.g., prices rise when earnings strengthen because the interest payments become more certain), the narrowing of this credit spread is strong evidence that the equity risk premium has been shrinking.

### Is the Shrinkage Justified?

While it appears clear that the equity risk premium has narrowed, this does not answer the more critical question: Is the shrinkage justified or not? If the shrinkage is not sustainable, then equity prices will fall as the equity risk premium rises back to a "normal" level. However, if the shrinkage is justified by long-lasting changes in the nature of the business cycle then the shrinkage may prove persistent. As we shall show below, the reduced volatility of the business cycle has reduced earnings volatility and increased earnings visibility (i.e., the predictability of earnings). Equity prices have been less volatile as a consequence, justifying a narrower equity risk premium and higher equity prices.

Just-in-time inventory management, trade liberalization, more flexible labor and capital markets, and financial market deregulation have all reduced the incidence of recession. The current business expansion is already nearly six years old, with no recession in sight, and, since 1982, the economy has been in recession for only 8 months. Over the past ten years, the economy has been in recession less than 10% of the time, down from more than 20% of the time over the prior forty years.

This development, in turn, has dampened earnings volatility and improved earnings visibility. Investors are more willing to pay for next year's earnings because they have more confidence that such earnings will, in fact, materialize. As shown, earnings



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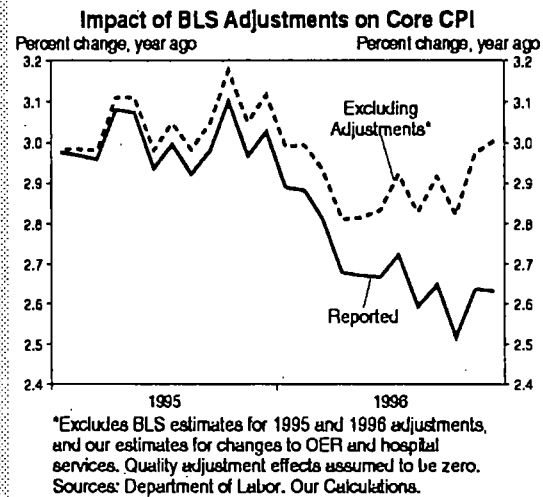
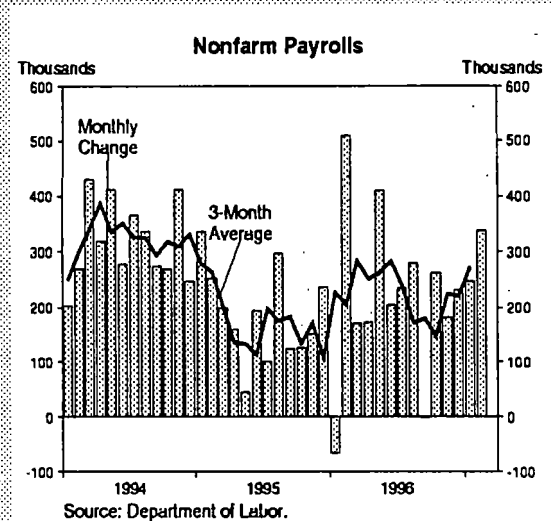
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# U.S. Economics Analyst

## 25-Basis-Point Tightening Likely at the March FOMC Meeting

- Strong activity data, combined with a Fed Chairman who believes that monetary policy tightening must be preemptive, suggests that Fed officials will decide to tighten monetary policy by 25 basis points at the March FOMC meeting. Earlier, we had been undecided about whether they would move in March or wait until May. Our forecast of 125 basis points of tightening over the next 12 to 18 months is unchanged.
- The newest activity data point almost uniformly toward firm economic momentum. In February, payrolls rose by 339,000, the index of aggregate hours worked climbed by 2.7%, the four-week average of initial unemployment claims fell to its lowest level since 1989, and the national purchasing managers' index rose to 53.1%.
- In a center-section analysis, *BLS Adjustments Explain Slower Pace in Core CPI*, we examine several changes that have been implemented by the Bureau of Labor Statistics over the past two years, which have shaved the rate of CPI inflation by 0.14 percentage points starting in 1995 and an additional 0.10 points beginning in 1996. Moreover, our analysis of other BLS changes suggests that the dampening effect of revisions on inflation may have been higher, particularly in 1996.
- This means that the apparent deceleration in the core CPI in 1996 is suspect, as it reflects a change in methodology rather than a change in underlying inflation pressures. This is important since monetary policymakers usually focus more on the direction of inflation than on its absolute level.



### Trade Recommendations

- Stay long the June '97/June '98 Eurodollar futures calendar spread, maintaining stops on a close below 50 basis points and retaining a target of 90 basis points.
- Stay short December '97 Euro futures, with a stop on a close above 94.00 and a target of 93.50.
- Set shorts in June T-bond futures at 111.08, with a stop on a close above 112.16.

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**Issue No: 97/10  
March 7, 1997**

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## I. Weekly Wrapup

### Economic and Market Overview

Although the equity market recovered following Greenspan's comment that it might not be overvalued, the bond market remained under pressure as the economic news and the Chairman's testimony indicated that monetary policy tightening was increasingly likely.

In particular, production trends remain firm as can be seen in the uptick in the National Association of Purchasing Management index in February to 53.1 from 52.0 in January and the 2.5% rebound in factory orders in January, led by an upward-revised 4% jump in durable goods orders. The jump in orders caused unfilled orders to rise by 0.9% in January, putting the six-month rate of advance at 6.0% (annualized). Factory inventories, meanwhile, remained lean, rising by 0.1%, and the manufacturing inventories-to-sales ratio fell to 1.37, a new record low.

Meanwhile, conditions on the consumer front remain vibrant. Real consumer spending in January rose by 0.6%, putting consumption on about a 4% annualized growth path in the first quarter. Meanwhile, new home sales rose by 8.5% in January, pushing the inventory-to-sales ratio down to an unusually low 4.5 months' supply. In addition, labor market conditions are buoyant. Not only did total payrolls rise sharply in February (+339,000), helped by mild weather that boosted construction payrolls by 109,000, but the workweek rose sharply as well, pushing the index of aggregate hours up by 2.7%.

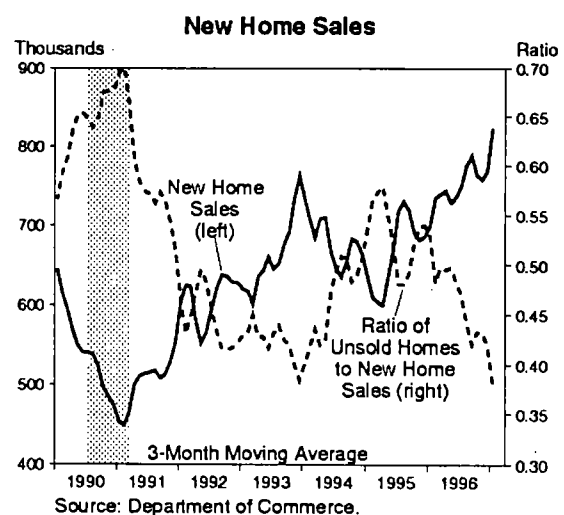
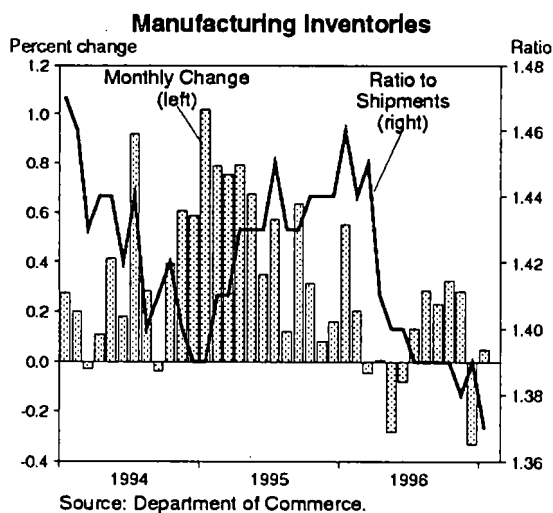
Although the proportion of job quitters fell in February to 10.9% of those that are unemployed from 12.3% in January, we do not think this is meaningful. This series has been trending upward and other indicators suggest that labor markets are continuing to tighten. In particular, the four-week moving average of initial claims has fallen to 310,000, the lowest reading since 1989. On the inflation front, both the prices paid component and the vendor performance component moved up in the January NAPM report, rising to 55.1 from 51.4 and 51.3 from 48.5, respectively. However, average hourly earnings were well-behaved in February, rising only 0.2%, keeping the year-over-year gain at 3.8%.

### Federal Reserve Policy

We now expect Fed officials to begin to tighten monetary policy at the March 25 FOMC meeting (75% probability) because the economy continues to grow at an above-trend pace and Chairman Greenspan has not backed away from his earlier remarks that monetary policy needs to be preemptive. Action is likely because Chairman Greenspan has clearly put Congress and the markets on notice. To delay now, Chairman Greenspan would risk his credibility. We expect the first move will be a 25-basis-point hike in the federal funds rate and continue to expect 125 basis points of tightening over the next 12 to 18 months, well above the market consensus.

### Fiscal and Political Developments

The Congressional Budget Office evaluation of the Clinton balanced budget plan reaches conclusions very similar to our own. The CBO estimates that the





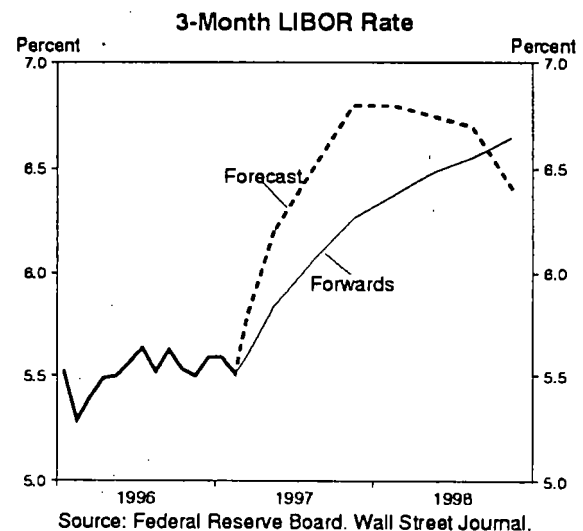
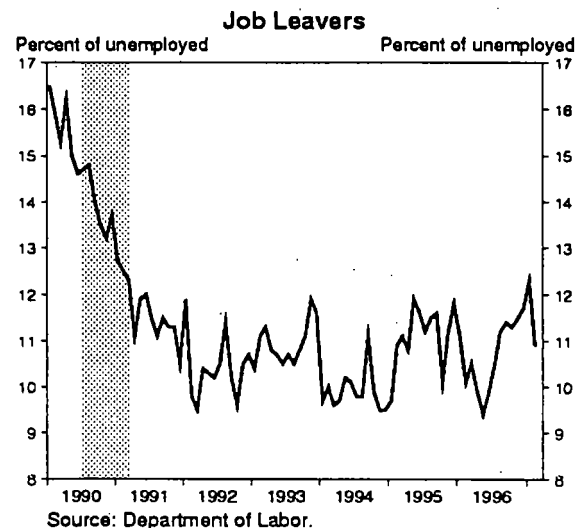
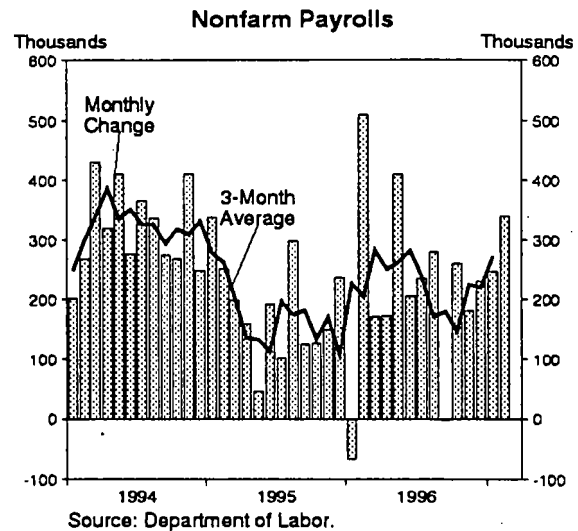
Clinton budget would result in a \$69 billion deficit in 2002, not a \$17 billion surplus as the Clinton budget projects. In addition, the CBO finds that the budget savings are extremely backloaded into the last two years of the plan. In other words, the Clinton plan would not result in meaningful fiscal restraint until after the millennium.

The large gap between the projections of the Clinton budget and those obtained using CBO scoring will make it more difficult to achieve a budget compromise. But one mechanism that could help bridge the gap would be a downward adjustment to the cost-of-living provisions for social security recipients and others to reflect the overstatement of inflation as calculated by the consumer price index. In that regard, the outlook has brightened a bit over the past few weeks as Trent Lott, the Republican majority leader, has suggested establishing a commission to consider this matter. The Clinton administration has not yet formally endorsed this idea, but Franklin Raines, the Director of the Office of Management and Budget, did indicate some willingness to consider the matter. A breakthrough on inflation-indexing would be very significant. Not only would it increase the likelihood of a budget agreement because it would reduce the magnitude of required spending cuts elsewhere, but also it would represent a better budget deal because it would result in further deficit reduction beyond the year 2002, a wedge of deficit reduction that would climb in size over time.

### Market Outlook and Comments on Value

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

The likelihood that Fed officials will tighten monetary policy at the March FOMC meeting remains substantially higher than what is embodied in Eurodollar futures prices. Moreover, the cumulative magnitude of tightening over the next year is likely to be greater than generally anticipated, regardless of the timing of the first Fed move. For this reason, we would stay with our two bearish positions, remaining long the June '97/June '98 Eurodollar futures calendar spread with a target of 90 basis points and a stop on a close below 50 basis points. We also would remain short December Eurodollar futures, maintaining a target of 93.50 and a stop on a close above 94.00. On the long end, we continue to look for a good opportunity to get short, and would set shorts on the June bond future at 111.08 or higher, with a stop on a close above 112.16.



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## II. BLS Adjustments Explain Slower Pace of Core CPI

In its report to the Senate Finance Committee, the Boskin Commission estimated that the consumer price index overstates inflation by approximately 1.1 percentage points per year. This has triggered much discussion about the need for revisions to the calculation of inflation. A recent hint from White House Budget Director Frank Raines, in favor of establishing an expert panel to study such revamping efforts, suggests that political momentum for either new inflation or cost of living measures has increased.

What should not be overlooked, however, is that some revisions have already been made, reflecting gradual attempts by the Bureau of Labor Statistics to address some of the problems pointed out by CPI critics. Such revisions are, in fact, estimated to have subtracted 0.14 percentage points per year starting in 1995, and another 0.10 percentage points per year starting in 1996. These estimates alone explain much of the surprising deceleration of core inflation over the last two years, falling from 2.8% in 1994 to 2.5% (year-over-year) in January 1997, despite evidence that the economy is growing at an above-trend rate. Moreover, our analysis suggests that further changes in methodology—not included in the tally above—may have held down inflation measures even more, particularly in 1996. In sum, we believe year-over-year core CPI inflation would have registered 3.0% at yearend 1996, had no revisions occurred.

It is probably still true that the CPI overstates the absolute rate of inflation. But *gradual* revisions to eliminate a bias are also quite important, since these cause the *pattern* of inflation—accelerations or decelerations relative to previous years—to be disturbed. In thinking about the right setting for monetary policy, it is the pattern, rather than the level, of inflation that matters most.

Recent Adjustments to CPI Bias

| Component                 | Date of Revision | Weight in     | Contrib. to         | Weight in    | Contrib. to        |
|---------------------------|------------------|---------------|---------------------|--------------|--------------------|
|                           |                  | Total CPI (%) | Total CPI (pct pts) | Core CPI (%) | Core CPI (pct pts) |
| Food at Home              | Jan-95           | 9.9           | -0.07               | 0.0          | 0.00               |
| Owners' Equiv. Rent       | Jan-95           | 19.7          | -0.08               | 25.4         | -0.10              |
| Residential Rent          | Jan-95           | 5.8           | 0.01                | 7.4          | 0.01               |
| Prescription Drugs        | Jan-95           | 0.5           | 0.00                | 0.8          | 0.00               |
| <b>Effect on 1995 CPI</b> |                  |               | <b>-0.14</b>        |              | <b>-0.09</b>       |
| Non-Food, Non-Shelter     | Jun-96           | 55.9          | -0.10               | 72.1         | -0.13              |
| <b>Effect on 1996 CPI</b> |                  |               | <b>-0.06</b>        |              | <b>-0.08</b>       |

Sources: Department of Labor. Our calculations.

### Effects of Revisions in 1995 and 1996

The table below provides a summary of recent revisions, estimated by the BLS to have shaved 0.14 and 0.10 percentage points off the rate of increase in CPI inflation starting in 1995 and 1996 respectively. In January 1995, for example, the method for introducing new food items into the CPI was altered. The new approach helps to eliminate distortions caused when a food item is on sale in the month it enters the CPI base by taking pricing samples for months before the item is incorporated. This change accounted for a 0.07 point reduction in the overall rate of inflation, but had no effect on the core. Also in 1995, the calculations of owners' equivalent and residential rent were changed to incorporate a geometric, rather than arithmetic, average of rent changes. The net reduction in overall and core inflation equaled 0.07 and 0.09 percentage points. Finally, the treatment of prescription drugs was modified in 1995—classifying a drug as generic as soon as it loses its patent—but this was estimated to have no impact in reducing the upward inflation bias.

In 1996, the new pricing techniques for food at home items were extended to all non-shelter categories. BLS estimates that this change reduced the CPI inflation bias by approximately 0.10 points per year (0.13 on the core). For 1996 specifically, the impact was likely smaller, on the order of 0.06 points (0.08 on the core), since these changes were not actually put in place until June. Together with the 1995 changes, this explains 0.20-0.25 percentage points per year in adjustments, a figure used by the Boskin Commission as the probable reduction in the inflation bias over the last two years due to technical changes.

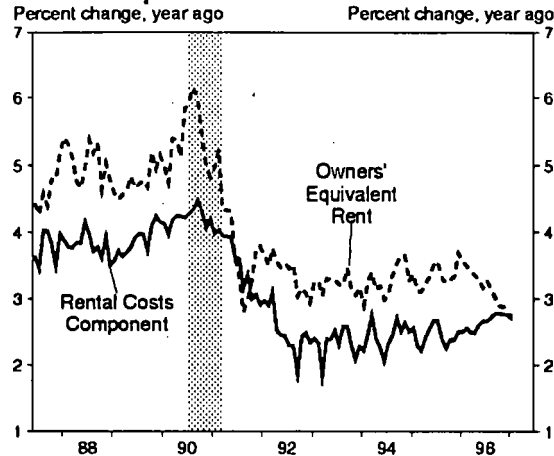
### More Than Meets The Eye

We would argue however, that, aside from these modifications, other gradual adjustments to the CPI in recent years have shaved the rate of inflation by more than is commonly perceived. Three observations support our case:

1. Additional changes to the calculation of owners' equivalent rent (OER) were made in 1996. Accounting for 19.7% of the overall CPI and 25.4% of the core, OER captures what homeowners would pay to rent a similar structure. To calculate this, the BLS surveys owners about the structural characteristics and location of their home and then matches each



### Shelter Components of the Consumer Price Index



Source: Department of Labor.

owned unit to a similar rental unit, catalogued from a survey of 35,000 actual renters for use in the residential rent component. In effect, changes in OER are simply a subset of changes in residential rent. Before 1995, however, OER inflation was consistently higher than residential rent inflation by nearly 1.0 percentage point. About 0.4 points of this gap, corrected in 1995, was due to the arithmetic averaging of underlying rental price changes. A second reason, however, was that owned units were being matched with rentals in mostly-owned neighborhoods, where rental prices were rising faster than average. Thus, in January 1996, the BLS enlarged the rental subset used in matching owners to renters. Since that time, the gap between OER and residential rent has been fully eliminated, as shown in the chart above. It appears, then, that 0.5 points was subtracted from OER inflation in 1996, shaving CPI gains by an additional 0.10 points (0.13 on the core).

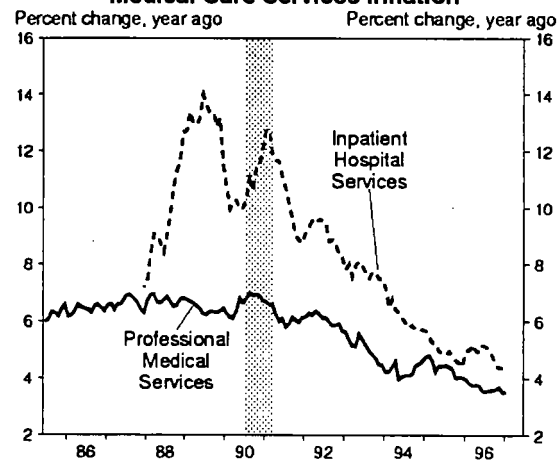
2. Gradual revisions to inpatient hospital services costs have occurred since 1990, but may have had an outsized effect in 1996. As shown in the accompanying chart, inflation in this component, accounting for 3.0% of the CPI, began gradually decelerating in 1990, from 10.7% to a current rate of 4.4%. Doubtless, some of this move reflects a shift in the composition of payors, as the penetration of HMO's has increased relative to fee-for-service plans. Yet, the deceleration in other medical care services costs has been less dramatic. Thus, it strikes us that a change in methodology—also beginning in 1990—has likely had some effect. In that year, the BLS began a gradual move toward the use of

transaction prices, rather than published or "list" prices, which are often discounted at the point of purchase. In 1990 and 1991, hospitals in only three states reported transaction prices. By 1996, about 20% of all hospitals had been included. In June of last year, a final push was initiated, resulting in coverage today of about 60%.

While it would be nearly impossible to quantify the year-to-year effects of these changes, we would point out that the effect has likely been to dampen inflation and that the adjustments were concentrated in 1996. It is also noteworthy that inflation in this component actually turned up in the first half of 1996, but began decelerating mid-summer, coincident with the push to expand hospital coverage. Had hospital services inflation continued on its first-half course, accelerating 0.13 percentage points per month, prices would have been rising at a 6.0% rate by yearend, rather than 4.4%. Adjustments, then, may have shaved as much as 1.60 points off the growth rate of this component, resulting in a 0.06 point reduction in CPI inflation (0.08 on the core).

3. Quality adjustments are routinely incorporated into various CPI components and may be growing in size.<sup>1</sup> In collecting price data on individual items, BLS officials also regularly determine whether the quality of that item has improved since last reading. If so, the value of the enhancement is estimated and is

### Medical Care Services Inflation



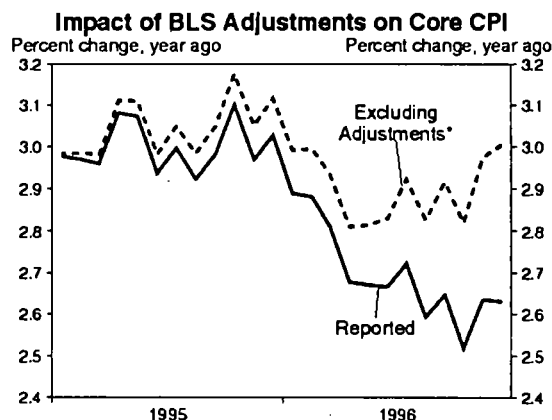
Source: Department of Labor.

<sup>1</sup> The Boskin Commission's estimate of the quality bias, 0.6 point per year, relates to adjustments needed above and beyond the modifications being discussed here.

subtracted from the item's new price, so as not to confuse pure inflation effects with a higher price due to higher quality. The BLS estimates that quality adjustments acted to reduce CPI inflation by 2.6 percentage points in 1995 in the components affected.<sup>2</sup> This is up substantially from 1.2 percentage points in 1984, the last year for which estimates were released. It thus seems likely that this adjustment has been growing by 0.10 percentage points or more in recent years.

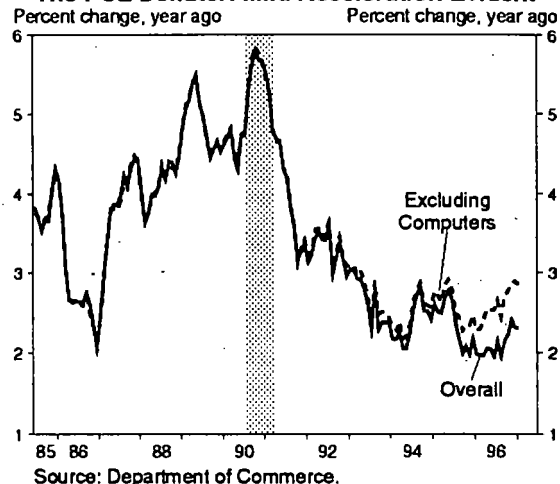
### Looking Ahead: Inflation Resuscitation?

The revisions discussed above, though not sufficient to eliminate the upward bias in the *level* of inflation, have clearly altered the *pattern* of inflation. By revising one year, without restating historical data, current CPI figures are being grafted onto a historical data set which is not directly comparable. Percentage changes, under this scenario, are not representative of true price behavior, since attaching a price series at a lower level looks like a deceleration in price. The accompanying chart shows our estimate of core CPI gains over the last two years, had no adjustments occurred. As shown, we think core inflation actually moved up in late 1996, to about 3.0% year-over-year. The disruption in pattern is important because Fed officials are often more concerned about changes in the pace of inflation than with the absolute rate of price gains. A few additional points are worth noting about the effect of recent and future revisions:



\*Excludes BLS estimates for 1995 and 1996 adjustments, and our estimates for changes to OER and hospital services. Quality adjustment effects assumed to be zero. Sources: Department of Labor. Our Calculations.

### The PCE Deflator: Mild Acceleration Evident



1. Once the revision process is complete, inflation could appear to change course, merely by returning to a normal trajectory. Take, for instance, a component accelerating 0.20 percentage points per year, on average, but where growth was dampened by 0.30 points in 1996. This component would appear to decelerate 0.1 points in 1996, but then accelerate 0.2 points in 1997. The net effect would look like a reversal of trend.
2. Further revisions may be in store. The BLS will likely continue making adjustments to CPI components. Particularly in 1998, when a benchmark revision is scheduled (updating the weights of components, but not altering the pattern of inflation, since back data is revised), other types of adjustments may be implemented. Also, if an expert panel is convened to discuss the CPI bias, further adjustments may be called for.
3. Other inflation indicators may prove more useful. The PCE deflator, for example, may provide a clearer picture of inflation since this indicator uses a basket of goods which is up to date (eliminating substitution bias) and since healthcare costs are benchmarked off of PPI transaction based data. As shown above, the PCE deflator accelerated slightly in 1996. This pickup occurred despite the greater weight given to computers, an area where price moves decelerated rapidly in 1995-1996.

Jill Jacobs

<sup>2</sup> Estimates are based on studies of 171 of the total 207 CPI strata. Calculation methods in excluded categories do not lend themselves to quality adjustments.



## Key U.S. Economic Data

|                                            | Latest Monthly Data |         |         |         | 6 Mo<br>Trend | 12 Mo<br>Trend | Next<br>Release |
|--------------------------------------------|---------------------|---------|---------|---------|---------------|----------------|-----------------|
|                                            | '97 Feb             | '97 Jan | '96 Dec | '96 Nov |               |                |                 |
| Nonfarm Payrolls (ch. Thousands)           | 339                 | 247     | 231     | 181     | 210           | 228            | Apr 4           |
| Unemployment Rate (%)                      | 5.3                 | 5.4     | 5.3     | 5.3     | 5.3           | 5.3            |                 |
| Index of Hours Worked (% ch)               | 2.7                 | -1.6    | 0.8     | -0.8    | 5.8           | 3.9            |                 |
| Average Hourly Earnings (% ch)             | 0.2                 | 0.2     | 0.4     | 0.8     | 3.7           | 3.8            |                 |
| Producer price finished goods index (% ch) | --                  | -0.3    | 0.6     | 0.2     | 2.8           | 2.5            | Mar 14          |
| Excluding food and energy                  | --                  | 0.0     | 0.1     | 0.1     | 0.4           | 0.6            |                 |
| Consumer price index (% ch)                | --                  | 0.1     | 0.3     | 0.3     | 2.9           | 3.0            | Mar 19          |
| Excluding food and energy (% ch)           | --                  | 0.1     | 0.2     | 0.2     | 2.3           | 2.5            |                 |
| Retail sales (% ch)                        | --                  | 0.6     | 0.3     | -0.1    | 4.3           | 4.9            | Mar 13          |
| Excluding motor vehicles (% ch)            | --                  | 0.4     | 0.0     | 0.2     | 3.0           | 4.6            |                 |
| Industrial Production (% ch)               | --                  | 0.0     | 0.5     | 0.8     | 3.9           | 4.8            | Mar 14          |
| Manufacturing                              | --                  | -0.3    | 0.8     | 0.8     | 3.6           | 5.1            |                 |
| Capacity utilization (%)                   | --                  | 83.3    | 83.5    | 83.4    | 83.3          | 83.2           | Mar 14          |
| Manufacturing                              | --                  | 82.2    | 82.7    | 82.4    | 82.3          | 82.2           |                 |
| Housing Starts (annual rate, thousands)    | --                  | 1350    | 1323    | 1486    | 1425          | 1466           | Mar 18          |
| Single-family                              | --                  | 1108    | 1005    | 1133    | 1120          | 1150           |                 |
| Trade balance (billions, monthly)          | --                  | --      | -10.3   | -7.9    | -10.0         | -9.4           | Mar 20          |
| Merchandise                                | --                  | --      | -16.6   | -14.3   | -16.1         | -15.5          |                 |
| Factory Orders (% ch)                      | --                  | 2.5     | -1.5    | -0.5    | 3.8           | 5.2            | Apr 2           |
| Durable Goods                              | --                  | 3.6     | -1.8    | -1.7    | 2.8           | 4.5            | Mar 26          |
| Personal Income (% ch)                     | --                  | 0.3     | 0.7     | 0.6     | 5.9           | 6.1            | Mar 31          |
| Wages and Salaries                         | --                  | -0.1    | 1.1     | 0.8     | 6.7           | 6.9            |                 |
| Purchasing Managers' Index (%)             | 53.1                | 52.0    | 53.8    | 52.4    | 52.2          | 51.3           | Apr 1           |
| Consumer Sentiment U Mich (Feb 66=100)     | 99.7                | 97.4    | 96.9    | 99.2    | 97.4          | 95.2           | Mar 28          |
| Conference Board (1985=100)                | 118.4               | 118.7   | 114.2   | 109.5   | 113.3         | 108.8          | Mar 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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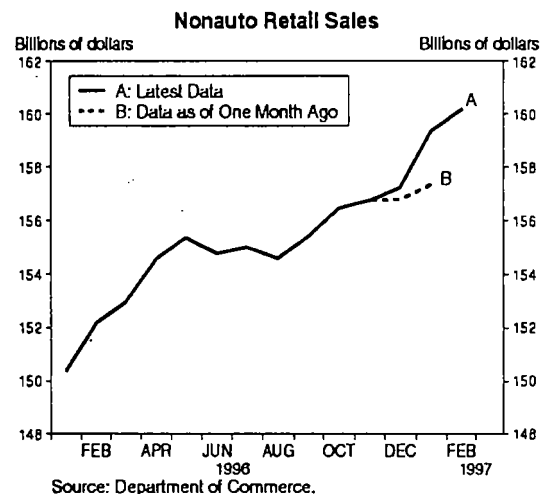
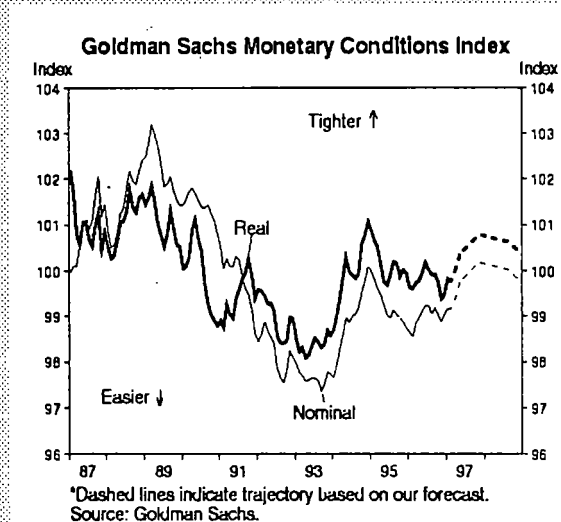
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# U.S. Economics Analyst

## Five Reasons to Expect Prompt Fed Tightening

- We continue to expect a 25-basis-point tightening of monetary policy at the March 25 FOMC meeting. Chairman Greenspan's assessment that inflation risks are increasingly skewed to the upside coupled with his commitment to a preemptive interest rate strategy suggest that the central bank will finally act on the policy bias they have maintained consistently since last July.
- There are five specific pillars supporting our judgment that rates must rise: (1) Real growth remains solidly above trend; (2) This strength is likely to persist; (3) Monetary policy does not appear tight at present; (4) Wages already are displaying a gradual acceleration; and (5) Higher pay awards are apt to cause a modest pickup in core price inflation.
- Current circumstances differ notably from those present when the Fed chose not to tighten last September. In particular, data on retail purchases in January and February were exceptionally strong, implying that overall real personal consumption growth has accelerated further this quarter, to about 4.5% at an annual rate. Six months ago, by contrast, consumption gains had all but stalled.
- Robust consumer activity reports have led us to revise upward our estimate for annualized first quarter GDP growth, from 2.6% to 3.5%. In addition, strong demand has pushed inventory-to-sales ratios down even further, despite solid production gains. This bodes for a continuation of relatively brisk growth later this year.



## Trade Recommendations

- Close out long June '97/June '98 Eurodollar futures calendar spread positions.
- Shift outright short Eurodollar positions from the December 1997 to the June 1997 contract. Set stops at 94.30 with a target of 93.75.

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**Issue No: 97/11  
March 14, 1997**

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## I. Weekly Wrapup

### Economic and Market Overview

Investors in U.S. securities markets remained uneasy this week, faced with uncertainty about the prospects for Fed tightening at the March 25<sup>th</sup> FOMC meeting. The disquietude made for volatile trading, and ultimately caused downward adjustments in both bond and stock prices. By week's end, bond investors had pegged the chances of a March rate hike at approximately 50%, a probability assessment that we view as still too low.

Data during the week underscored the view that economic momentum is building and that household demand is firmly rooted. February retail sales figures suggest that spending thus far this quarter has been quite a bit stronger than previously thought. Revisions to January retail data reveal growth in that month of 1.5% overall and 1.4% in the nonauto group, versus earlier estimates of 0.6% and 0.4%, respectively. These January gains were then supplemented by a solid pace of sales growth in February, at 0.8% overall and 0.5% excluding motor vehicles. These data have pulled the trend pace of real spending in the first quarter up to about 4.5%, causing us to raise our sights for GDP growth in that period to 3.5% (annual rate), versus 2.6% previously.

With such healthy demand conditions as a backdrop, industrial production rose 0.5% in February, despite a 3.5% decline in utility output that reflects unseasonably warm weather. Manufacturing output posted a 0.8% rise, bringing the factory utilization rate to 82.5%, one of the highest readings of the last fifteen months. Still, solid output gains were unable

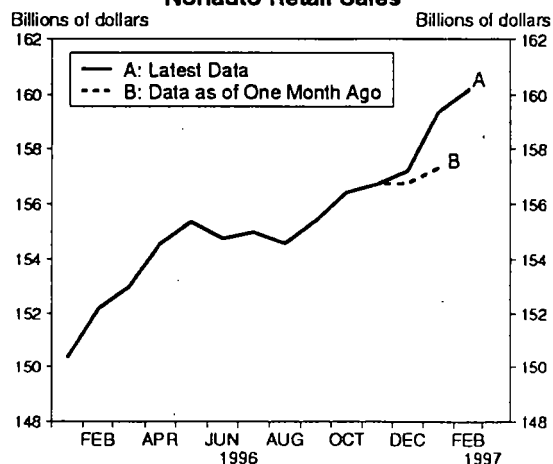
to match the rapid pace of sales, resulting in sharply lower inventory-to-sales ratios. In the retail arena, for example, nonauto goods stocks stand at their lowest level relative to sales since late 1983.

Despite clear strength in both demand and production, domestic goods pricing remains strikingly restrained. In February, large declines in food and energy quotes, alongside only small changes in other areas, caused the producer price index to decline 0.4% overall and 0.1% in the core.

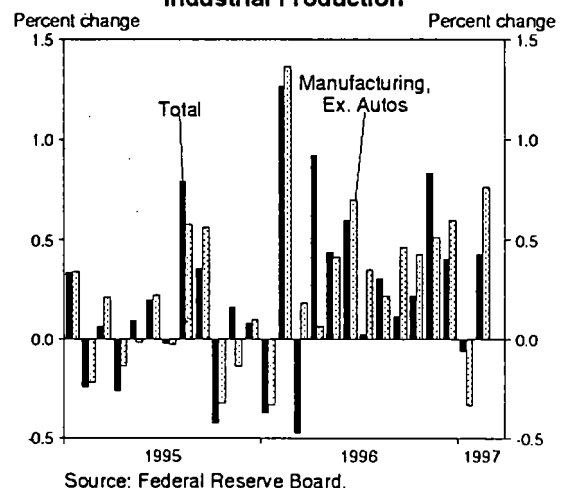
### Federal Reserve Policy

In the runup to the March 25<sup>th</sup> FOMC meeting, commentary by Federal Reserve officials will likely be scrutinized even more closely than usual. A recent remark by Robert McTeer, President of the Federal Reserve Bank of Dallas, suggesting that the Fed is not yet ready to raise interest rates was given much attention. Yet, as discussed on pages 4-6, it is important to remain focused on Chairman Greenspan's statements, as he has been shown to hold enormous sway in molding Fed policy. For instance, while it was clear last fall that a number of regional Fed bank presidents were inclined toward a rate rise, no hike materialized, suggesting that the Chairman remained unconvinced of the need to tighten policy. Now, by contrast, official comments from the Fed chief convey a growing concern about the inflationary risks inherent in several developments, including gains in financial asset markets and continued momentum in economic activity. Moreover, Dr. Greenspan has agreed to testify before the Joint Economic Committee on March 20<sup>th</sup>, just five days

**Nonauto Retail Sales**



**Industrial Production**





prior to the FOMC meeting. It is worth recalling that this was precisely the forum he used in January 1994 to prepare financial markets for an imminent tightening of policy.

### Fiscal and Political Developments

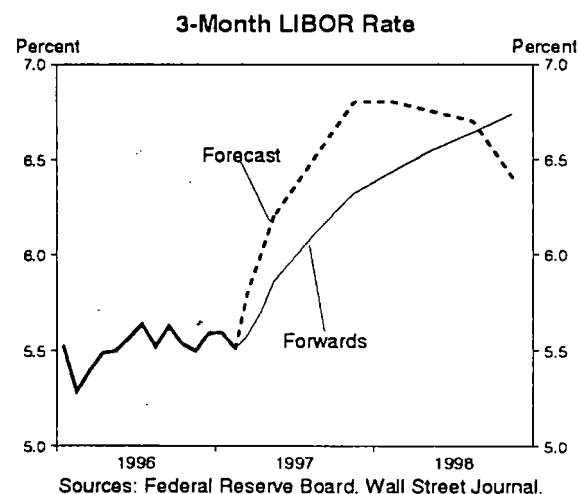
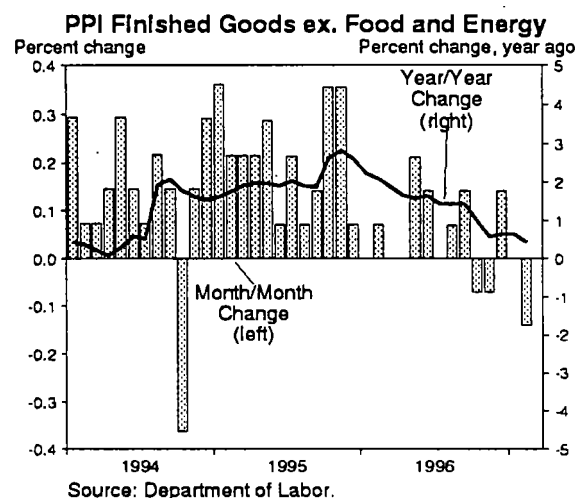
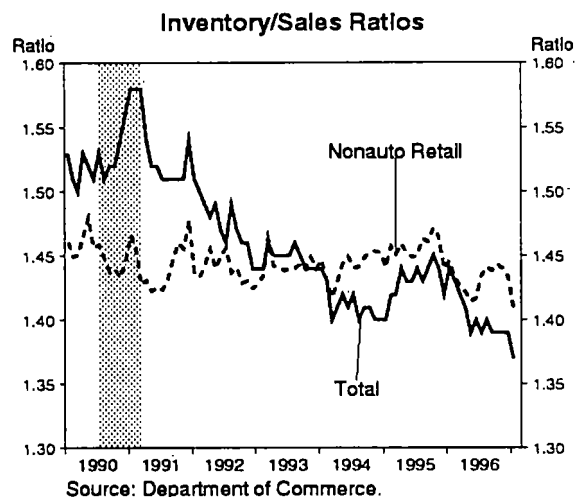
Budget talks between Congress and the White House have hit the rocks in recent days, and may prove difficult to salvage. The atmosphere began to deteriorate last week when the Congressional Budget Office announced that its calculations imply a much larger-than-expected deficit in fiscal 2002 under the Clinton administration's plan. Then, in a second serious blow, the Administration backed away from the idea of a panel to specify future downward adjustments to the Consumer Price Index. This decision makes it much harder to plug the wide gap between White House and CBO budget estimates. It also has angered key lawmakers, who were counting on President Clinton to lend some political cover for their efforts in this highly sensitive area, which touches on both Social Security benefits and income tax brackets. These developments have further deepened the distrust that congressional officials hold for any fiscal dealings with this White House, elevating the risk that the leadership will forego further efforts at a bipartisan accord in favor of writing their own budget in a piecemeal fashion.

### Market Outlook and Comments on Value

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

With a rate rise likely to occur at the FOMC meeting just 11 days from now, we recommend closing long positions in the June '97/June '98 Eurodollar futures calendar spread. If the Fed tightens this month, the June 1997 Euros should weaken significantly as market participants begin discounting a high probability of one or more additional rate hikes before the end of summer. In fact, we now would advocate shifting short positions in December 1997 Euro contracts forward into June 1997 Euros, on the basis that the market still assigns a lower probability to a swift tightening than we believe is appropriate.

At this point, we prefer to stay uncommitted in the bond sector, although our preference remains to look for an opportunity to get short. Bond yields have already risen a great deal in recent weeks, but may continue to escalate as investors gain a fuller appreciation for the degree of upward momentum the U.S. economy presently enjoys.





## II. Five Reasons To Expect Prompt Fed Tightening

Federal Reserve officials appear poised to initiate a credit tightening very soon, probably at the March 25 FOMC meeting. In his latest monetary policy report to Congress, Chairman Greenspan was clear in stating that the risks on inflation are tilted to the upside, and that interest rate increases must be undertaken before price pressures become visible, given long lags in their effects on business conditions.

In our view, the time for such a program of monetary restraint has arrived. There are five principal grounds for this conclusion: (1) U.S. economic growth has been maintained at a solid above-trend pace in recent months; (2) Leading indicators of business activity suggest that similarly robust expansion will persist for some time; (3) The behavior of interest-sensitive economic sectors and pricing in financial asset markets imply an unrestrictive monetary posture at present; (4) An upward trend in labor costs is increasingly evident; and (5) Stronger compensation gains are likely to slowly leak into pricing decisions.

Factors which deterred central bankers from hiking rates last summer and fall have gradually fallen away. Whereas final demand—and consumer spending in particular—slumped in the third quarter of 1996, the latest signals on domestic spending have been strong. With the formal bias toward tightening already 8 1/2 months old, it is not clear what would be gained from delaying action another eight weeks.

### Five Reasons For The Fed To Tighten Soon

#### 1. Economic Growth Remains Well Above Trend

Upward momentum in business activity has continued this quarter, led by broad gains in final demand. In particular, the pace of consumer spending seems to be intensifying. In the wake of sturdy preliminary consumption figures from January and an exceptionally robust February retail sales report, personal consumption looks likely to climb about 4.5% at an annual rate this quarter, following a 3.4% fourth-period increase. The strength in spending is well supported by trends in jobs and income as well as buoyant consumer confidence. Over the past three months payroll employment has expanded an average of 272,000, versus 193,000 per month in the prior half year. Declining unemployment claims reinforce the impression of a pickup in net hiring, which has bolstered the pace of real income gains. Meanwhile, all major consumer polls

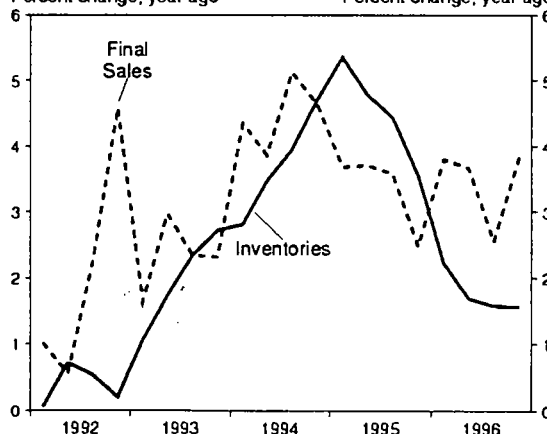
show the most optimistic attitudes about job availability and medium-term finances in years.

Other sectors of the economy also appear to be sturdy. Business fixed investment should remain on a positive course given high profitability and rising utilization rates. Consistent with this outlook, new orders for capital goods other than aircraft jumped 3.9% in January, reversing declines in the prior two months, and real nonresidential private construction outlays in January were already 1.4% (not annualized) above the fourth-quarter average. The housing industry continues to display surprising strength, as new single-family home sales in the past three months were the highest in over a decade.

#### 2. Leading Indicators Imply Continued Strength

There are good reasons to believe that GDP will sustain this momentum for quite some time. In particular, unfilled order backlogs are swelling and inventories are unusually lean. Order backlogs surged 0.9% in January and are 6.2% higher than a year ago, while real nonfarm stocks accumulated at only a \$18.4 billion annual rate last quarter, revised down from the initial estimate of \$31.9 billion. The gap between year-to-year growth in sales and inventories of nonfarm goods is at the widest point in four years. Purchasing managers, moreover, have indicated that these trends intensified in February; their national index of new orders leaped to 57.7%, while inventories dropped to 41.2%, toward the bottom end of the range seen since

**Nonfarm Goods Sales Outstripping Production**  
Percent change, year ago



Source: Department of Commerce.



late 1991. Stock levels are very low for homebuilders as well; the seasonally-adjusted supply of unsold new units dropped 10.8% between July and January, and the supply of new dwellings is about 20% below the normal 6.0-6.5 month range.

Longer-leading indicators such as the performance of equity prices and broad monetary aggregates also point toward a maintenance of solid broad expansion. The Standard and Poor's 500 stock index has risen 22.9% in the past 12 months and soared 71.6% since the beginning of 1995. Annualized growth over the past six months in M2 and M3, meanwhile, has quickened to 5.4% and 8.3%, respectively.

### 3. Scant Evidence of Monetary Restraint

Neither activity developments in the most interest sensitive economic areas (such as housing and durable-goods consumption) nor the current status of financial asset valuations are suggestive of a restrictive credit environment in the U.S. Despite weak economic growth abroad, federal fiscal restraint, and a drag from inventory investment, the economy has grown 3.2% over the past four quarters. Business and financial market sectors that are most closely associated with monetary policy have all performed in precisely the opposite way one would expect if policy were restrictive. Housing demand is up, stock prices have exploded upward, and yield spreads between Treasury debt and that of non-investment-grade corporations are very thin.

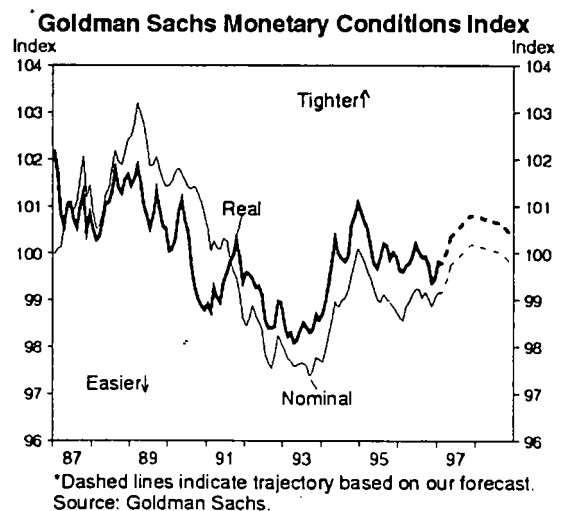
To be sure, the differential between the Federal funds rate and the trailing 12-month change in core retail prices—now 2.75%—is about 1% wider than a 40-year historical average. This spread, however, is very volatile over time, with one standard deviation around the mean since 1960 equal to 2.2 percent. This means that the current reading is less than half of a standard deviation above the mean, hardly a difference of statistical significance. In addition, there are good reasons why this spread should be wider today than the average in the 1950s and 1960s. Financial deregulation and global interlinked capital markets imply somewhat higher U.S. real interest rates than in the more tightly regulated earlier eras, while higher share prices have reduced the equity cost of capital, a consequence of which should be an offsetting increase in equilibrium real interest rates. Finally, it would

be dangerous to assume that the level of real interest rates associated with neutrality is invariant within the business cycle. When utilization rates and confidence are high, a wider spread between interest rates and inflation may be needed to keep economic growth on a trend path.

Consistent with these interpretations, the Goldman Sachs Monetary Conditions Index for the U.S. is still hovering at close to a neutral level. Assuming our forecasts for money-market rates and bond yields over the next year prove accurate, the GSMCI will move into restrictive territory, but not to the degree experienced during either of the last two major tightening episodes (1988-1989 and 1994-1995).

### 4. Wage Pressures Already Are Apparent

Both average hourly earnings and the employment cost index for wages and salaries are slowly gaining speed, suggesting that the labor market has tightened beyond the point at which labor costs can be expected to hold steady. Moreover, if the economy continues to expand faster than its long-term average the unemployment rate is likely to decline further, intensifying strains on labor resources. This would risk an even faster acceleration in the pace of pay awards. Throughout 1996, the decline in joblessness was retarded by an unusually rapid growth in the labor force (2.0% over the 12 months ending last December). Unfortunately, it is doubtful that this will continue, because the number of discouraged workers available to augment the labor supply has fallen quickly, reducing the pool of potential re-entrants.






#### 5. Labor Costs Likely To Push Up Core Inflation

If the pace of wage inflation continues to increase, it appears inevitable that some of these cost pressures will leak into prices, for three reasons. First, productivity trends almost never improve late in a business expansion, by which time the highest-quality resources have already been absorbed. Thus, it will be difficult to enhance output per hour so as to neutralize the upward pressure on unit labor costs from compensation gains. Second, special factors that helped suppress inflation in 1996, such as rapidly declining computer prices and falling medical care inflation, are not likely to persist to the same degree in 1997. Third, much of the improvement in the core CPI over the past two years has been an illusion created by changes in the Bureau of Labor Statistics methodology that lowered the inflation rate but did not apply retroactively.

#### Current Period Different From Last Fall

Last September, Chairman Greenspan and the rest of the FOMC elected to keep rates steady despite widespread expectations of a rate rise. Conditions at that time, however, were significantly different than at present, particularly with regard to trends in consumer activity and other key demand components. To be sure, Fed policy makers have retained an official expectation that GDP growth will slow substantially, toward a 2.0% annual rate from the recent 3.0%-3.5% average—the same view they held last summer. The major difference between now and then is that consumer outlay growth has remained vigorous, whereas such demand virtually stalled in the third period. Taking this together with the unexpected rebound in spending last quarter, there

should be much less comfort now with the forecast of an early return to trend growth. Additionally, the potential for an improvement in economic conditions overseas seems improved versus six months ago, with activity reports from the European continent as well as Japan displaying a modestly firmer tone.

#### Further Delay Difficult To Justify

Against this background, in our view it will be difficult for the FOMC members to provide a clear and convincing rationale for leaving short-term interest rates unchanged another eight weeks (the next scheduled policy gathering is on May 21). This is particularly true because Fed officials have already expressed a bias toward policy tightening for 8 1/2 months without taking any action. According to our records, this marks by far the longest period in the modern era of effective interest rate targeting (which began in late 1982) that the central bank has expressed a consistent policy leaning without changing rates; indeed, the previous record was less than half the duration of the current interval.

#### Periods of Fed Policy Bias Without Action (1983-Date)

| Period                      | Formal Bias Toward | No. of Days |
|-----------------------------|--------------------|-------------|
| Feb 9 - May 23, 1983        | Easing             | 104         |
| Nov 15, 1983 - Jan 30, 1984 | Tightening         | 77          |
| Feb 11 - Apr 8, 1987        | Tightening         | 56          |
| Aug 16 - Nov 22, 1988       | Tightening         | 99          |
| Aug 22 - Oct 15, 1989       | Easing             | 55          |
| Aug 21 - Oct 28, 1990       | Easing             | 69          |
| Feb 5 - Apr 8, 1992         | Easing             | 64          |
| Oct 6 - Dec 22, 1992        | Easing             | 78          |
| May 18 - Aug 16, 1993       | Tightening         | 91          |
| July 3, 1996 - Date         | Tightening         | 255         |

Only five days ahead of the FOMC meeting, on Thursday, March 20, Chairman Greenspan will deliver yet another set of remarks to lawmakers, this time at a Joint Economic Committee hearing. It is our expectation that he will repeat, or perhaps even heighten, his warnings about the potential for an early rate hike, just as he did in front of the same panel on January 31, 1994, four days before the last tightening round was commenced.

Bill Dudley

John Youngdahl



## Key U.S. Economic Data

|                                            | Latest Monthly Data |         |         |         | 6 Mo<br>Trend | 12 Mo<br>Trend | Next<br>Release |
|--------------------------------------------|---------------------|---------|---------|---------|---------------|----------------|-----------------|
|                                            | '97 Feb             | '97 Jan | '96 Dec | '96 Nov |               |                |                 |
| Nonfarm Payrolls (ch. Thousands)           | 339                 | 247     | 231     | 181     | 210           | 228            | Apr 4           |
| Unemployment Rate (%)                      | 5.3                 | 5.4     | 5.3     | 5.3     | 5.3           | 5.3            |                 |
| Index of Hours Worked (% ch)               | 2.7                 | -1.6    | 0.8     | 0.8     | 5.8           | 3.9            |                 |
| Average Hourly Earnings (% ch)             | 0.2                 | 0.2     | 0.4     | 0.8     | 3.7           | 3.8            |                 |
| Producer price finished goods index (% ch) | -0.4                | -0.3    | 0.6     | 0.1     | 1.4           | 2.2            | Apr 11          |
| Excluding food and energy                  | -0.1                | 0.0     | 0.1     | -0.1    | 0.0           | 0.4            |                 |
| Consumer price index (% ch)                | --                  | 0.1     | 0.3     | 0.3     | 2.9           | 3.0            | Mar 19          |
| Excluding food and energy (% ch)           | --                  | 0.1     | 0.2     | 0.2     | 2.3           | 2.5            |                 |
| Retail sales (% ch)                        | 0.8                 | 1.5     | 0.5     | -0.1    | 8.6           | 5.1            | Apr 11          |
| Excluding motor vehicles (% ch)            | 0.5                 | 1.4     | 0.3     | 0.2     | 7.4           | 5.4            |                 |
| Industrial Production (% ch)               | 0.4                 | -0.1    | 0.4     | 0.8     | 3.9           | 3.8            | Apr 16          |
| Manufacturing                              | 0.8                 | -0.3    | 0.6     | 0.8     | 4.5           | 4.3            |                 |
| Capacity utilization (%)                   | 83.3                | 83.2    | 83.5    | 83.4    | 83.2          | 83.2           | Apr 16          |
| Manufacturing                              | 82.5                | 82.1    | 82.5    | 82.4    | 82.3          | 82.2           |                 |
| Housing Starts (annual rate, thousands)    | --                  | 1350    | 1323    | 1486    | 1425          | 1466           | Mar 18          |
| Single-family                              | --                  | 1108    | 1005    | 1133    | 1120          | 1150           |                 |
| Trade balance (billions, monthly)          | --                  | --      | -10.3   | -7.9    | -10.0         | -9.4           | Mar 20          |
| Merchandise                                | --                  | --      | -16.6   | -14.3   | -16.1         | -15.5          |                 |
| Factory Orders (% ch)                      | --                  | 2.5     | -1.5    | -0.5    | 3.8           | 5.2            | Apr 2           |
| Durable Goods                              | --                  | 3.6     | -1.8    | -1.7    | 2.8           | 4.5            | Mar 26          |
| Personal Income (% ch)                     | --                  | 0.3     | 0.7     | 0.6     | 5.9           | 6.1            | Mar 31          |
| Wages and Salaries                         | --                  | -0.1    | 1.1     | 0.8     | 6.7           | 6.9            |                 |
| Purchasing Managers' Index (%)             | 53.1                | 52.0    | 53.8    | 52.4    | 52.2          | 51.3           | Apr 1           |
| Consumer Sentiment U Mich (Feb 66=100)     | 99.7                | 97.4    | 96.9    | 99.2    | 97.4          | 95.2           | Mar 28          |
| Conference Board (1985=100)                | 118.4               | 118.7   | 114.2   | 109.5   | 113.3         | 108.8          | Mar 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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**Goldman  
Sachs****U.S. Calendar****Focus for the Week Ahead**

- Fed Chairman Greenspan will deliver one more round of congressional testimony prior to the March 25 FOMC meeting, this time before the Joint Economic Committee (March 20). He is unlikely to temper, and may well intensify, his warnings about the possibility of an early monetary tightening.
- Consumer prices are expected to rise 0.2%, both overall and excluding the food and energy groups (March 19). The core figure should be held down somewhat by a decline in apparel quotes.
- The trade deficit likely widened again in January, in part reflecting a reversal of the statistically suspect narrowing posted early in the fourth quarter of last year (March 20). The January surge in wholesale inventories hints that imports are reaccelerating.
- Housing starts should record strong gains for February for several reasons, including warm weather, robust new home sales volumes, low stocks of unsold dwellings, and a rebound from flood-depressed activity in the West (March 18).

**Economic Releases and Other Events**

| Date       | Time  | Indicator                     | Estimate    |             | Last Report |
|------------|-------|-------------------------------|-------------|-------------|-------------|
|            |       |                               | GS          | Consensus   |             |
| Tue Mar 18 | 8:30  | Housing Starts (Feb)          | +12.0%      | +5.2%       | +2.0%       |
| Wed Mar 19 | 8:30  | Consumer Price Index (Feb)    | +0.2%       | +0.2%       | +0.1%       |
|            |       | Excluding Food & Energy       | +0.2%       | +0.2%       | +0.1%       |
| Thu Mar 20 | 8:30  | Trade Balance (Jan)           | -\$11.6 Bil | -\$10.3 Bil | -\$10.3 Bil |
|            | 10:00 | Philadelphia Fed Survey (Mar) | +15.0%      | +18.0%      | +17.4%      |
| Fri Mar 21 | 2:00  | Federal Budget Balance (Feb)  | -\$47.5 Bil | -\$43.0 Bil | -\$44.3 Bil |

- Homebuilders' Survey (Mon, Mar 17)
- Treasury Announces 2- and 5-Year Notes (Tue, Mar 19 - 2:30)
- Greenspan Testifies to the Joint Economic Committee (Thu, Mar 20 - 10:00)
- Import and Export Prices (Fri, Mar 21 - 10:00)
- Treasury Announces 1-Year Bill (Fri, Mar 21 - 2:30)

**Interest Rates: Forecast vs. Forward Yields:**

|              | 3 mo | 6 mo | 12 mo |
|--------------|------|------|-------|
| LIBOR 3 mo   | 5.8% | 6.2% | 6.8%  |
| Forward      | 5.8  | 6.1  | 6.4   |
| 2 Yr T-Note  | 6.2  | 6.5  | 7.0   |
| Forward      | 6.4  | 6.5  | 6.7   |
| 10 Yr T-Note | 6.7  | 7.0  | 7.2   |
| Forward      | 6.8  | 6.8  | 6.9   |

**Key Numbers in the Business Outlook**

|                    | 1996  | 1997 |      | 1996  | 1997E |
|--------------------|-------|------|------|-------|-------|
|                    | Q4    | Q1E  | Q2E  |       |       |
| Real GDP           | 3.9%  | 3.5% | 3.4% | 2.4%  | 3.3%  |
| Ind. Prod., Mfg.   | 4.6   | 3.8  | 4.6  | 2.8   | 4.5   |
| CPI                | 3.3   | 3.6  | 2.8  | 2.9   | 3.2   |
| After-Tax Profits* | 10.9E | 6.9  | 7.4  | 15.1E | 5.0   |
| Unemployment       | 5.3   | 5.3  | 5.1  | 5.4   | 5.1   |

\* Excluding inventory profits; adjusted for depreciation distortions.

TO: Gene Sperling  
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| BAS  | Bearer A Shares              | EC      | Euro Convertibles               |         | NVS                | Nonvoting Shares           |
| BS   | Bearer Shares                | ED      | Equity Derivatives              |         | OS                 | Ordinary Shares            |
| CD   | Convertible Debentures       | ES      | Equity Securities               |         | PC                 | Participating Certificates |
| CPF  | Convertible Preferreds       | For RS  | Foreign Registered Shares       | RBS     |                    | Registered Bearer Shares   |
| CLA  | Class A Shares               | G       | Genussschein                    | RS      |                    | Registered Shares          |
| CLB  | Class B Shares               | Gds     | Global Depositary Receipt/Share | ZC      |                    | Zero Coupon Convertibles   |
| CS   | Common Stock                 | New CLA | New Class A Special Shares      |         |                    |                            |

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**Investment  
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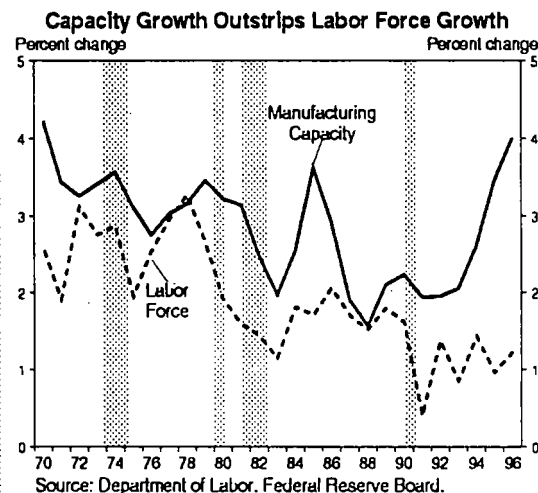
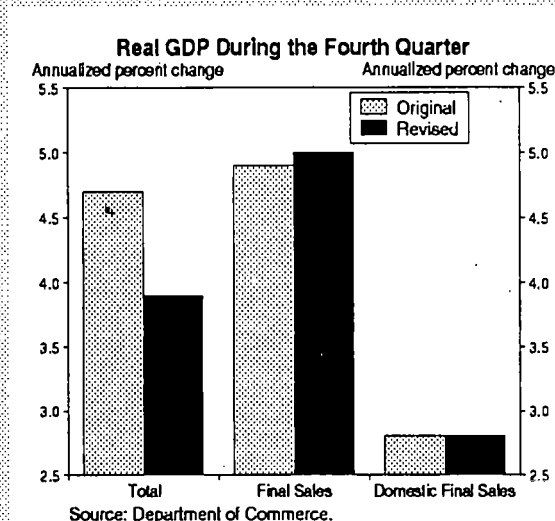
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# U.S. Economics Analyst

## Capital Spending: Inflation's Balance Wheel

- U.S. financial markets are taking more seriously Chairman Greenspan's warnings that continued strong growth and signs of rising labor-market stress may provoke credit tightening, now that he has said more explicitly that signs of higher inflation are not a prerequisite to such a rate rise.
- It remains a very close judgment as to whether or not the Fed will hike rates as soon as the March 25 FOMC meeting. Data due next week on labor market developments and factory conditions will likely tip the balance.
- Meanwhile, a markdown of fourth-quarter GDP growth, stemming entirely from reductions in inventory accumulation, means that a higher growth pace can now be expected in the first quarter of 1997. We have moved our growth target for this period from 1.8% to 2.5%, raising the expected first-half gain to 3.0%.
- One key factor behind benign inflation has been the surge in capacity growth that has resulted from strength in capital spending. Its traditional role as inflation's balance wheel has been enhanced in the Brave New Business Cycle, which stimulates business investment and features faster deliveries of capital equipment.
- Inflation has also benefited from sharp declines in computer prices and the fact that imports, rather than domestic production, account for almost all of the incremental capital spending since 1990. But inflation is apt to turn up in 1997, albeit at a gradual pace, as productivity gains fail to fill the gap between strong growth in output and slow growth in the labor force.



## Trade Recommendations

- Stay long the June '97/June '98 Eurodollar futures calendar spread, raising stops to a close below 50 basis points and retaining a target of 90 basis points.
- Stay short December '97 Euro futures, moving stop down to a close above 94.00 from 94.15.
- Set shorts in June T-bond futures at 111.08, with a stop on a close above 112.16.

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**Issue No: 97/9  
February 28, 1997**

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## I. Weekly Wrapup

### Economic and Market Overview

Bond and stock prices swooned in the wake of Fed Chairman Greenspan's "Humphrey-Hawkins" testimony, in which he cautioned that a preemptive tightening of monetary policy should not be ruled out. The re-pricing of the bond market to reflect some risk of a rate rise next month is entirely appropriate in our view, since we continue to assess the probability of such a move at close to 50%.

The latest economic reports have been virtually uniform in suggesting a continuation of sturdy expansion in demand and production. The Conference Board's confidence index for February (118.4) was essentially steady versus the 87-month high reached the prior month. Such high confidence is substantially tied to a perception of robust job availability, which seems justified in view of the strikingly low volume of first-time unemployment claims. Durable-goods orders posted a larger-than-expected jump in January, up 3.6% overall and 4.8% outside the volatile defense and aircraft categories. These gains completely reversed large declines over the previous two months. Unfilled order backlogs also rose steeply (+0.8%), implying pressure on factories to accelerate output. An uptick in the Chicago Purchasing Managers Index (to 56.2%) fits this pattern.

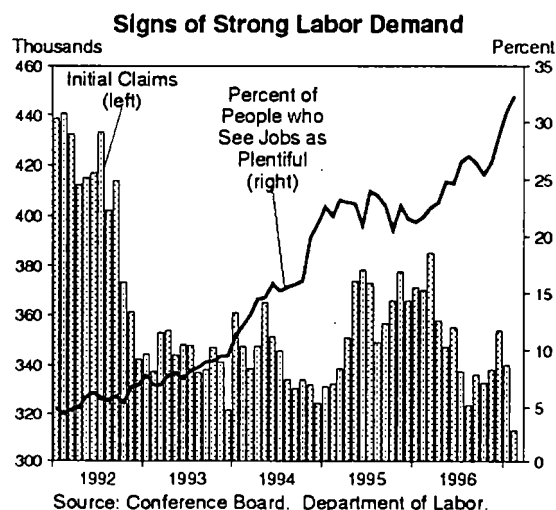
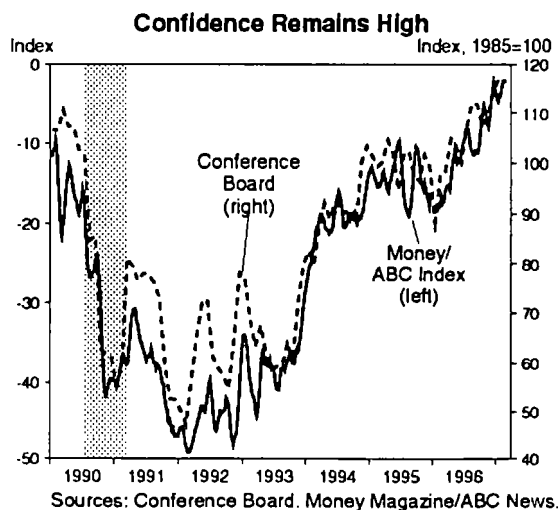
Revisions to fourth-quarter GDP echoed these soundings of firm business conditions. Though overall growth was revised down, from 4.7% to 3.9%, all of the reduction derived from a slower stock accumulation rate. Leaner inventories suggest that

more growth can now be expected in the first quarter. Thus, we have revised up our GDP growth estimate for this period, from 1.8% to 2.5% annualized.

### Federal Reserve Policy

Chairman Greenspan has clearly signaled that he and other senior central bankers are creeping closer to a short-term rate increase. In his report to Congress, Greenspan offered an outlook for continued firm U.S. economic growth with upside risks to core inflation measures, especially if labor markets continue to tighten and workers begin to demand greater wage and benefit awards. Of particular note were the Fed chief's remarks that some of the main forces suppressing wage and price gains in recent quarters—job insecurity, corporate profit margin expansion, and a rising dollar exchange rate—may now be waning, as well as his statement that even a small inflation pickup must not be tolerated. The latter comment underscores the Fed's willingness to act before clear signs of faster price inflation emerge.

Coming reports on manufacturing activity and broad employment conditions will be of great importance in the central bank's decisions on interest rates next month. Given Chairman Greenspan's obvious focus on labor market developments, market participants are advised to pay close attention to both the size and the composition of the unemployed labor pool. A sharp drop in the unemployment rate or further evidence of a rise in the number of people voluntarily leaving jobs could tilt the balance in favor of an early start to the tightening process.





## Fiscal and Political Developments

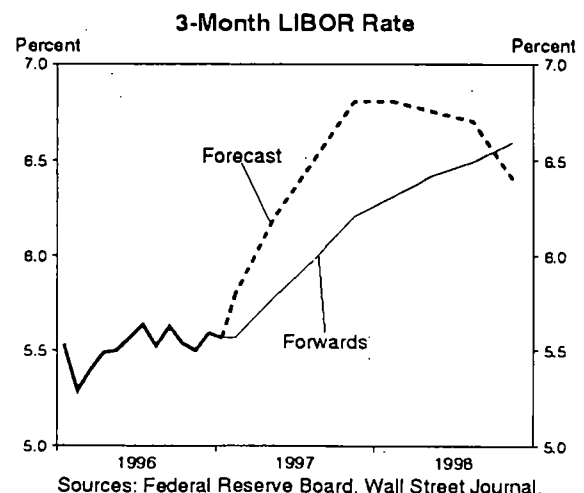
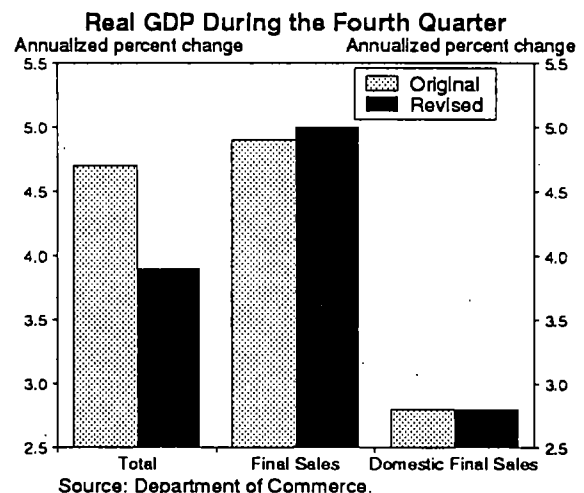
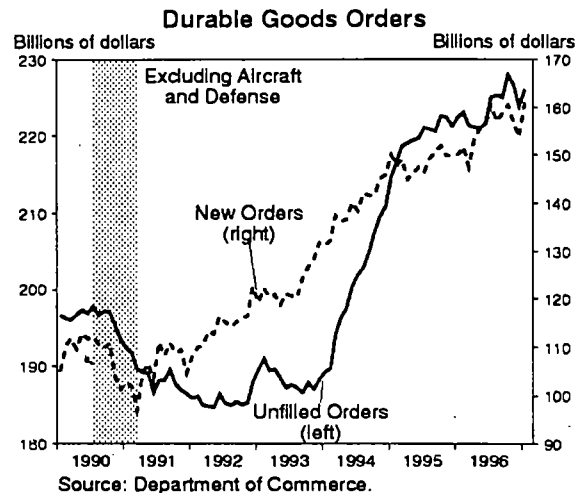
While a bipartisan deal to balance the budget remains likely, it does not look like this will be achieved before summer. Congressional leaders appear to be having a hard time coordinating the budget-writing effort, with top House members pursuing different agendas. Many Republican lawmakers may refuse to support any deal that does not contain a large net tax cut. A gap of more than \$60 billion exists between the fiscal 2002 deficit estimates of the White House and the Congressional Budget Office, and this must be bridged in a way that satisfies GOP conservatives while also allowing room for the steeper tax reductions they seek. On the Democratic side, political sensitivities related to the next presidential race may constrain flexibility. House Minority Leader Richard Gephardt (D-Missouri), a prospective challenger for Vice President Albert Gore in 2000, is refusing to take part in efforts to modify inflation indexation for the purpose of restraining growth in Social Security and other entitlement outlays. His stance may deter the Administration from supporting inclusion of a CPI adjustment in a budget accord.

## Market Outlook and Comments on Value

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

Forward rates in the Eurodollar market once again reflect some risk of a Fed monetary tightening by midyear, but still not enough in our view to incorporate the distinctly more negative tone of Chairman Greenspan's comments and the strong forward momentum in economic activity suggested by recent indicators. Thus, we continue to recommend an outright short stance in December 1997 Euros, with stops reduced from 94.15 to 94.00 on the grounds that the market should not recover above levels that prevailed before the Fed chairman spoke. Similarly, long June 1997/June 1998 calendar spread positions should be retained, because coming economic reports should imply sturdy expansion, underscoring the potential for a sizeable cumulative rate rise over the next year. Raise stops for the calendar spread from 35 to 50 basis points.

We also sense that the tide has turned toward higher yields in the long duration sector of the market. Therefore, we would look for an opportunity to sell bonds at prices moderately above those which now prevail. Set shorts in June bond contracts on a rise to or above 111.08, with a stop on a close above 112.16.





## II. Capital Spending: Inflation's Balance Wheel

Benign inflation has certainly been the hallmark of the current business expansion, which features declining core rates of inflation in both consumer and producer prices on the eve of its sixth anniversary. In no small part, this is due to strong growth in capital spending, which so far has forestalled the emergence of serious inflationary constraints on U.S. capacity.

The notion that capital spending helps keep inflation under control, by expanding capacity, is nothing new. However, in the United States this role has been enhanced in recent years by various structural changes that have reduced the frequency of recessions—a regime we have termed the Brave New Business Cycle.<sup>1</sup> In this setting, the prospect of longer business expansions is apt to stimulate capital spending, while shorter delivery times for capital goods should help companies avert capacity constraints. Declining computer prices and rising import penetration in the capital goods sector have also reinforced the role of capital spending as an inflation preventative.

However, strong capital spending has not immunized the U.S. economy from inflation. Rapid growth in capacity provides no guarantee that productivity gains will fill the large gap between growth rates of output and labor input. Thus, we continue to expect inflation to turn up in 1997, albeit very gradually.

It also appears that year-to-year growth in capital spending has passed its peak in this business expansion. Rapid growth in capacity—4% per year in manufacturing and perhaps 3% overall—sets the stage for a slowdown over the next year or two, and it creates a clear risk of pronounced weakness in the unlikely event of a recession. But this is not necessarily bad news for U.S. capital goods producers, whose business has become increasingly international.

### Inflation's Balance Wheel

Capital spending—defined as total business outlays on plant and equipment—is inherently less inflationary than any other form of expenditure. This is because it not only draws on current capacity but does so for the purpose of expanding future capacity.

<sup>1</sup> For a detailed analysis, see William C. Dudley and Edward F. McKelvey, *The Brave New Business Cycle: No Recession in Sight*, January 1997.

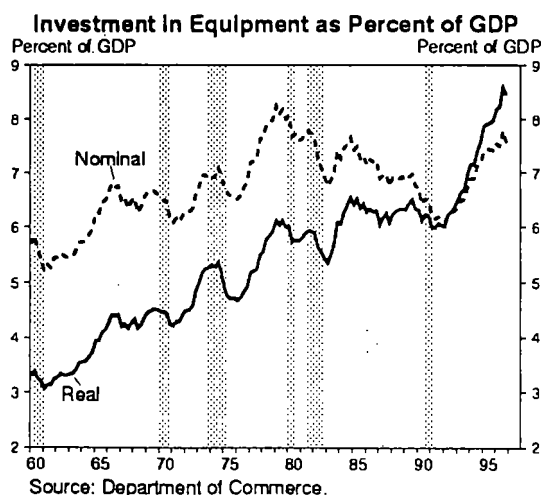
Thus, capital spending has always served as a balance wheel of sorts for inflation.

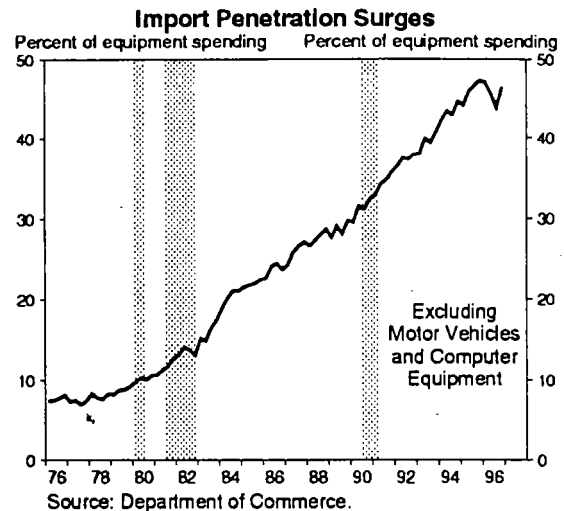
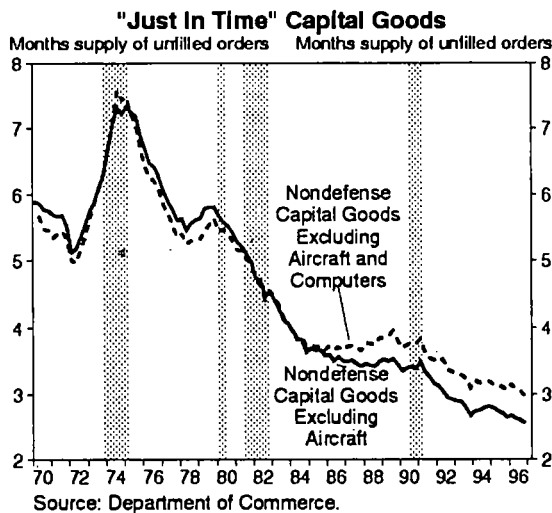
In our view, the advent of the Brave New Business Cycle has enhanced this role in four ways:

#### 1. Over time, capital spending is apt to rise as a percentage of real GDP.

There are two reasons for this. First, cutting labor costs and keeping them under tight control has been a major motivation for the changes in corporate behavior that underlie the Brave New Business Cycle. One way to accomplish this objective is to provide a leaner work force with more capital per worker—that is, to invest more intensively in plant and equipment. Second, companies will be more willing to commit the funds needed for capital investment once they develop the confidence that business expansions will last longer.

On the surface, this does not appear to have happened. Since the last business cycle peak in the summer of 1990, real business spending has averaged 9.8% of real GDP, slightly less than the 10.0% average of the prior two cycles despite strong growth in recent years. But this is mainly due to the prolonged contraction in outlays for structures following the repeal of overly generous tax incentives in 1986. Outlays for business equipment have escalated sharply as a percentage of GDP, at least in real terms. Most of this escalation reflects the acquisition of computers and related equipment; however, even for other types of equipment the ratio of real outlays to real GDP has moved up slightly.



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## 2. Capital equipment is getting cheaper, at least in relative terms.

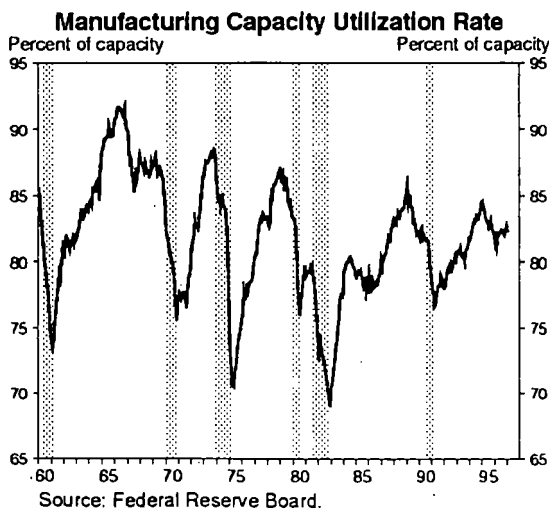
When it comes to nominal spending, the story is quite different. Even for equipment, nominal outlays have slipped relative to GDP—to 6.8% on average in this cycle from 7.2% in the preceding two cycles. This divergence reflects the 13.2%-per-year rate at which the deflator for computers and peripherals has been sliding, which has virtually offset the 2.8% annualized increase in prices of other types of equipment. While the difficulty of measuring the prices of computers cautions against putting too much confidence in the precision of this offset—or, for that matter, in the recorded strength of real capital spending—the basic point is clear: By investing heavily in computers, U.S. business firms have gotten a big bang for their investment buck and, in the process, helped contain U.S. inflation by steering the

composition of national expenditure toward items whose prices have been falling sharply.

## 3. Delivery times for capital goods are shorter.

In the 1970s, the ratio of unfilled orders to shipments of nondefense capital goods (other than aircraft) averaged 6.1, indicating an average delivery time of slightly more than 6 months. By 1996, this ratio had fallen to less than 3 months. While part of this downshift represents the shift toward computers and peripherals, which have short delivery times, the bulk of it represents faster delivery for other types of equipment. Thus, companies can bring capital equipment on line more quickly to alleviate capacity constraints as they begin to emerge.

The benefits of this are evident in the smoother path that capacity utilization has followed in recent years. Peaks in utilization have been progressively lower, and in the 1990s the standard deviation of quarterly changes in utilization has been cut by more than half—to 0.8 percentage points from 1.7 points in the prior two decades.



## 4. Capital spending has placed hardly any drain on existing domestic capacity.

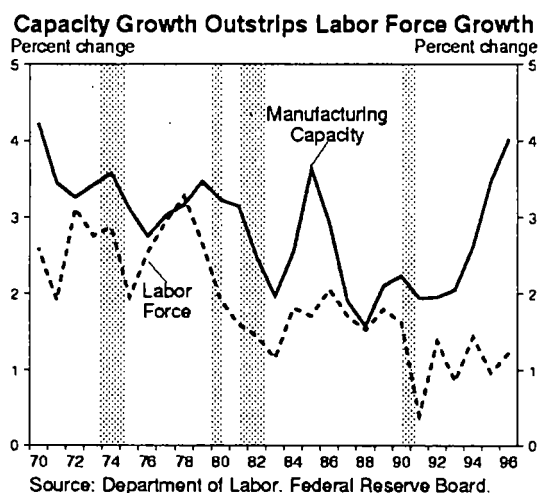
Finally, one of the driving forces behind the emergence of the Brave New Business Cycle has been the rise in global competition, which has added an extra element of discipline to pricing. Nowhere is global competition more evident in the U.S. economy than in the capital goods sector, where the import penetration rate has shot up from about 31% in

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1990—already well above average—to 46% in 1996.<sup>2</sup> One implication of this surge in import penetration is that capital spending has placed almost no demand on domestic productive resources in the 1990s. This runs counter to the common perception that it has been a big growth driver. Once the increase in imports is netted out, the contribution of capital spending to real GDP growth in this expansion has been virtually nil. In essence, the benefits of contained inflation have been realized without the downside of draining existing capacity. Put differently, this decade's expansion of U.S. capacity has been accomplished almost entirely by importing excess capacity from abroad.

### No Immunity From Labor Cost Pressures

Can capital spending continue to shield the U.S. economy from the labor-cost pressures that are slowly building? Probably not, because rapid capacity growth does not guarantee that productivity gains will fill the gap between growth rates in output and labor input. Although Federal Reserve figures indicate that manufacturing capacity grew 4% in 1996, the sustainable growth in the labor force is only about 1%. Thus, unless the economy slows from its current 3% trend, productivity growth must rise about 2% per year—more than double the current trend—to avert an acceleration in unit labor costs. Otherwise, inflation is apt to rise at least modestly as companies attempt to defend profit margins.



<sup>2</sup> This calculation excludes computers and motor vehicles because imports of these items cannot be readily distinguished between business and consumer use.

### Peak Growth Rates in Capital Spending

|                            | Periods of Expansion |           |           |           |              |
|----------------------------|----------------------|-----------|-----------|-----------|--------------|
|                            | 61Q1-69Q4            | 70Q4-73Q4 | 75Q1-80Q1 | 82Q4-90Q3 | 91Q1-Current |
| Qtrs Ahead of NBER Peak    | 16                   | 1         | 4         | 25        | N/A          |
| Qtrs from Last NBER Trough | 19                   | 11        | 16        | 6         | 16           |

### Risks Tilt Toward Slower Capital Spending

Rapid growth in capacity sets the stage for a slowing in business investment growth over the next year or two. Already, factory output can rise 4% per year without causing utilization to increase. Up-to-date figures for the total nonresidential capital stock are not available, but if past relationships hold, then the 3% real GDP growth we envision will not boost the utilization of existing capacity materially, and next year's growth slowdown will almost surely reduce utilization.

Under these circumstances, it seems likely that the peak growth rate for real capital spending in this expansion has passed. This underscores a change in the pattern of capital spending in the Brave New Business Cycle: Whereas growth in such spending has normally peaked toward the end of shorter expansions—hence the classification of capital goods stocks as “deep cyclicals”—in longer expansions, growth typically peaks well before the cycle peak in total output, normally in the fourth or fifth year. In the new regime, growth in capital spending will probably ebb during the late phase of an expansion, and there is a clear risk that recessions will provoke deeper declines in capital spending because capacity growth will generally be high.

Does this mean that investment in U.S. capital goods producers is unwarranted? Not necessarily. While soaring imports of capital goods have accounted for almost all of this decade's surge in equipment outlays by U.S. firms, growth in real exports of capital equipment has also been phenomenal, averaging 12% per year between 1990 and 1996. Thus, the future success of these companies increasingly lies in the growth of our major trading partners, where the best news on investment still lies ahead.

Ed McKelvey



## Key U.S. Economic Data

|                                            | Latest Monthly Data |         |         |         | 6 Mo  | 12 Mo | Next    |
|--------------------------------------------|---------------------|---------|---------|---------|-------|-------|---------|
|                                            | '97 Feb             | '97 Jan | '96 Dec | '96 Nov | Trend | Trend | Release |
| Nonfarm Payrolls (ch. Thousands)           | --                  | 271     | 261     | 181     | 209   | 246   | Mar 7   |
| Unemployment Rate (%)                      | --                  | 5.4     | 5.3     | 5.3     | 5.3   | 5.4   |         |
| Index of Hours Worked (% ch)               | --                  | -1.7    | 0.8     | 0.8     | 1.3   | 4.0   |         |
| Average Hourly Earnings (% ch)             | --                  | 0.1     | 0.5     | 0.8     | 4.3   | 3.8   |         |
| Producer price finished goods index (% ch) | --                  | -0.3    | 0.6     | 0.2     | 2.8   | 2.5   | Mar 14  |
| Excluding food and energy                  | --                  | 0.0     | 0.1     | 0.1     | 0.4   | 0.6   |         |
| Consumer price index (% ch)                | --                  | 0.1     | 0.3     | 0.3     | 2.9   | 3.0   | Mar 19  |
| Excluding food and energy (% ch)           | --                  | 0.1     | 0.2     | 0.2     | 2.3   | 2.5   |         |
| Retail sales (% ch)                        | --                  | 0.6     | 0.3     | -0.1    | 4.3   | 4.9   | Mar 13  |
| Excluding motor vehicles (% ch)            | --                  | 0.4     | 0.0     | 0.2     | 3.0   | 4.6   |         |
| Industrial Production (% ch)               | --                  | 0.0     | 0.5     | 0.8     | 3.9   | 4.8   | Mar 14  |
| Manufacturing                              | --                  | -0.3    | 0.8     | 0.8     | 3.6   | 5.1   |         |
| Capacity utilization (%)                   | --                  | 83.3    | 83.5    | 83.4    | 83.3  | 83.2  | Mar 14  |
| Manufacturing                              | --                  | 82.2    | 82.7    | 82.4    | 82.3  | 82.2  |         |
| Housing Starts (annual rate, thousands)    | --                  | 1350    | 1323    | 1486    | 1425  | 1466  | Mar 18  |
| Single-family                              | --                  | 1108    | 1005    | 1133    | 1120  | 1150  |         |
| Trade balance (billions, monthly)          | --                  | --      | -10.3   | -7.9    | -10.0 | -9.4  | Mar 20  |
| Merchandise                                | --                  | --      | -16.6   | -14.3   | -16.1 | -15.5 |         |
| Factory Orders (% ch)                      | --                  | --      | -1.3    | -0.5    | 2.4   | 13.2  | Mar 6   |
| Durable Goods                              | --                  | 3.6     | -1.8    | -1.7    | 2.8   | 4.5   | Mar 26  |
| Personal Income (% ch)                     | --                  | --      | 0.8     | 0.6     | 5.6   | 5.9   | Mar 3   |
| Wages and Salaries                         | --                  | --      | 1.2     | 0.8     | 6.3   | 6.9   |         |
| Purchasing Managers' Index (%)             | --                  | 52.0    | 53.8    | 52.4    | 52.0  | 50.7  | Mar 3   |
| Consumer Sentiment U Mich (Feb 66=100)     | 99.7                | 97.4    | 96.9    | 99.2    | 97.4  | 95.2  | Mar 28  |
| Conference Board (1985=100)                | 118.4               | 118.7   | 114.2   | 109.5   | 113.3 | 108.8 | Mar 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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- Payroll job growth likely slowed in February, due in part to depressing influences from unusually powerful seasonal adjustments (March 7). Other statistics in the monthly employment report should be relatively strong, however; in particular, hours worked are expected to rebound sharply, unemployment seems poised to decline at least 0.1%, and year-to-year growth in average hourly earnings may approach 4.0%.
- The national purchasing managers survey probably will show a pickup in manufacturing activity this month, led by gains in new orders (March 3).
- Personal spending appears to have risen sharply at the outset of 1997, temporarily outstripping income growth, which likely was dampened by poor weather in the western part of the country (March 3).
- Fed Chairman Greenspan returns to Capitol Hill for the final half of his semiannual monetary policy report (March 5). Although his prepared statement will be the same as that delivered this week, the Chairman's views on key issues may be clarified further in the question-and-answer session with House panel members.

**Economic Releases and Other Events**

| Date      | Time  | Indicator                          | Estimate   |            |             |
|-----------|-------|------------------------------------|------------|------------|-------------|
|           |       |                                    | GS         | Consensus  | Last Report |
| Mon Mar 3 | 8:30  | Personal Income (Jan)              | +0.4%      | +0.1%      | +0.8%       |
|           | 8:30  | Personal Consumption (Jan)         | +0.7%      | +0.5%      | +0.5%       |
|           | 10:00 | Purchasing Managers Index (Feb)    | 53.5%      | 53.0%      | 52.0%       |
|           | 10:00 | Construction Spending (Jan)        | -0.5%      | +0.1%      | -0.7%       |
|           |       | Domestic Motor Vehicle Sales (Feb) | 13.0M      | 13.3M      | 13.6M       |
| Tue Mar 4 | 10:00 | New Home Sales (Jan)               | -8.7%      | -2.9%      | -1.0%       |
|           | 10:00 | Leading Indicators (Jan)           | +0.2%      | +0.1%      | +0.1%       |
| Thu Mar 6 | 10:00 | Factory Orders (Jan)               | +2.3%      | +0.7%      | -1.3%       |
| Fri Mar 7 | 8:30  | Civilian Unemployment Rate (Feb)   | 5.3%       | 5.3%       | 5.4%        |
|           | 8:30  | Nonfarm Payroll Employment (Feb)   | 175,000    | 230,000    | 271,000     |
|           | 3:00  | Consumer Credit (Jan)              | +\$6.0 bil | +\$5.5 bil | +\$4.9 bil  |

- Chairman Greenspan Delivers Monetary Policy Testimony To House Banking Subcommittee (Wed, Mar 5, 2:00)

- Chain-Store Sales Results (Thu, Mar 6)

**Interest Rates: Forecast vs. Forward Yields:**

|              | 3 mo | 6 mo | 12 mo |
|--------------|------|------|-------|
| LIBOR 3 mo   | 5.8% | 6.2% | 6.8%  |
| Forward      | 5.7  | 5.9  | 6.3   |
| 2 Yr T-Note  | 6.2  | 6.5  | 7.0   |
| Forward      | 6.2  | 6.4  | 6.5   |
| 10 Yr T-Note | 6.7  | 7.0  | 7.2   |
| Forward      | 6.6  | 6.7  | 6.8   |

**Key Numbers in the Business Outlook**

|                    | 1996  | 1997 |      | 1996  | 1997E |
|--------------------|-------|------|------|-------|-------|
|                    | Q4    | Q1E  | Q2E  |       |       |
| Real GDP           | 3.9%  | 2.5% | 3.4% | 2.5%  | 2.9%  |
| Ind. Prod., Mfg.   | 3.7   | 5.5  | 4.4  | 2.7   | 4.2   |
| CPI                | 3.2   | 3.5  | 2.8  | 2.9   | 3.2   |
| After-Tax Profits* | 10.9E | 6.7  | 7.3  | 15.1E | 4.9   |
| Unemployment       | 5.3   | 5.3  | 5.1  | 5.4   | 5.1   |

\* Excluding inventory profits; adjusted for depreciation distortions.

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### The Goldman Sachs U.S. Economic Outlook

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## Highlights

- The U.S. economy was strong at yearend 1996, but not as strong as implied by the 4.7% annualized growth rate published for real GDP in the fourth quarter. Nearly half of this increase was due to a seasonal drop in the trade deficit, most of which should be reversed this quarter. Thus, while real domestic final sales are apt to grow slightly faster than the fourth quarter's 2.8% annualized pace, we have dropped our estimate of first-quarter growth to 1.8% from 2.4%.
- Via ongoing acceleration in wages and salaries, the latest data on employment costs confirm that the U.S. labor market is tight. There is also growing evidence that the downtrend in benefits inflation has ended, increasing the probability that rising labor-cost inflation passes through to price inflation in 1997. We therefore continue to expect a small upturn in inflation to 3.2% in 1997, as measured by the CPI, from 2.9% in 1996.
- Economic policy does not pose an obstacle to growth at present. Fiscal policy turned neutral in 1997 after several years of modest restraint, and this posture is unlikely to change soon because any balanced budget deal is likely to backload the fiscal restraint. Indicators of monetary policy likewise suggest that it is not restrictive, a judgment confirmed by firm sales of new homes and motor vehicles.
- Federal Reserve officials appear to be inching closer to a tightening in policy, a decision that will probably turn on labor market developments. In this regard, signs of softness in the January employment report are more statistical than real and in no way overturn the accumulating evidence of labor cost acceleration. Thus, we continue to expect a tightening to start by midyear, and possibly as soon as late March.
- Dollar strength is the one "policy" variable that poses a risk of restraint, especially if G7 efforts to cap its rise are not successful. Even so, the dollar's effects on U.S. trade flows are apt to be small and long in coming. For this reason, the dollar probably played only a marginal role in the Federal Open Market Committee's decision to stand pat on February 4-5.
- Once under way, U.S. monetary tightening is almost sure to surpass the minimalist expectations in financial markets, currently no more than 25 basis points. In part, this is because the Federal Reserve's leverage on the economy has diminished in the financially deregulated world of the Brave New Business Cycle.<sup>1</sup> Even relative to earlier norms, the 125-basis-point increase in short-term interest rates we envision over the next year or so pales compared with other phases of monetary tightening. Thus, bond yields should rise when the tightening comes into clearer focus.

William C. Dudley

Edward F. McKelvey

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<sup>1</sup> -See our January 1997 paper, *The Brave New Business Cycle: No Recession In Sight*, for details.

## Overview

*Large gains in real income and asset values are sustaining last quarter's strong momentum in consumer spending. As a result, we continue to expect real GDP growth of about 3% and the Federal Reserve to boost interest rates in 1997.*

*Currently, neither fiscal nor monetary policy poses an obstacle to continued strong growth, while the dollar's dampening effects on U.S. growth are apt to be small and long in coming.*

The slowdown we anticipate, to 1.8% in the first-quarter 1997 from a 4.7% annual growth pace for real GDP in the fourth-quarter 1996, appears on the surface to be strikingly similar to the situation in mid-1996, when real GDP rose at an identical 4.7% rate in the second quarter, but only 2.1% in the third. However, we view the differences as significant because the slowdown reflects statistical measurement problems. *It is not real.* In particular, the trade balance swing accounts for all of the downshift; underpinnings to growth in domestic spending are much firmer, on balance, than before. Large gains in real income and asset values are sustaining last quarter's strong momentum in consumer spending. As a result, our growth outlook has not wavered. We continue to expect real GDP growth of about 3% in 1997.

This month, we focus on the role that economic policy is apt to play in 1997 and beyond. Currently, neither fiscal nor monetary policy poses an obstacle to continued strong growth. On the fiscal side, recent estimates by both the Congressional Budget Office (CBO) and the Office of Management and Budget (OMB) support our judgment that the thrust of budget policy turned to essentially neutral in fiscal 1997 from restrictive over the preceding four years. In fact, there is little likelihood that significant fiscal restraint will be imposed until after 2000 if this year's widely anticipated budget agreement is struck within the framework outlined in the Clinton Administration's fiscal 1998 plan, as seems likely. Meanwhile, our indexes of monetary conditions indicate that Federal Reserve policy is actually slightly easier than it has been on balance over the past ten years. Conditions in the credit-sensitive housing and auto industries, where demand is solid and inventories are low, support this conclusion.

Thus, we continue to believe that the Federal Reserve will be compelled to boost interest rates during 1997 in an effort to deflect inflation pressures before they can emerge. In this regard, both the minutes of the December Federal Open Market Committee (FOMC) meeting and Chairman Greenspan's congressional testimony in late January set the stage for such a move by focusing on the strength of the economy, the need to be forward-looking in setting policy, and the growing risk that the period of subdued inflation might be ending. The FOMC's decision to leave policy unchanged at its February 4-5 meeting suggests that central bankers still have some patience with the current patterns of strong growth and gradual wage acceleration. But if our outlook is right, this patience will soon run out—probably before midyear, and possibly as soon as the next FOMC meeting on March 25.

The one "policy" development that poses a risk of restraint on the U.S. economy is the dollar's persistent strength. Now nearly two years in the making, the dollar's rise has progressed to the point where the G7 finance ministers clearly want no further appreciation. How willing they are to make the policy changes needed to assure this outcome remains to be seen. But even if they do not succeed, the dollar's dampening effects on U.S. growth are apt to be small and long in coming for several reasons: (1) It has risen much less, in trade-weighted terms than against the German mark and the Japanese yen. (2) Domestic demand is picking up in Mexico and Canada. (3) The sensitivity of U.S. trade flows to changes in the exchange rate is quite small and typically is stretched out over two years.

### Growth: Not 4.7%, But Still Well Above Trend

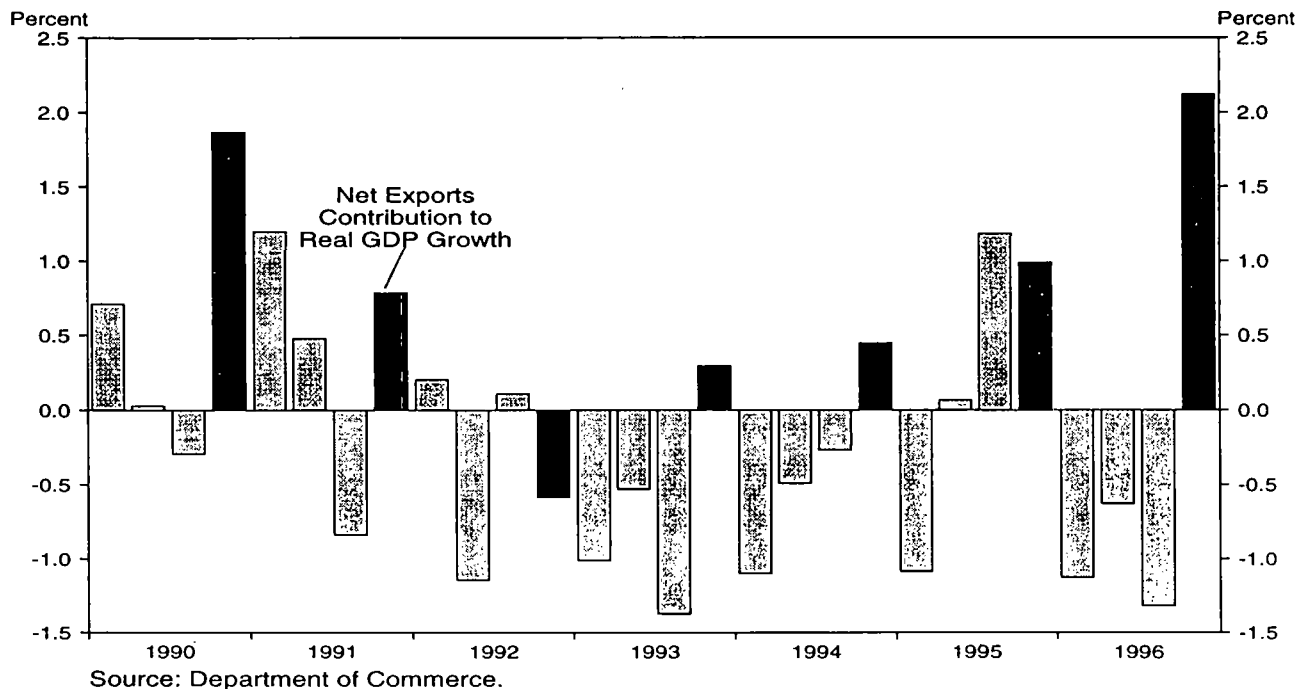
*Growth at yearend 1996 was strong, but not nearly as strong as 4.7%. Almost half of this figure represents a sharp and statistically suspect drop in the trade deficit.*

Growth at yearend 1996 was strong, but not nearly as strong as reported by the Commerce Department in its "advance" report, which summarizes last quarter's economic activity. In that report, the government's statisticians pegged annualized real GDP growth at 4.7%. However, almost half of this figure—2.2 percentage points—represents a sharp and statistically suspect drop in the trade deficit. In this circumstance, growth in real domestic final sales, which strips out changes in the trade balance and inventories, is probably the best gauge of underlying growth at yearend. On this basis, the economy expanded at a 2.8% rate last quarter.

The decline in the trade balance is suspect because it replicates a pattern seen in the fourth quarters of most recent years, as shown in Chart 1. It therefore appears to be the result of faulty seasonal adjustment rather than genuine improvement. In essence, seasonal trade patterns seem to be shifting toward yearend improvement faster than the Commerce Department's efforts to correct for them. The underlying cause of this problem is unclear, but it is rooted in exports, where annualized fourth-quarter growth rates are 6-7 percentage points above yearly averages, and widely distributed across major product categories. This suggests that the difficulty could stem from the shifting geographic destination of U.S. exports toward the Pacific Rim and away from Europe.

Whatever the cause, the bias is sizable. In six of the last seven years, the trade balance has been a significant contributor to real GDP growth in the fourth quarter. Trade improvement has boosted growth an average of 0.84 percentage points in these quarters during a period when the trade balance was a neutral factor, on balance. In recent years, the bias appears to have increased to about 1.1-1.2 percentage points. From 1993 through 1996, the trade balance added an average of 0.95 percentage points to

**Chart 1: Seasonal Trade Patterns Shift Toward Yearend Improvement**



fourth-quarter growth, while its average contribution in all quarters was -0.2 points.

Most of the fourth-quarter trade gain is likely to be reversed in the first quarter, if past patterns hold. In each of the past four years, the trade balance has subtracted 1.0-1.1 percentage points from growth in the first quarter, a remarkably tight range. Against the average drag of 0.2 points, this interval would imply that the first quarter tends to overstate trade weakness by 0.8-0.9 points, or about three-quarters of the average fourth-quarter overstatement of trade improvement. Analysis of export growth yields a similar conclusion—about 70% of the fourth quarter's excess growth is offset in the first quarter. In light of these patterns, we have increased our estimate of this quarter's trade drag to 1.6 percentage points. This, in turn, has caused us to cut our estimate of first-quarter real GDP growth to 1.8% from 2.4%.

### Déjà Vu All over Again? No!

*On the surface, the fourth-quarter/first-quarter sequence of growth looks like a replay of last summer, when the U.S. economy slowed just in time to forestall monetary tightening. But this time around, prospects for above-trend growth in real domestic final sales are actually quite a bit better.*

On the surface, the fourth-quarter/first-quarter sequence of growth looks like a replay of last summer, when the U.S. economy slowed just in time to forestall monetary tightening by the Federal Reserve. At that time, the economy was also downshifting from 4.7% real GDP growth in the second quarter to 2.1% in the third. But this time around, the swing in trade is entirely responsible for the anticipated slowing. Prospects for above-trend growth in real domestic final sales over the next quarter or two are actually quite a bit better, on balance, judging from the data summarized in Table 1. In particular, consumer fundamentals look even better than they did in mid-1996, when a hiatus in spending growth was the main factor driving the slowdown:

1. **Real disposable income growth is stronger.** From June to December, real disposable personal income rose at a 3.0% annual rate, compared with 2.6% during the first six months of the year. This growth continues to be driven by wages and salaries, which rose at nearly a 4% clip in real terms during the second half of 1996.
2. **Household net worth has continued to accumulate.** Although fourth-quarter flow of funds data on household balance sheets are not

**Table 1: Comparative Growth Trends Mid 1996 vs. Yearend**

|                                                                       | Jun-96 | Dec-96 |
|-----------------------------------------------------------------------|--------|--------|
| <b>Consumer</b>                                                       |        |        |
| Real Disposable Income (6 mo ch, annualized)                          | 2.6    | 3.0    |
| Consumer Installment Credit (6 mo ch, annualized)                     | 9.6    | 7.1    |
| University of Michigan Consumer Confidence                            | 92.4   | 96.9   |
| Conference Board Consumer Confidence                                  | 100.1  | 114.2  |
| <b>Housing</b>                                                        |        |        |
| Housing Starts, Q average (millions of units, annualized)             | 1.49   | 1.41   |
| Ratio of New Home Sales to Starts (3 mo mov avg)                      | 5.9    | 5.3    |
| <b>Orders</b>                                                         |        |        |
| Nondefense Capital Goods, Excluding Aircraft<br>(6 mo ch, annualized) | 5.3    | -3.9   |
| Manufacturing Capacity Utilization Rate                               | 82.3   | 82.6   |
| <b>Inventories</b>                                                    |        |        |
| Quarterly Accumulation of Nonfarm Inventories(%)                      | 1.1    | 2.9    |
| Final Sales of NonFarm Goods (% ch year ago)                          | 3.7    | 4.0    |

*Consumer spending is on a much more solid track now than it was six months ago.*

yet available, it is a slam-dunk that they continued to improve substantially during the second half of the year. Asset values benefited from a surge in stock prices, more than 10% based on the S&P 500 (and another 9% since New Year's Day), plus a personal saving rate in excess of 5% of disposable income. Meanwhile, growth in installment credit has subsided to 7.1% at an annual rate between June and December from 9.6% during the first six months of 1996.

3. **As a result, confidence has moved up further from already high levels.** At yearend, the Conference Board reported its confidence index at 114.2 (1985=100), up from 100.1 in June. Meanwhile, the Michigan index of sentiment rose to 96.9 (Feb 1966=100) from 92.4. Both surveys recorded further gains in January, with the Conference Board's index tacking on another 2.6 points and the Michigan index up marginally to 97.4.

Thanks to these developments, consumer spending is on a much more solid track now than it was six months ago. This is evident in three ways. First, the platform set for this quarter's growth at yearend was much higher than it was at midyear despite the downward revision to nonauto retail sales for December. Second, domestic motor vehicle sales picked up in January to a 13.5-million unit rate versus 13.1 million, on average, in the fourth quarter. Finally, retailers reported solid sales gains for January, albeit from weather-depressed lows a year ago. On the basis of these considerations, it appears that real consumer spending is growing this quarter at a rate not far below the fourth-quarter 3.4% annualized increase—in sharp contrast to the virtual hiatus in spending growth that occurred in last year's third quarter.

*Outside the household sector, these half-year comparisons are more mixed, but generally support the notion that growth will remain firm.*

Outside the household sector, these half-year comparisons are more mixed, but generally support the notion that growth will remain firm:

1. Housing starts fell 5.6% between the second and fourth quarters of 1996, in part because the midweek timing of Christmas and New Year's appears to have caused longer-than-normal work shutdowns (see box on p. 6). Over the same period, the months' supply of unsold new homes fell to 5.3 from 5.9. By yearend, this ratio was more than one month below its 6.3-month long-term average. This suggests that residential activity is more likely to support than restrain growth in the first half of 1997.
2. Growth in orders for nondefense capital goods slowed in the second half of 1996, and these bookings actually fell 7.7% in November and December. This decline, too, was probably influenced by the timing of Christmas and New Year's Day. Meanwhile, capacity utilization rose slightly. Under these circumstances, it seems unlikely that growth in capital goods spending will slow more than moderately in the near future, notwithstanding the 1.7% fourth-quarter annualized setback in real business equipment outlays.
3. Nonfarm inventories accumulated more rapidly in the fourth quarter than in the second, although yearend declines in the book value of manufacturing and wholesale stocks suggest that the preliminary GDP estimates overstate last quarter's accumulation. At a 2.9%

## Christmas on a Wednesday Distorts Economic Data

As many economists—including ourselves—have pointed out, the 1996 holiday shopping season was unusually short, causing signals about the pace of retail activity to be more ambiguous than usual. But the holiday months were also atypical in another way, with both Christmas Day and New Year's Day falling on a Wednesday, creating a two-week period during which production schedules were vulnerable to being disrupted by vacation plans (i.e., either employees or employers deciding that "It's just two extra days"). Thus, when analyzing the recently reported December statistics on production, factory orders, NAPM orders, and housing, we recommend caution, because historically, these figures show a pronounced tendency to look weaker than trend when December 25 falls on a Wednesday. It is likely that at least some of the softness of recent reports reflects such a distortion.

The table below shows the deviation from trend, calculated as the seven-month centered moving average, in a variety of indicators for Decembers during which Christmas fell on a Wednesday. The negative reading across production-related statistics during most of these months seems more than coincidental. In some cases, the impact is rather sizable—manufacturing orders appear to take a 1.4-point hit, on average, helping to shave the orders component of the NAPM approximately 3.6 points. Industrial production, too, generally appears softer than the surrounding months would suggest. While the average negative hit to housing starts does not look very large, an outsized increase in December 1985 obscures what is otherwise a consistently negative impact.

One cross-check for the idea that production is merely disrupted, while underlying economic conditions remain on track, is provided by looking at payroll growth: If firms continue to see strong product demand ahead, payrolls

should not be cut. Moreover, payroll reports are a snapshot of the employment situation, based on a survey during the week that includes the 12th of the month, and should therefore not be influenced by disruptions related to the timing of Christmas. A look at the payroll data suggests that this pattern, in fact, holds true—employment growth is neither consistently higher nor lower than trend during the relevant December months.

For December 1996, much of the data released thus far have proved weaker than trend (judging trend as the trailing six-month moving average until data for a centered average are available). Factory orders, for instance, by registering a decline of 1.4% in December, fell 1.7 points below the average over the previous six months. Housing starts also looked soft, falling 191,000 below trend in December. Employment growth, however, held up nicely in December and January, relative to levels in neighboring months. These statistics, when viewed alone, seem to reflect the same pattern shown below, making it tempting to conclude that a midweek Christmas played at least some role.

Interestingly, however, neither the orders component of the NAPM nor the NAPM composite was weak in December relative to trend (January did look weak, however). This twist on the historical pattern could be interpreted to mean that manufacturing orders exited 1996 on such a firm note that any effects of production disruptions were swamped. January could then be viewed as a respite, following an usually large December surge. The net implication would be that production momentum remains robust. In gauging whether this interpretation is correct, January and February data for all the indicators discussed should be closely watched.

Jill Jacobs

**December Deviation From Seven-Month Centered Moving Average\***

| <u>Christmas on<br/>Wednesday</u> | <u>Factory<br/>Orders<br/>% Change</u> | <u>NAPM<br/>Orders<br/>% Points</u> | <u>NAPM<br/>Composite<br/>% Points</u> | <u>Industrial<br/>Production<br/>% Change</u> | <u>Housing Starts<br/>Change (000's)</u> |
|-----------------------------------|----------------------------------------|-------------------------------------|----------------------------------------|-----------------------------------------------|------------------------------------------|
| 1957                              | NA                                     | -2.6                                | -2.4                                   | 0.0                                           | NA                                       |
| 1963                              | -0.5                                   | -3.0                                | -3.3                                   | -0.5                                          | -114                                     |
| 1968                              | -1.2                                   | -0.9                                | 0.3                                    | -0.3                                          | -91                                      |
| 1974                              | -4.1                                   | -7.6                                | -5.4                                   | -2.3                                          | -30                                      |
| 1985                              | 2.8                                    | -0.7                                | -0.3                                   | 1.0                                           | 225                                      |
| 1991                              | -3.8                                   | -6.6                                | -4.5                                   | -0.7                                          | -59                                      |
| <i>avg. deviation</i>             | -1.4                                   | -3.6                                | -2.6                                   | -0.5                                          | -14                                      |

\* An average centered on December and including the previous three months as well as the subsequent three months.

annual rate, even this stockpiling is below the trend rate of growth in real final sales of nonfarm goods (4.0% in the second half of 1996); as a result, ratios of stocks to sales have drifted lower. Thus, inventories are still poised to turbo-charge real GDP growth if growth in final sales remains firm.

**Policy Not Restrictive**


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*While the likelihood of a budget deal has increased, the chances that it is a good deal have decreased. The lower hurdle set by the revised CBO baseline makes it easier to avoid the politically painful spending cuts essential to achieving longer-run balance.*

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Under these circumstances, we continue to believe that the U.S. economy will grow a sturdy 3% this year, faster than its long-term sustainable 2% rate. This conclusion reflects not only our analysis of current trends, but a judgment that policy is not pushing the economy significantly in one direction or another. In our view, the current stances of fiscal and monetary policy are essentially neutral, biased slightly toward stimulus rather than restraint in both cases. And while the dollar's appreciation has probably progressed to the point where it could reduce export growth, the impact should be neither large nor immediate.

On the fiscal side, financial markets are focused on the question of whether Congress and President Clinton will reach an agreement to balance the budget this year. Although the negotiating positions have not changed much from last year, when an accord proved elusive, there are three reasons for optimism that a deal can be reached this year. First, differences between the two sides on the thorniest issues—Medicare and tax cuts—do not appear insurmountable. Second, a CBO-certified budget balancing agreement is much easier to reach now that this agency has trimmed its baseline deficit estimate for 2002 by nearly one-third. Finally, the political calculus has changed immensely, not only because 1997 is not an election year but also because Republicans' efforts to paint President Clinton as the obstacle to a balanced budget in the last election proved unsuccessful; with that experience fresh in their minds, GOP leaders are more likely to cooperate with the president than to risk the perception that they are the obstacle.

However, while the likelihood of a budget deal has increased, the chances that it is a good deal have decreased, for the simple reason that the lower hurdle set by the revised CBO baseline makes it easier to avoid the politically painful spending cuts essential to achieving longer-run balance. This can be seen by analyzing President Clinton's fiscal 1998 budget proposals, as detailed in the box on p. 8. The key conclusions are as follows: (1) The deficit is not projected to drop below the \$107-billion fiscal 1996 level until 2000. (2) Structural changes in key entitlement programs, especially Medicare, are largely avoided. (3) Instead, concern this year is focused on tax cuts. (4) As a result, reaching budget balance in 2002 relies heavily on the time-worn gimmickry of optimistic interest-rate assumptions and asset sales.

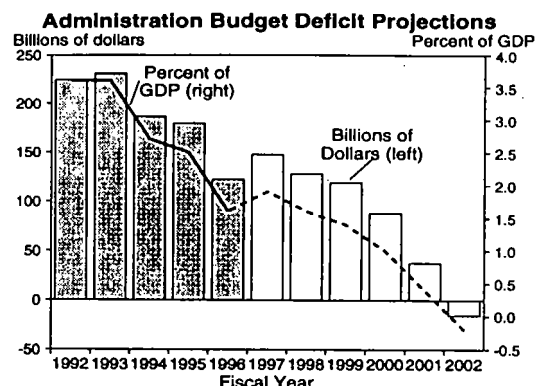
On a nearer-term horizon, the modestly higher budget deficits projected for fiscal 1997 by both the administration and CBO—increases of \$19 billion and \$17 billion, respectively—confirm that fiscal policy has moved to a neutral posture from the slightly restrictive stance of the past four years. This shift is illustrated by the CBO's estimates of the cyclically adjusted balance, the best available gauge of the budget's impact on economic growth. On this basis, the CBO estimates that the deficit will be 1.8% of GDP in 1997, up slightly from 1.7% in fiscal 1996, as shown in Chart 2. Moreover, on current policy settings, the CBO sees no change in this posture in coming years, a judgment that is unlikely to change much given the dull knife wielded by the Clinton Administration in its proposals.

## Clinton Budget Implies No Fiscal Restraint Before 2000

Prospects for an agreement between President Clinton and Congress this year on a medium-term plan for federal fiscal balance remain very favorable. While congressional leaders expressed disappointment with many particulars of President Clinton's budget proposals for fiscal 1998-2002, they sound willing to use his submission as a starting point for developing a blueprint that provides for balance within five years. Toward that end, elected officials are displaying much greater flexibility on substantive policy issues than was the case in either 1995 or 1996.

Despite these hopeful signs for bipartisanship, however, this year's budget process is unlikely to lead to a more restrictive fiscal impulse on the economy for the next few years. We note four main grounds for this conclusion:

1. **Most of the deficit restraint in the president's budget is delayed until 2000 or later.** Of the \$252.1 billion in total deficit savings recommended for fiscal 1997-2002, three-fourths (\$190 billion) falls in the last two years. In 1998 and 1999 combined, by contrast, the net deficit decline from the current baseline would amount to only \$21.6 billion.
2. **The great majority of future savings would not be derived from immediate spending cuts or structural program reforms.** Less than a quarter of the proposed deficit reduction would be attributable to Medicare, Medicaid, and other federal mandatory outlay areas, which are the fastest-growing items and, hence, the biggest potential problems for deficit control in the 21st century. A far greater proportion (45%) is projected to come from discretionary spending cuts in the 2000-2002 interval, which shifts the burden for this restraint onto the next two Congresses. Another 15% (\$38 billion) comes from sales of major assets and the audio spectrum, actions that mitigate the need for tighter budgeting in traditional budget categories.
3. **Congress this year appears to be focusing more on tax cuts than on renewing the battle for entitlement program changes.** Republican House members, their majority reduced following a bruising election season, have little taste for another drive to squeeze popular (though expensive) federal entitlements. Judging from comments by senior lawmakers, achievement of a sizeable, broad tax abatement—including a capital gains rate reduction—has moved up on the priority list.



4. **Consideration is being given to a device that would allow use of relatively positive economic assumptions in the budgeting process.** The Clinton administration has proposed the use of a deficit-reduction "mechanism" or "trigger" that would come into play if the administration's economic assumptions—which are more sanguine than those published by the Congressional Budget Office—prove too rosy. In that event, the administration's suggested tax reductions would be allowed to expire, and across-the-board spending cuts would occur beginning in fiscal 2001. Significantly, Republican leaders have not yet ruled out this option, which is a hint that they might accept it as the price for gaining the scope of tax relief they are seeking.

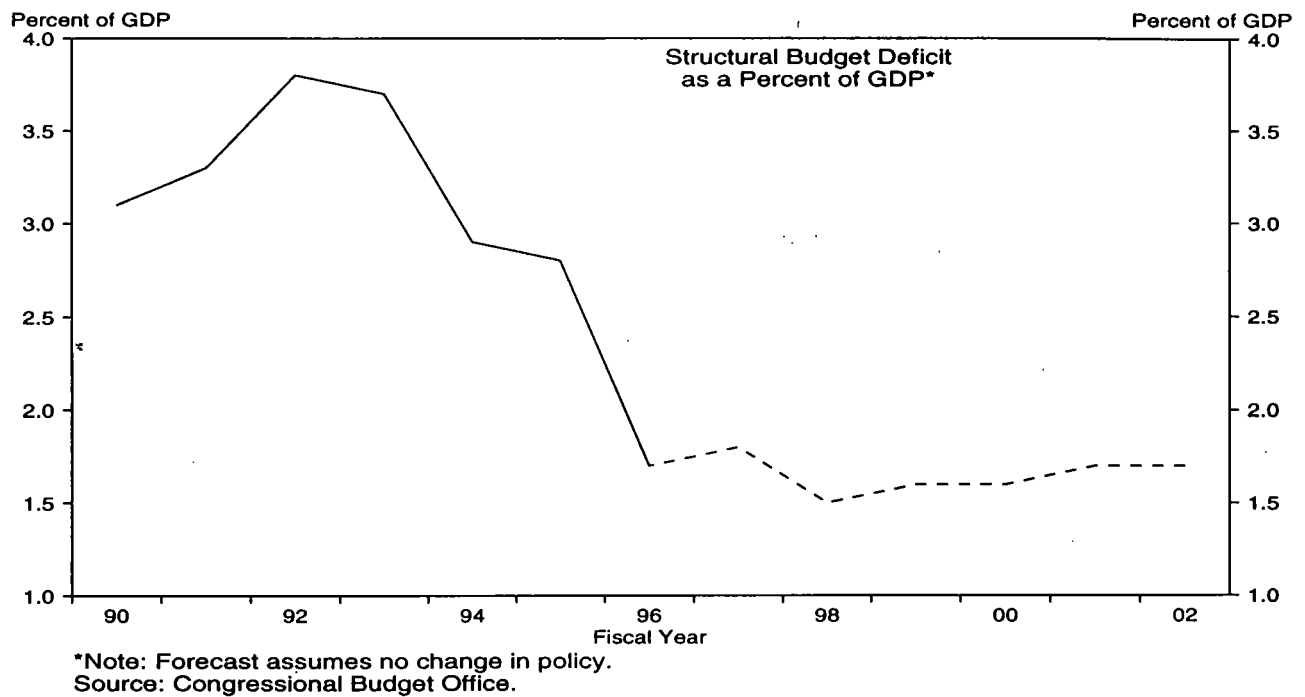
From 1993 through early 1996, senior U.S. central bankers needed to pay close attention to the federal budget-writing process as they evaluated the appropriateness of monetary policy changes. Those conditions no longer seem to be present. The deficit as a percent of GDP, both in actual and structural terms, has leveled off or edged up slightly, and it is unlikely to move down again to any notable degree until at least fiscal 2000. Therefore, we expect the Fed to give the budget little or no weight this year in its monetary policy deliberations. Thus, financial market participants should not expect that the outcome of the budget process will serve as a deterrent to changes in short-term U.S. interest rates over coming quarters.

John Youngdahl

*At present, the stance of monetary policy is quite similar to that of fiscal policy—certainly no obstacle, and perhaps a small stimulus to growth.*

Unless this situation changes radically, it is unlikely that Federal Reserve officials will base their policy decisions on the expectation of significant fiscal restraint. At present, the stance of monetary policy is quite similar to that of fiscal policy—certainly no obstacle, and perhaps a small stimulus to growth. This is evident in two ways. First, our indexes of monetary conditions are currently below their average levels of the past ten years (Chart on p. C20). Thus, monetary policy is actually providing more support to economic activity than it has, on average, over the past decade. Second, activity in the housing and motor vehicle industries—the sectors most directly affected by changes in credit policy—has held

Chart 2: Deficit Projections Confirm That Fiscal Policy Has Shifted to a Neutral Stance



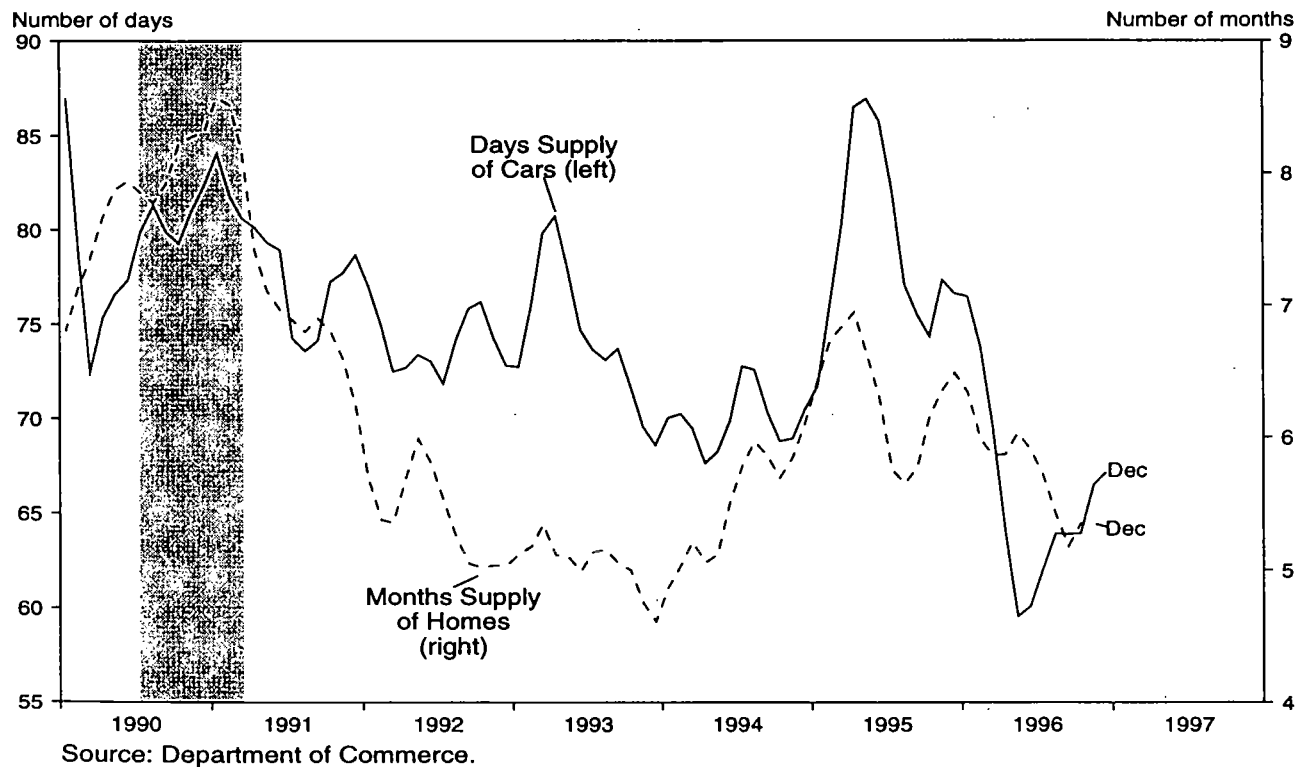
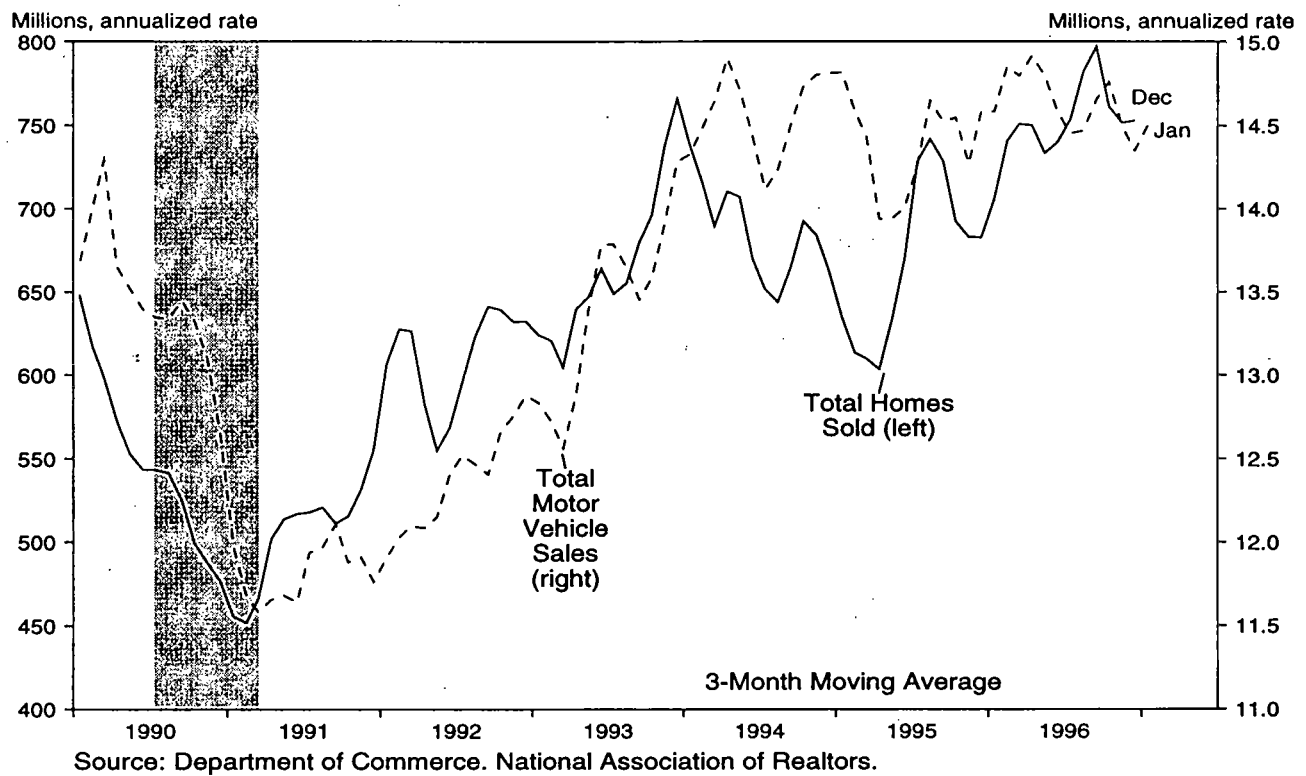
up quite well. As shown in Chart 3, production and sales of homes and motor vehicles remain firm, and low inventory/sales ratios suggest that weakness is not on the horizon.

There are growing signs, however, that FOMC members recognize that monetary policy is not restrictive, and they are inching closer to tightening credit. This is evident in a number of comments contained in the minutes to its December 17th meeting, at which it unanimously retained a tightening bias despite a string of softer economic data. From these comments, we draw the following conclusions about the mind-set of senior Fed officials:

*There are growing signs, however, that FOMC members recognize that monetary policy is not restrictive, and they are inching closer to tightening credit.*

- **The Fed staff forecast expects inflation to drift higher.** "Consumer price inflation, excluding the volatile food and energy components, . . . was forecast to rise slightly over 1997 and 1998. . . . Somewhat larger increases would have been projected in consumer price inflation in the absence of anticipated technical measurement changes to the index."
- **FOMC members appeared to agree with the staff forecast on inflation.** "Despite the prospects for moderate economic growth, members observed that the risks on inflation still seemed to be tilted toward some rise over time."
- **The stock market bears watching because of risks that it might fuel increased consumer spending.** "The members recognized the need to monitor with special care price movements in the stock market and asset markets more generally for their implications for

**Chart 3: Credit-Sensitive Sectors—Firm Sales and Low Inventories Imply No Monetary Restraint**



*Fed officials are not inclined to wait to see the whites of inflation's eyes before tightening monetary policy.*

consumer and other spending.” At the time of the meeting, the S&P 500 index was at 733. The index is now at 812, up almost 11%. Although this quote on the stock market can be read in different ways, the concern appears to be that the stock market gains, which have not yet leaked out into consumer spending, might begin to do so in the future and that this would push the economy along at an above-trend growth pace.

- **Fed officials are not inclined to wait to see the whites of inflation's eyes before tightening monetary policy.** “Because the risks of waiting did not appear to be substantial at this juncture, *anticipatory tightening was not yet called for.*” [our emphasis] The key words here, in our opinion, are “anticipatory” and “yet.”

The thrust of these minutes, written in mid-December but not released until early February, was previewed by Chairman Greenspan in congressional testimony on January 21. At that session, Mr. Greenspan seemed impressed with the strength of recent economic growth. Moreover, the fact that he did not offer a laundry list of reasons why it should slow, as he had in July, suggested that he saw the risks as evenly balanced around this strong trend. He then focused the bulk of his remarks on inflation, surmising that the restraining influence of workers' job insecurity on inflation in wages and prices might be drawing to a close.

### **Wage Inflation: The Horse Is Out of the Barn**

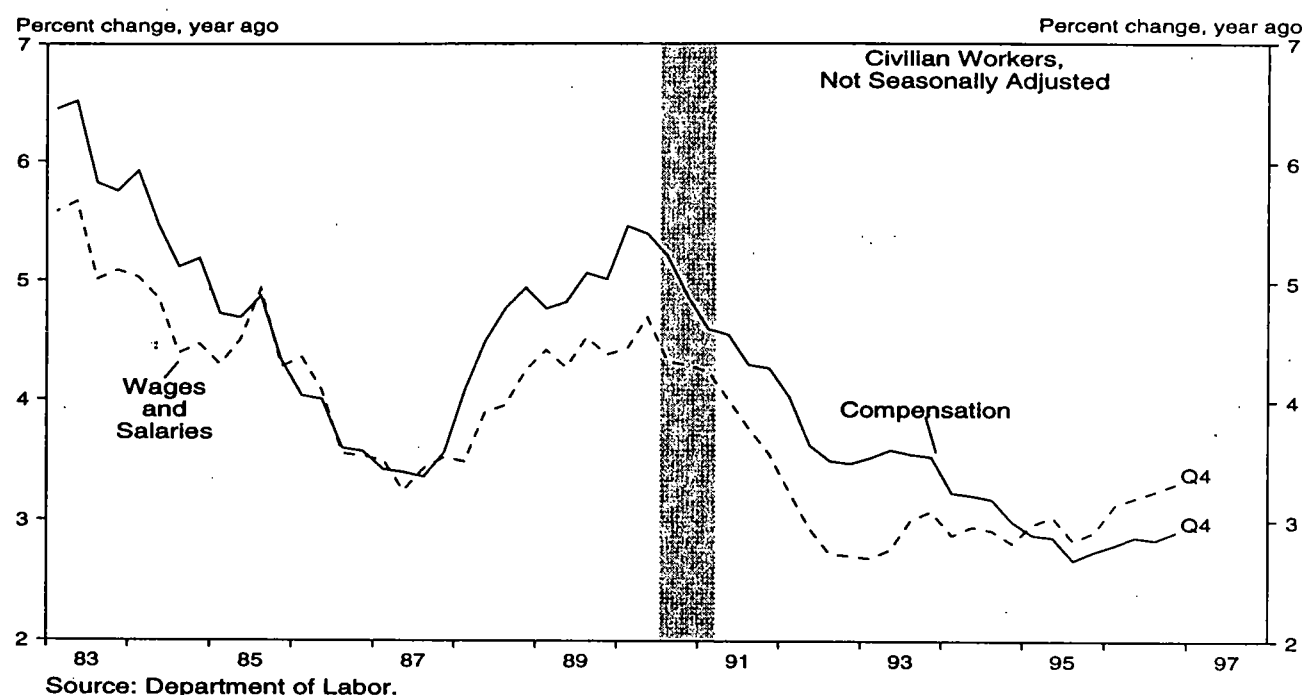
*They will be watching labor-market indicators closely to see whether the patterns of job growth and compensation gains increase the likelihood of a pickup in inflation. In our view, the evidence already points in that direction.*

These comments imply that Fed officials will be watching labor-market indicators closely to see whether the patterns of job growth and compensation gains increase the likelihood of a pickup in inflation. In our view, the evidence already points in that direction. The latest employment cost index, covering the fourth quarter of 1996, confirms via an ongoing pattern of wage and salary acceleration that the U.S. labor market is tight, as shown in Chart 4. This acceleration is widespread across major regions, occupations, and industries, contrary to the spottiness of wage pressures depicted in anecdotal reports. And there is growing evidence that the downtrend in benefit cost inflation, which until recently had shielded total compensation from the wage and salary acceleration, has ended.<sup>2</sup> Under these circumstances, pressures on inflation are more likely to surface as companies seek to maintain profit margins.

On the surface, the January employment report suggested in several respects that tensions in the labor market might be easing. Average hourly earnings rose a scant 0.1%, hours worked plunged 1.7%, and unemployment ticked up 0.1 percentage point to 5.4%. However, the first two factors reflected seasonal distortions common to the first month of a quarter, as shown in Table 2. For hourly earnings, the year-to-year trend remained at an elevated 3.8%, and annualized six- and three-month increases were even higher at 4.3% and 5.5%, respectively. And the rise in unemployment came alongside an unusually large increase in both the labor force and wages, even when corrected for changes in survey methods. This suggests that the rise in unemployment is more likely a reflection of improving job opportunities drawing workers into the labor force, rather than a sign of reduced job availability, an interpretation

<sup>2</sup> See the January 31, 1997, *U.S. Economics Analyst*, pp. 4-6, for a more detailed analysis of the latest wage and cost data.

Chart 4: Labor Compensation Begins to Accelerate as Benefits Disinflation Ends



supported by declines in jobless benefit claims, a rise in the proportion of unemployed represented by job leavers, and the 271,000 increase reported for nonfarm payrolls.

*The one "policy" factor that may pose a risk to U.S. growth, if it persists, is the dollar's strength on world currency markets.*

When it met on February 4-5, the FOMC was obviously willing to wait a while longer before taking action to head off inflation pressures. But as the FOMC minutes note, "With the economy operating in the neighborhood of its sustainable potential, relatively minor differences in overall economic growth could have a significant effect over time on whether inflation would tend to trend up or down." Presumably, this applies just as much to the need for the Fed to tighten monetary policy. In our view, Fed tightening is quite likely to begin before midyear, and it could occur as soon as the next FOMC meeting, which is slated for March 25.

The one "policy" factor that may pose a risk to U.S. growth, if it persists, is the dollar's strength on world currency markets. That strength has reached the point where U.S. companies are beginning to complain about

Table 2: Seasonal Patterns in Wages and Hours Worked

| Indicator               | Average Monthly Change in 1996 | Average Change: 1 <sup>st</sup> Mo. of Qtr. | Average Change: 2 <sup>nd</sup> & 3 <sup>rd</sup> Mos. of Qtr. |
|-------------------------|--------------------------------|---------------------------------------------|----------------------------------------------------------------|
| Average Hourly Earnings | 0.31%                          | 0.05%                                       | 0.45%                                                          |
| Nonfarm Work Week       | 0.04 hr.                       | -0.40 hr.                                   | 0.26 hr.                                                       |
| Index of Hours Worked   | 0.31%                          | -0.99%                                      | 1.04%                                                          |

*At this juncture, it is unclear what force lies behind the G7 communiqué and therefore what success it may achieve in stabilizing the dollar.*

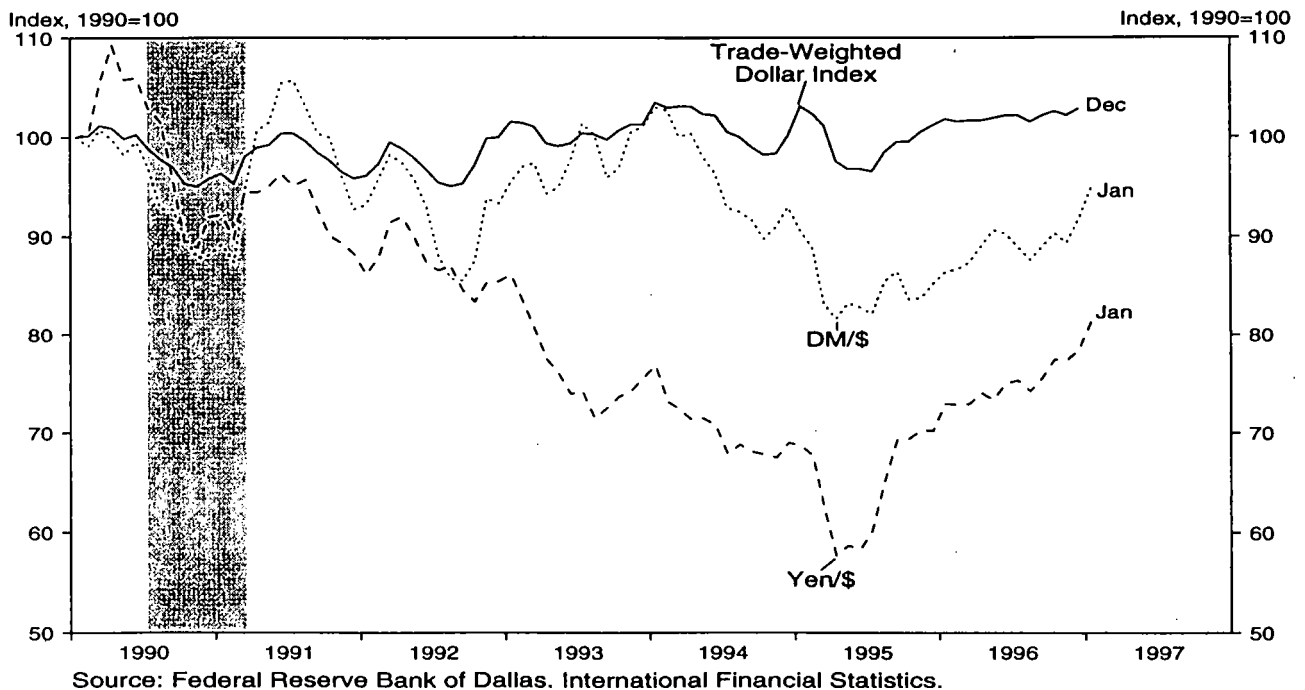
its impact on their operations. It has also evoked a response from the G7 finance ministers, who on February 8 officially declared, "We believe that the major misalignments in exchange markets, noted in our April 1995 communiqué, have been corrected."

At this juncture, it is unclear what force lies behind the G7 communiqué and therefore what success it may achieve in stabilizing the dollar. As yet, it is not even obvious whether the central banks will intervene to prevent further dollar gains, although that will surely be tested in coming days. But such intervention does not normally work unless backed up by shifts in policy—in this case, presumably via adoption of a tighter monetary/looser fiscal mix of policies abroad, especially in Germany and Japan. And the prospects of this seem next to nil. Thus, dollar strength has to be regarded as an ongoing risk to our above-trend growth outlook.

So far, however, the risk of the appreciation that has already occurred on the growth outlook in 1997 appears minimal, for several reasons:

1. **Of U.S. companies' problems, only part is rooted in a material loss of competitiveness.** The dollar's impact on earnings translation appears to be the source of about half of the reported difficulties, according to an informal survey of our industry analysts reported in this month's Analyst's Corner (box, p. 14). While this clearly hurts the bottom line, it can be hedged and has no direct effect on growth.
2. **The dollar's strength is concentrated against the Japanese yen and German mark.** Its appreciation against these two currencies has been 11.4% and 9.7%, respectively, over the past year, as shown in Chart 5. Meanwhile, based upon the trade-weighted measure of the dollar calculated by the Federal Reserve Bank of Dallas, the dollar

**Chart 5: Dollar Strength Modest on a Trade-Weighted Basis**



## The Analyst's Corner: The Impact of the Stronger Dollar

*The Analyst's Corner is a new regular feature of the Pocket Chartroom. Every month, we will publish in this space a summary of discussions with one or more of our industry analysts about a topic relevant to our economic outlook. This month's topic is the impact of the stronger dollar.*

An issue that both we and our equity analysts have been mulling over recently is whether the recent runup in the dollar has significant consequences for U.S. industries. Particularly in light of Treasury Secretary Rubin's subtle shift in stance, backing away from a stronger-dollar policy, we wonder what role corporate complaining has played. The following summarizes our discussions with a broad spectrum of our industry analysts, assessing whether the companies they follow are now feeling pinched by the dollar's rise. Some industries, of course, are essentially unaffected, while others actually benefit by seeing lower import costs. Yet, in thinking about U.S.-dollar policy in the future and the political issues that surround it, those industries that are suffering are most relevant.

One conclusion, as shown above, is that most industries where a rise in the greenback can hurt are starting to feel the impact. Dollar strength versus the yen appears to have the most broad-based impact. Regarding the deutschmark, some analysts indicate that exchange rates between deutschmark and other European currencies matter more, because many U.S. firms have a substantial manufacturing presence in Germany, which is used as a base for servicing Europe. Still, deutschmark weakness versus the dollar critically affects some industries, such as steel and high-end computer hardware.

Second, in conducting our survey, we asked analysts to be specific about whether the effects of dollar strength stem from negative currency translations, reduced competitiveness, or both. Currency-translation issues typically arise for companies with a substantial portion of their operations abroad, because profits are, in that case,

earned in foreign currencies, which are lower in dollar terms as a result of repatriation at a more expensive greenback rate. On the other hand, U.S. industries that export product from domestically based operations face reduced competitiveness when the dollar strengthens.

For heavy or high-end industries (i.e., for companies where skilled U.S. labor is often used in domestic manufacturing operations), the issue is competitiveness. The auto industry is probably the most visible example, because it is vulnerable both to lower export demand from consumers abroad and higher demand by U.S. consumers for imported cars. Note, however, that if foreign auto producers choose not to drop their dollar prices (but pad profit margins instead), the competitive effects are confined to reductions in export demand.

Our informal survey also suggests, however, that for many industries, the dollar's rise presents a translation issue only. The distinction is important because these industries likely have little role in influencing U.S.-dollar policy, for two reasons: (1) Once the move occurs and translation impacts are realized, the problem disappears (i.e., translation losses result from **changes** in the exchange rate, not from the dollar being at a high or low level). (2) Companies can hedge to protect themselves from translation effects of currency fluctuations.

All of this leads us to believe that while some corporations are feeling squeezed by dollar strength, this effect was probably not the primary motivation behind Rubin's shift in tone. Moreover, in thinking about both recent and future changes in dollar policy, it is likely that the massive amount of foreign direct investment by U.S. corporations into manufacturing facilities abroad has mitigated the effects of dollar strength on the health of U.S. firms. As the process of overseas investment continues, U.S. corporations may, on the margin, become either less energetic or less effectual in complaining about dollar strength.

Jill Jacobs

| Industry                     | Effects of \$ Strength |                      | Level Which is Worrisome |                          |
|------------------------------|------------------------|----------------------|--------------------------|--------------------------|
|                              | Firms Less Competitive | Currency Translation | \$/yen                   | \$/DM                    |
| Airlines                     | ✓                      | ✓                    | 116                      | Euro crosses matter more |
| Autos                        | ✓                      |                      | 120                      | Euro crosses matter more |
| Chemicals                    |                        | ✓                    | 120                      | 1.70                     |
| Consumer Products            |                        | ✓                    | 125                      | 1.75                     |
| Electrical Equipment         |                        | ✓                    |                          | are generally hedged     |
| Semiconductor Capital Equip. | ✓                      | ✓                    | 125                      | Not as relevant          |
| Servers / Networking         |                        | ✓                    | 120                      | 1.70                     |
| Software                     |                        | ✓                    | any large-scale changes  | any large-scale changes  |
| Steel                        | ✓                      |                      | 125                      | 1.70                     |

has risen less than 2% in trade-weighted terms.<sup>3</sup> It is the trade-weighted move that will be more important in governing trade flows.

2. **The dollar's impact on U.S. trade flows is small and stretched out over time.** Each 1% rise in the trade-weighted dollar reduces real export growth only about ½%, cumulatively, over a two-year period. The boost to import growth is even smaller. In comparison, the impact of an additional 1 percentage point of growth in demand abroad has effects four to five times larger and is more immediate.
3. **Domestic demand in Canada and Mexico is firm.** In Canada, we expect real domestic demand to rise 3.3% in 1997 from 2.1% in 1996. In Mexico, the comparable figures are 5.4% and 5.6%. Together, these two countries accounted for 30% of U.S. exports in 1996.

From this, we conclude that the dollar's impact on U.S. growth will be more visible in 1998 than in 1997, and then only if the currency continues to appreciate and growth in Europe and Japan continues to falter. It is therefore premature to assume that the dollar will exert much more than its usual marginal role on U.S. monetary policy decisions.

**Tightening: Likely to Be More than Currently Meets the Financial Eye**

*When the FOMC does decide that it is time to restrain growth, it will probably boost interest rates considerably more than expected.*

At most, financial markets are priced to an eventual tightening in monetary policy of minuscule proportions—no more than 25 basis points, at present. However, when the FOMC does decide that it is time to restrain growth, it will probably boost interest rates considerably more than this. Our expectation is that the cumulative increase will be 100-125 basis points for two reasons. First, Fed officials know that a move of 25 or 50 basis points would not have much effect on the economy, and therefore, it would probably not initiate a tightening phase with the expectation of only going this far. Otherwise, why bother? In this context, it is noteworthy that past tightening phases have typically ranged between 300 and 1,000 basis points. Second, in the financially deregulated world of the Brave New Business Cycle, the Fed has less leverage on the economy. Thus, to have the same impact on the economy's growth trajectory, it will have to work a bit harder.

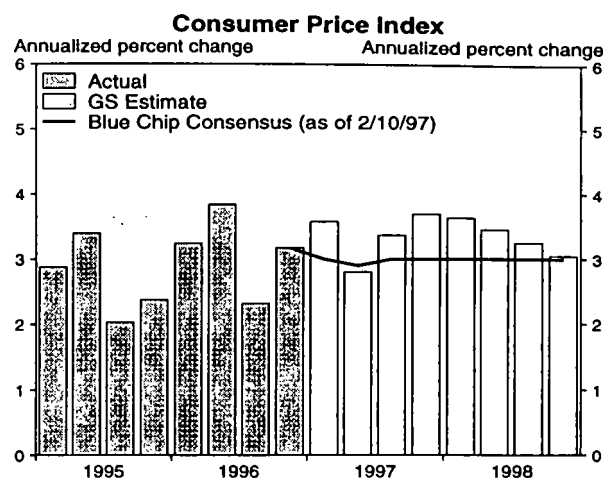
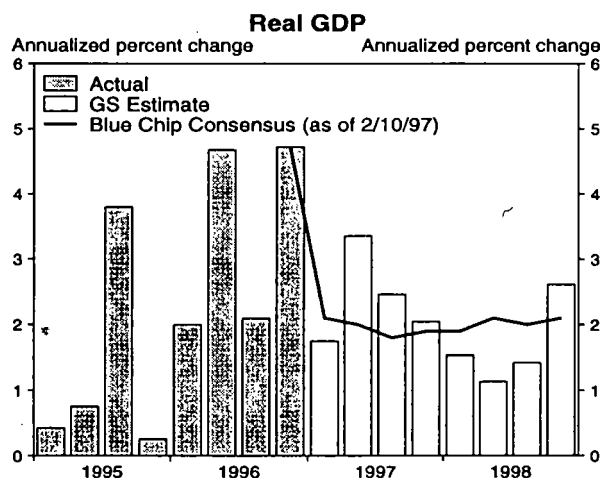
The bond market is apt to take its cue from the Fed. As long as tightening is in the murky distance, then long-term Treasury yields are likely to remain stuck in a 6½%-7% range. Once Fed officials either confirm that tightening is imminent or actually pull the trigger, then Treasury bond yields are likely to climb back above 7%. A repeat of the 1994 experience, however, appears very unlikely. Improved Fed credibility, prospects for a balanced budget agreement, and U.S. interest rates that are already high relative to rates in Japan and Germany should all help to prevent long-bond yields from rising above 7½%.

William C. Dudley  
February 17, 1997

Edward F. McKelvey

<sup>3</sup> This measure uses more up-to-date trade weights and is broader in its coverage than the Federal Reserve Board's trade-weighted dollar index, which shows a more substantial appreciation of the dollar over this time frame.

# Main Economic Forecasts



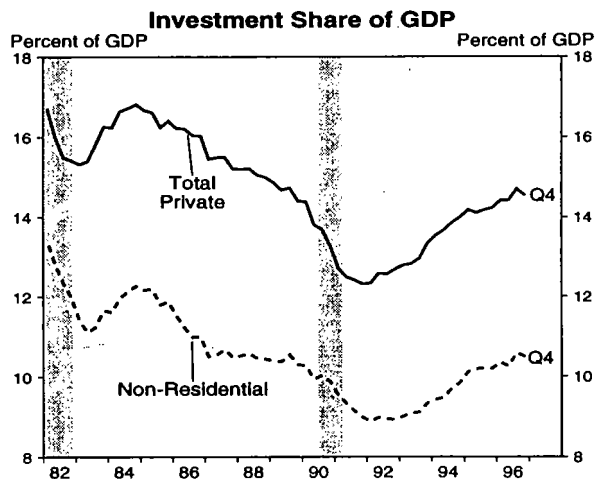
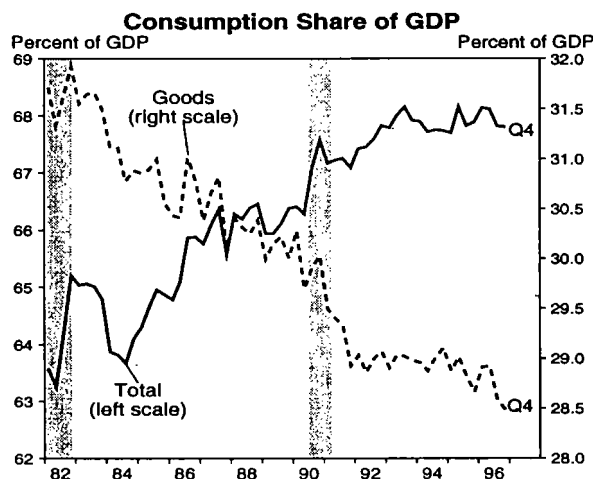
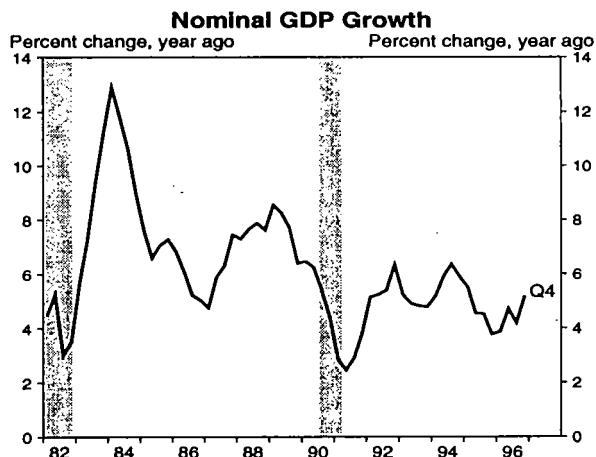
## UNITED STATES - MAIN ECONOMIC FORECASTS

|                                                                          | 1995   | 1996   | 1997   | 1998   | 1996   |        |        |        | 1997   |        |        |       | 1998   |        |        |       |
|--------------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|-------|
|                                                                          |        | (f)    | (f)    | (f)    | Q1     | Q2     | Q3     | Q4     | Q1     | Q2     | Q3     | Q4    | Q1     | Q2     | Q3     | Q4    |
| <b>GDP COMPONENTS (1992 Prices, % chg on Previous Period Annualized)</b> |        |        |        |        |        |        |        |        |        |        |        |       |        |        |        |       |
| Consumer Expenditure                                                     | 2.3    | 2.5    | 2.5    | 1.8    | 3.5    | 3.4    | 0.5    | 3.3    | 3.0    | 2.4    | 2.0    | 1.7   | 1.4    | 1.6    | 2.1    | 2.4   |
| Federal Government                                                       | -3.6   | -0.9   | 1.4    | 0.0    | 6.0    | 9.4    | -3.4   | -1.9   | 4.8    | 2.4    | 0.0    | -0.6  | 0.0    | 0.0    | 0.0    | -0.3  |
| State and Local Gov't                                                    | 2.4    | 2.0    | 2.0    | 1.7    | -0.9   | 6.7    | 1.1    | 2.2    | 1.3    | 2.0    | 1.9    | 1.7   | 1.7    | 1.6    | 1.6    | 1.6   |
| Resid. Fixed Investment                                                  | -2.3   | 5.4    | -1.6   | -7.2   | 7.4    | 16.3   | -5.2   | -1.3   | -1.0   | 1.1    | -4.9   | -13.9 | -12.8  | -7.6   | 3.7    | 5.4   |
| Bus Fixed Investment                                                     | 9.5    | 7.3    | 7.4    | 4.7    | 11.6   | 3.8    | 17.5   | 4.2    | 5.2    | 8.9    | 7.4    | 5.6   | 4.1    | 3.1    | 2.9    | 3.3   |
| - Structures                                                             | 7.3    | 4.7    | 5.1    | 3.5    | 7.6    | -3.6   | 8.2    | 22.7   | -10.0  | 10.0   | 7.5    | 5.0   | 2.5    | 0.0    | 2.5    | 2.5   |
| - Equipment                                                              | 10.4   | 8.2    | 8.1    | 5.0    | 13.1   | 6.8    | 20.8   | -1.7   | 10.8   | 8.6    | 7.4    | 5.7   | 4.7    | 4.1    | 2.9    | 3.5   |
| Inventories (chg) 1992\$bn                                               | 33.2   | 17.6   | 41.3   | 42.8   | -3.0   | 7.1    | 34.5   | 31.9   | 35.2   | 45.1   | 55.0   | 29.9  | 64.8   | 59.7   | 37.1   | 9.5   |
| Net Exports 1992 \$bn                                                    | -107.6 | -114.2 | -121.8 | -107.6 | -104.0 | -114.7 | -137.4 | -100.7 | -126.2 | -129.7 | -134.4 | -97.0 | -123.3 | -121.5 | -109.2 | -76.4 |
| - Exports                                                                | 8.9    | 6.5    | 8.1    | 8.9    | 1.8    | 5.7    | -0.9   | 25.5   | -0.6   | 8.6    | 5.9    | 20.9  | -1.8   | 9.6    | 12.4   | 16.9  |
| - Imports                                                                | 8.0    | 6.5    | 7.9    | 6.4    | 10.6   | 10.0   | 9.3    | 4.7    | 10.4   | 9.0    | 7.1    | 2.4   | 8.8    | 7.7    | 6.1    | 2.4   |
| <b>OUTPUT (% Chg on Year Earlier)</b>                                    |        |        |        |        |        |        |        |        |        |        |        |       |        |        |        |       |
| Real GDP                                                                 | 2.0    | 2.5    | 2.9    | 1.8    | 1.7    | 2.7    | 2.2    | 3.4    | 3.3    | 3.0    | 3.1    | 2.4   | 2.3    | 1.8    | 1.5    | 1.7   |
| Ind Production, Mfg                                                      | 3.5    | 2.8    | 4.4    | 3.2    | 0.8    | 2.7    | 3.3    | 4.2    | 4.8    | 4.4    | 4.3    | 4.1   | 4.1    | 3.5    | 2.7    | 2.5   |
| <b>% Chg on Previous Quarter Annualized</b>                              |        |        |        |        |        |        |        |        |        |        |        |       |        |        |        |       |
| Real GDP                                                                 | 2.0    | 2.5    | 2.9    | 1.8    | 2.0    | 4.7    | 2.1    | 4.7    | 1.8    | 3.4    | 2.5    | 2.0   | 1.5    | 1.1    | 1.4    | 2.6   |
| Ind Production, Mfg                                                      | 3.5    | 2.8    | 4.4    | 3.2    | 1.1    | 6.3    | 5.0    | 4.6    | 3.6    | 4.4    | 4.4    | 3.9   | 3.5    | 2.1    | 1.4    | 2.9   |
| <b>INFLATION (% Chg on a Year Earlier)</b>                               |        |        |        |        |        |        |        |        |        |        |        |       |        |        |        |       |
| Consumer Prices                                                          | 2.8    | 2.9    | 3.2    | 3.4    | 2.8    | 2.8    | 3.0    | 3.2    | 3.2    | 3.1    | 3.3    | 3.4   | 3.4    | 3.5    | 3.5    | 3.3   |
| Producer Prices                                                          | 1.9    | 2.6    | 2.3    | 3.5    | 2.2    | 2.5    | 2.8    | 2.9    | 2.5    | 2.1    | 2.3    | 2.4   | 3.1    | 3.7    | 3.7    | 3.3   |
| Compen per man hour                                                      | 3.1    | 3.8    | 4.4    | 4.7    | 3.8    | 3.8    | 3.7    | 3.8    | 4.0    | 4.2    | 4.5    | 4.9   | 4.8    | 4.8    | 4.7    | 4.3   |
| Labor Productivity                                                       | 0.2    | 0.8    | 0.9    | 0.6    | 1.0    | 0.8    | 0.4    | 1.2    | 0.7    | 0.9    | 1.1    | 0.9   | 1.2    | 0.7    | 0.2    | 0.2   |
| Unit Labor Costs                                                         | 2.9    | 2.9    | 3.5    | 4.1    | 2.7    | 2.9    | 3.3    | 2.6    | 3.3    | 3.3    | 3.4    | 4.0   | 3.7    | 4.1    | 4.5    | 4.1   |
| GDP Deflator                                                             | 2.5    | 2.0    | 2.0    | 2.6    | 2.1    | 2.0    | 1.9    | 1.8    | 1.6    | 1.9    | 2.0    | 2.4   | 2.5    | 2.6    | 2.7    | 2.6   |
| <b>FINANCIAL SECTOR</b>                                                  |        |        |        |        |        |        |        |        |        |        |        |       |        |        |        |       |
| Prime Rate (%) *                                                         | 8.5    | 8.5    | 9.5    | 9.3    | 9.0    | 9.0    | 8.8    | 8.5    | 8.5    | 9.0    | 9.3    | 9.5   | 9.5    | 9.5    | 9.5    | 9.3   |
| Discount Rate (%) *                                                      | 5.3    | 5.0    | 6.0    | 6.0    | 5.0    | 5.0    | 5.0    | 5.0    | 5.0    | 5.5    | 5.8    | 6.0   | 6.0    | 6.0    | 6.0    | 6.0   |
| Fed Funds (%) *                                                          | 5.6    | 5.3    | 6.5    | 6.3    | 5.3    | 5.3    | 5.3    | 5.3    | 5.5    | 6.0    | 6.3    | 6.5   | 6.5    | 6.5    | 6.5    | 6.3   |
| 3 Mth LIBOR (%) *                                                        | 5.8    | 5.6    | 6.8    | 6.4    | 5.4    | 5.6    | 5.6    | 5.6    | 5.8    | 6.2    | 6.5    | 6.8   | 6.8    | 6.8    | 6.7    | 6.4   |
| 10Yr Bond Yield (%) *                                                    | 5.7    | 6.3    | 7.2    | 6.6    | 6.3    | 6.9    | 6.8    | 6.3    | 6.9    | 7.0    | 7.1    | 7.2   | 7.0    | 6.9    | 6.8    | 6.6   |
| Corporate Profits (\$bn, after-tax)                                      | 380.2  | 407.7  | 429.3  | 440.9  | 408.8  | 408.1  | 402.2  | 411.6  | 425.4  | 425.8  | 434.0  | 432.3 | 442.5  | 440.3  | 438.3  | 442.6 |
| Federal Budget (FY, \$bn)                                                | -163.8 | -107.3 | -135.0 | -140.0 | -      | -      | -      | -      | -      | -      | -      | -     | -      | -      | -      | -     |
| Gen Govt Bal(\$bn)                                                       | -141.9 | -117.2 | -87.4  | -45.2  | -144.7 | -112.2 | -116.4 | -95.6  | -107.1 | -98.8  | -84.1  | -59.6 | -60.6  | -52.5  | -41.4  | -26.2 |
| % of GDP                                                                 | -2.1   | -1.7   | -1.2   | -0.6   | -2.1   | -1.6   | -1.7   | -1.4   | -1.5   | -1.4   | -1.2   | -0.8  | -0.8   | -0.7   | -0.6   | -0.4  |
| <b>OVERSEAS SECTOR</b>                                                   |        |        |        |        |        |        |        |        |        |        |        |       |        |        |        |       |
| Trade Balance (bop basis)                                                | -173.4 | -188.0 | -200.7 | -206.7 | -42.7  | -47.0  | -51.6  | -46.7  | -51.4  | -52.6  | -52.2  | -44.5 | -52.9  | -54.3  | -52.5  | -47.1 |
| Current Balance(\$bn)                                                    | -148.2 | -165.3 | -184.5 | -186.3 | -34.9  | -40.2  | -48.0  | -42.2  | -48.1  | -48.4  | -48.4  | -39.6 | -48.6  | -49.2  | -47.5  | -41.0 |
| <b>LABOR MARKET</b>                                                      |        |        |        |        |        |        |        |        |        |        |        |       |        |        |        |       |
| Unemployment Rate (%)                                                    | 5.6    | 5.4    | 5.1    | 5.3    | 5.6    | 5.4    | 5.3    | 5.3    | 5.3    | 5.1    | 4.9    | 5.0   | 5.2    | 5.3    | 5.2    | 5.4   |

\* end of period

## Nominal GDP Major Sectors

- Nominal GDP growth climbed at a 6.2% annual rate during the fourth quarter and 4.5% for the year. In 1997, nominal GDP growth is likely to climb at about a 5% annual rate, boosted by faster economic growth and an uptick in inflation.
- The GDP deflator remained well-behaved in the fourth quarter, rising by only 1.4% (annualized). It was held down by rapidly declining computer prices. With computer prices not expected to fall as rapidly in 1997, the GDP deflator is likely to accelerate into the 2%-3% range during 1997.

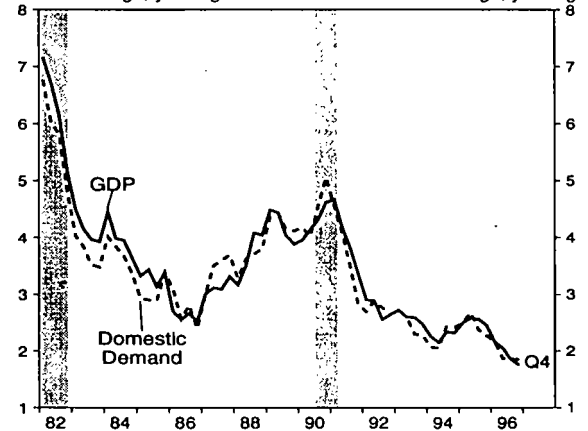


### Composition of Nominal GDP

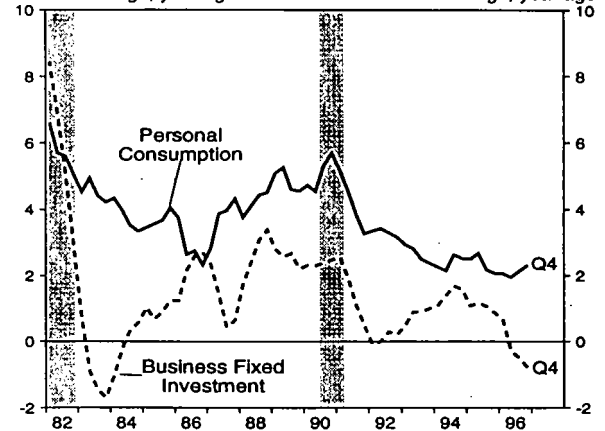
|        | Nominal GDP |       | Consum. Resident. Business |               |                     | Federal Defense: Federal Nondef. State & Local |                |                | Net Exports Exports Imports |        |        | Net Chg in Invent. |               |
|--------|-------------|-------|----------------------------|---------------|---------------------|------------------------------------------------|----------------|----------------|-----------------------------|--------|--------|--------------------|---------------|
|        | bn \$       | % chg | Spending bn \$             | Invest. bn \$ | Fixed Invest. bn \$ | Spending bn \$                                 | Spending bn \$ | Spending bn \$ | bn \$                       | bn \$  | bn \$  | Total bn \$        | Nonfarm bn \$ |
| 1995   | 7253.8      | 4.6   | 4924.9                     | 289.8         | 738.5               | 345.5                                          | 171.0          | 841.7          | -84.7                       | 807.4  | 902.1  | 37.0               | 39.6          |
| 1996   | 7580.0      | 4.5   | 5152.0                     | 310.2         | 790.4               | 348.1                                          | 176.0          | 883.6          | -99.6                       | 855.4  | 954.9  | 19.3               | 20.5          |
| 1997   | 7957.6      | 5.0   | 5410.3                     | 310.0         | 842.1               | 354.2                                          | 181.0          | 926.1          | -109.6                      | 917.9  | 1027.4 | 43.5               | 39.2          |
| 1998   | 8315.0      | 4.5   | 5682.3                     | 293.3         | 888.3               | 358.7                                          | 182.5          | 972.5          | -108.0                      | 1013.2 | 1121.3 | 45.4               | 41.1          |
| 1996Q1 | 7426.8      | 4.2   | 5060.5                     | 301.7         | 769.0               | 343.9                                          | 174.7          | 865.1          | -86.3                       | 839.5  | 925.8  | -1.7               | 2.7           |
| Q2     | 7545.1      | 6.5   | 5139.4                     | 314.2         | 773.8               | 353.7                                          | 175.8          | 879.2          | -89.2                       | 850.0  | 949.2  | 8.0                | 11.3          |
| Q3     | 7616.3      | 3.8   | 5165.4                     | 312.6         | 807.0               | 348.8                                          | 176.7          | 889.3          | -120.2                      | 844.3  | 964.5  | 36.6               | 35.4          |
| Q4     | 7731.7      | 6.2   | 5242.6                     | 312.2         | 811.7               | 346.1                                          | 176.8          | 900.6          | -92.5                       | 887.7  | 980.2  | 34.3               | 32.4          |
| 1997Q1 | 7797.9      | 3.5   | 5310.9                     | 312.2         | 819.3               | 350.5                                          | 178.5          | 907.0          | -117.7                      | 882.1  | 999.8  | 37.1               | 32.8          |
| Q2     | 7914.7      | 6.1   | 5378.5                     | 314.2         | 835.6               | 354.5                                          | 180.9          | 922.4          | -118.5                      | 903.6  | 1022.1 | 47.1               | 42.9          |
| Q3     | 8009.4      | 4.9   | 5442.8                     | 311.8         | 850.3               | 355.4                                          | 182.1          | 930.3          | -120.6                      | 918.9  | 1039.5 | 57.3               | 53.1          |
| Q4     | 8108.6      | 5.1   | 5509.0                     | 301.8         | 863.0               | 356.5                                          | 182.6          | 944.7          | -81.4                       | 967.0  | 1048.4 | 32.3               | 28.0          |
| 1998Q1 | 8183.3      | 3.7   | 5572.5                     | 293.1         | 873.6               | 357.9                                          | 182.2          | 954.1          | -117.4                      | 963.8  | 1081.2 | 67.2               | 62.9          |
| Q2     | 8269.4      | 4.3   | 5646.3                     | 288.8         | 882.8               | 358.4                                          | 182.4          | 967.4          | -119.1                      | 993.1  | 1112.2 | 62.2               | 58.0          |
| Q3     | 8352.5      | 4.1   | 5717.7                     | 292.9         | 892.9               | 359.1                                          | 182.7          | 978.9          | -111.6                      | 1026.9 | 1138.5 | 39.8               | 35.5          |
| Q4     | 8454.8      | 5.0   | 5792.7                     | 298.3         | 903.9               | 359.4                                          | 182.6          | 989.6          | -84.0                       | 1069.1 | 1153.2 | 12.2               | 8.0           |

# GDP Deflators

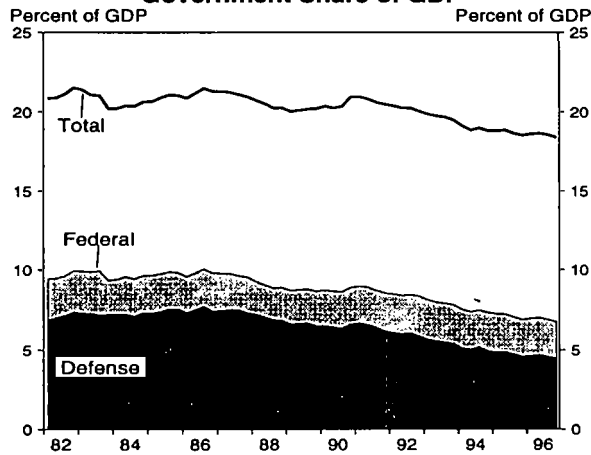
**GDP and Domestic Demand Implicit Deflators**  
Percent change, year ago



**Consumption and Investment Implicit Deflators**  
Percent change, year ago



**Government Share of GDP**



**Export and Import Share of GDP**

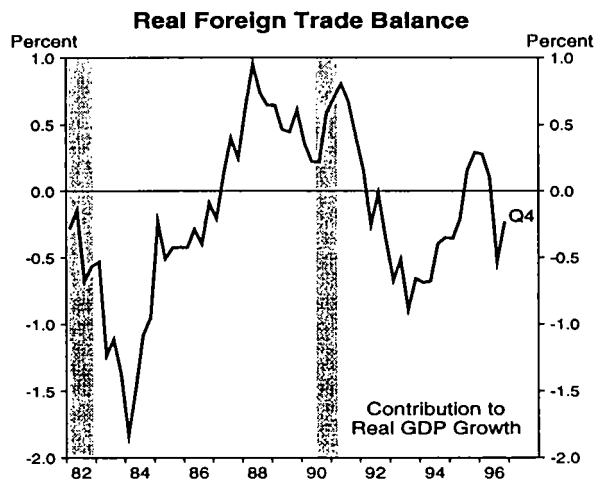
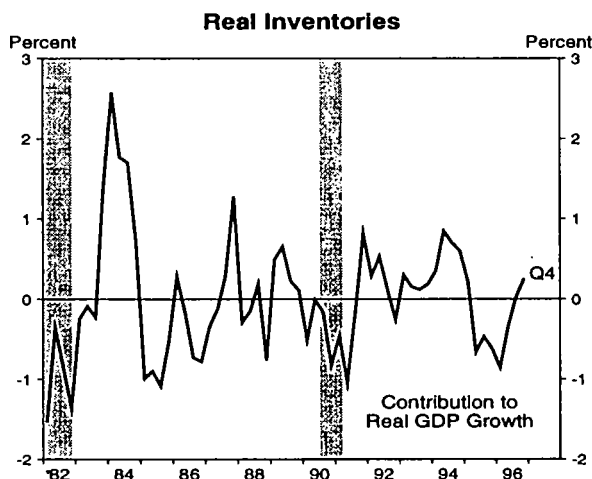
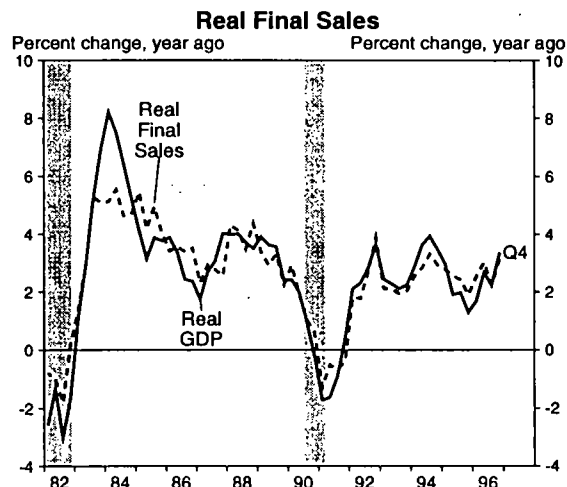


**GDP Price Deflators**

|        | GDP<br>Deflator<br>% chg | Personal<br>Consump.<br>Expend.<br>% chg | Durable<br>Goods<br>% chg | Nondur.<br>Goods<br>% chg | Services<br>% chg | Resident.<br>Invest.<br>% chg | Business<br>Fixed<br>Invest.<br>% chg | Struct.<br>% chg | Equip.<br>% chg | Federal<br>Gov't<br>% chg | State &<br>Local<br>Gov't<br>% chg | Exports<br>% chg | Imports<br>% chg |
|--------|--------------------------|------------------------------------------|---------------------------|---------------------------|-------------------|-------------------------------|---------------------------------------|------------------|-----------------|---------------------------|------------------------------------|------------------|------------------|
| 1995   | 2.5                      | 2.4                                      | 1.2                       | 1.6                       | 3.0               | 3.1                           | 1.1                                   | 3.3              | 0.2             | 3.8                       | 3.0                                | 3.1              | 2.7              |
| 1996   | 2.0                      | 2.1                                      | -1.1                      | 2.5                       | 2.6               | 1.6                           | -0.2                                  | 2.2              | -1.1            | 2.3                       | 2.9                                | -0.5             | -0.6             |
| 1997   | 2.0                      | 2.5                                      | -1.2                      | 2.8                       | 3.1               | 1.5                           | -0.8                                  | 2.4              | -1.8            | 0.8                       | 2.8                                | -0.8             | -0.3             |
| 1998   | 2.6                      | 3.2                                      | 1.0                       | 3.0                       | 3.7               | 2.0                           | 0.8                                   | 2.9              | 0.1             | 1.1                       | 3.3                                | 1.4              | 2.5              |
| 1996Q1 | 2.2                      | 2.2                                      | 0.1                       | 3.9                       | 1.8               | -0.2                          | -0.8                                  | 1.2              | -1.5            | 2.7                       | 5.4                                | -0.6             | -0.7             |
| Q2     | 1.8                      | 2.9                                      | -2.9                      | 4.7                       | 3.4               | 1.2                           | -1.3                                  | 1.8              | -2.5            | -0.6                      | 0.0                                | -0.5             | 0.5              |
| Q3     | 1.7                      | 1.5                                      | -1.9                      | 0.1                       | 3.0               | 3.3                           | 0.7                                   | 3.7              | -0.2            | 0.4                       | 3.5                                | -1.8             | -2.4             |
| Q4     | 1.4                      | 2.7                                      | -2.1                      | 3.7                       | 3.2               | 0.8                           | -1.7                                  | 1.6              | -3.3            | -0.1                      | 2.9                                | -2.6             | 1.9              |
| 1997Q1 | 1.7                      | 2.2                                      | -1.1                      | 2.0                       | 3.1               | 1.0                           | -1.4                                  | 2.3              | -2.0            | 0.0                       | 1.6                                | -1.9             | -2.0             |
| Q2     | 2.7                      | 2.8                                      | -0.8                      | 3.6                       | 3.1               | 1.5                           | -0.7                                  | 2.5              | -1.9            | 2.4                       | 4.9                                | 1.4              | 0.2              |
| Q3     | 2.4                      | 2.8                                      | 0.2                       | 3.1                       | 3.2               | 2.0                           | -0.2                                  | 2.8              | -1.2            | 1.6                       | 1.6                                | 1.0              | -0.1             |
| Q4     | 2.9                      | 3.2                                      | 1.1                       | 3.2                       | 3.5               | 2.0                           | 0.5                                   | 3.0              | -0.3            | 1.9                       | 4.6                                | 1.4              | 1.1              |
| 1998Q1 | 2.2                      | 3.3                                      | 1.4                       | 3.1                       | 3.7               | 2.0                           | 0.8                                   | 3.0              | 0.1             | 0.7                       | 2.3                                | 0.5              | 3.9              |
| Q2     | 3.1                      | 3.7                                      | 1.1                       | 3.3                       | 4.5               | 2.0                           | 1.1                                   | 3.0              | 0.6             | 0.6                       | 4.0                                | 2.9              | 4.0              |
| Q3     | 2.6                      | 3.0                                      | 1.2                       | 2.4                       | 3.7               | 2.0                           | 1.8                                   | 3.0              | 1.4             | 0.8                       | 3.2                                | 1.7              | 3.5              |
| Q4     | 2.3                      | 2.9                                      | 1.1                       | 2.1                       | 3.7               | 2.0                           | 1.6                                   | 3.0              | 1.2             | 0.4                       | 2.8                                | 0.5              | -2.8             |

# Real GDP and Aggregate Demand

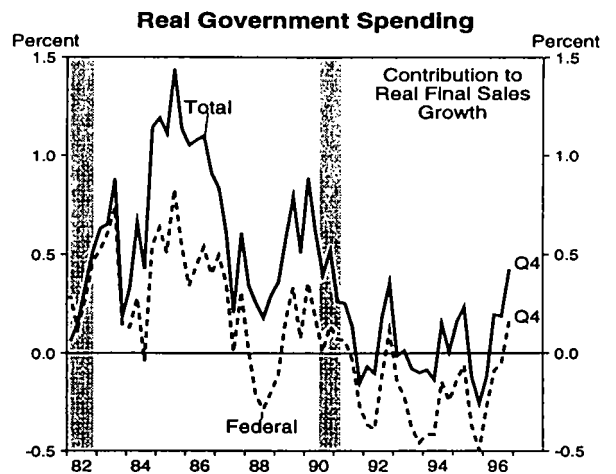
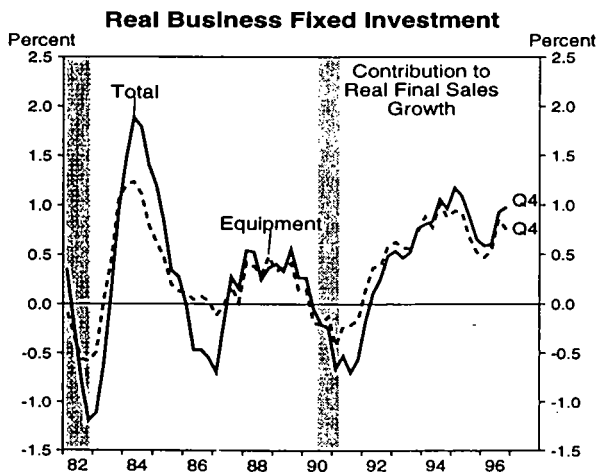
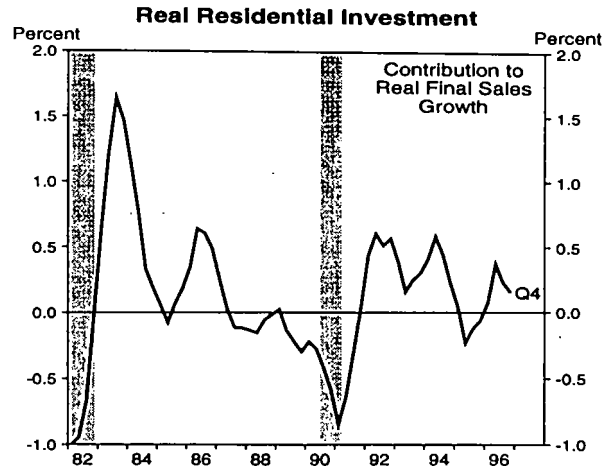
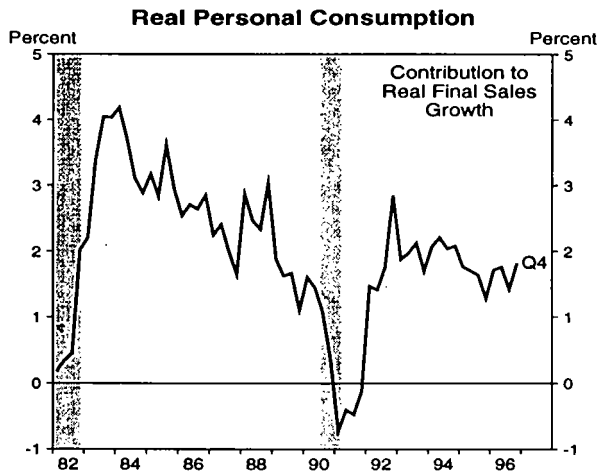
- Real GDP surged to a 4.7% growth pace during the fourth quarter, with a big narrowing of the trade gap responsible for more than 2 percentage points of the rise.
- The anticipated slowdown in Q1 real GDP growth to a 1.8% annual rate is statistical rather than real. The trade improvement in the fourth quarter will mostly unwind in the first, pulling down the reported growth rate.
- Domestic final sales paint the fairest picture of the economy's performance. Such sales are expected to continue to expand at around a 3% annual rate through the first half of 1997.



Real GDP and Final Sales

|        | Real GDP |       | less:    | equals:     |       | less:   | equals:     |       | less:    | equals:          |       |
|--------|----------|-------|----------|-------------|-------|---------|-------------|-------|----------|------------------|-------|
|        | bn '92\$ | % chg | Invent.  | Final Sales |       | Net     | Domestic    |       | Govt.    | Private Domestic |       |
|        | bn '92\$ | % chg | bn '92\$ | bn '92\$    | % chg | Exports | Final Sales | % chg | Spending | Final Sales      | % chg |
| 1995   | 6742.9   | 2.0   | 33.2     | 6708.9      | 2.4   | -107.6  | 6816.5      | 2.4   | 1260.9   | 5555.6           | 3.0   |
| 1996   | 6911.0   | 2.5   | 17.6     | 6892.3      | 2.7   | -114.2  | 7006.5      | 2.8   | 1272.7   | 5733.8           | 3.2   |
| 1997   | 7113.7   | 2.9   | 41.3     | 7074.3      | 2.6   | -121.8  | 7196.1      | 2.7   | 1295.0   | 5901.1           | 2.9   |
| 1998   | 7244.2   | 1.8   | 42.8     | 7206.5      | 1.9   | -107.6  | 7314.1      | 1.6   | 1308.8   | 6005.2           | 1.8   |
| 1996Q1 | 6814.3   | 2.0   | -3.0     | 6815.2      | 3.1   | -104.0  | 6919.2      | 4.2   | 1255.5   | 5663.7           | 4.7   |
| Q2     | 6892.6   | 4.7   | 7.1      | 6884.7      | 4.1   | -114.7  | 6999.4      | 4.7   | 1278.9   | 5720.5           | 4.1   |
| Q3     | 6928.4   | 2.1   | 34.5     | 6892.7      | 0.5   | -137.4  | 7030.1      | 1.8   | 1277.0   | 5753.1           | 2.3   |
| Q4     | 7008.7   | 4.7   | 31.9     | 6976.4      | 4.9   | -100.7  | 7077.1      | 2.7   | 1279.2   | 5797.9           | 3.2   |
| 1997Q1 | 7039.2   | 1.8   | 35.2     | 7004.7      | 1.6   | -126.2  | 7131.0      | 3.1   | 1287.3   | 5843.7           | 3.2   |
| Q2     | 7097.6   | 3.4   | 45.1     | 7054.0      | 2.8   | -129.7  | 7183.7      | 3.0   | 1294.1   | 5889.5           | 3.2   |
| Q3     | 7140.9   | 2.5   | 55.0     | 7088.1      | 2.0   | -134.4  | 7222.5      | 2.2   | 1297.9   | 5924.6           | 2.4   |
| Q4     | 7177.1   | 2.0   | 29.9     | 7150.3      | 3.6   | -97.0   | 7247.3      | 1.4   | 1300.6   | 5946.7           | 1.5   |
| 1998Q1 | 7204.5   | 1.5   | 64.8     | 7143.5      | -0.4  | -123.3  | 7266.9      | 1.1   | 1304.0   | 5962.9           | 1.1   |
| Q2     | 7224.8   | 1.1   | 59.7     | 7169.8      | 1.5   | -121.5  | 7291.2      | 1.3   | 1307.3   | 5983.9           | 1.4   |
| Q3     | 7250.3   | 1.4   | 37.1     | 7218.7      | 2.8   | -109.2  | 7327.9      | 2.0   | 1310.6   | 6017.3           | 2.2   |
| Q4     | 7297.2   | 2.6   | 9.5      | 7294.0      | 4.2   | -76.4   | 7370.4      | 2.3   | 1313.5   | 6056.9           | 2.7   |

# Composition of Aggregate Demand

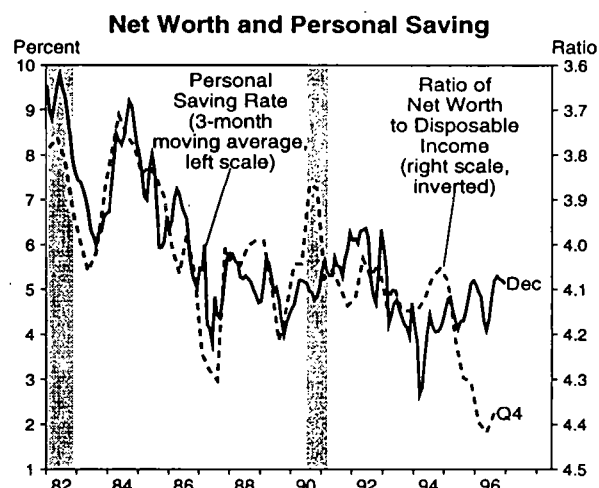


## Composition of Real Domestic Final Sales

|        | Consumer Spending |       | Residential Investment |       | Business Fixed Investment |       | Federal Defense Spending |       | Federal Nondefense Spending |       | State & Local Spending |       |
|--------|-------------------|-------|------------------------|-------|---------------------------|-------|--------------------------|-------|-----------------------------|-------|------------------------|-------|
|        | bn '92\$          | % chg | bn '92\$               | % chg | bn '92\$                  | % chg | bn '92\$                 | % chg | bn '92\$                    | % chg | bn '92\$               | % chg |
| 1995   | 4577.9            | 2.3   | 262.7                  | -2.3  | 714.3                     | 9.5   | 319.6                    | -5.1  | 152.3                       | -0.2  | 788.6                  | 2.4   |
| 1996   | 4690.6            | 2.5   | 276.8                  | 5.4   | 766.2                     | 7.3   | 314.9                    | -1.5  | 152.9                       | 0.4   | 804.5                  | 2.0   |
| 1997   | 4805.9            | 2.5   | 272.5                  | -1.6  | 822.7                     | 7.4   | 318.6                    | 1.2   | 155.5                       | 1.7   | 820.4                  | 2.0   |
| 1998   | 4891.1            | 1.8   | 252.8                  | -7.2  | 861.3                     | 4.7   | 319.0                    | 0.1   | 155.2                       | -0.2  | 834.3                  | 1.7   |
| 1996Q1 | 4649.1            | 3.5   | 271.1                  | 7.4   | 743.5                     | 11.6  | 311.9                    | 4.1   | 150.6                       | 10.2  | 792.6                  | -0.9  |
| Q2     | 4687.6            | 3.4   | 281.5                  | 16.3  | 750.5                     | 3.8   | 319.4                    | 10.0  | 153.7                       | 8.5   | 805.5                  | 6.7   |
| Q3     | 4693.5            | 0.5   | 277.8                  | -5.2  | 781.4                     | 17.5  | 314.9                    | -5.5  | 153.9                       | 0.5   | 807.7                  | 1.1   |
| Q4     | 4732.3            | 3.3   | 276.9                  | -1.3  | 789.4                     | 4.2   | 313.5                    | -1.8  | 153.2                       | -1.8  | 812.1                  | 2.2   |
| 1997Q1 | 4767.9            | 3.0   | 276.2                  | -1.0  | 799.6                     | 5.2   | 317.2                    | 4.9   | 155.0                       | 4.7   | 814.7                  | 1.3   |
| Q2     | 4795.8            | 2.4   | 277.0                  | 1.1   | 816.8                     | 8.9   | 319.2                    | 2.5   | 155.9                       | 2.4   | 818.7                  | 2.0   |
| Q3     | 4819.6            | 2.0   | 273.5                  | -4.9  | 831.6                     | 7.4   | 319.2                    | 0.0   | 155.8                       | -0.1  | 822.5                  | 1.9   |
| Q4     | 4840.3            | 1.7   | 263.4                  | -13.9 | 843.0                     | 5.6   | 319.0                    | -0.2  | 155.3                       | -1.3  | 825.9                  | 1.7   |
| 1998Q1 | 4856.7            | 1.4   | 254.6                  | -12.8 | 851.6                     | 4.1   | 319.0                    | 0.0   | 155.3                       | -0.1  | 829.3                  | 1.7   |
| Q2     | 4876.2            | 1.6   | 249.6                  | -7.6  | 858.1                     | 3.1   | 319.0                    | 0.0   | 155.2                       | -0.1  | 832.7                  | 1.6   |
| Q3     | 4901.2            | 2.1   | 251.9                  | 3.7   | 864.2                     | 2.9   | 319.0                    | 0.0   | 155.2                       | -0.1  | 836.0                  | 1.6   |
| Q4     | 4930.4            | 2.4   | 255.2                  | 5.4   | 871.3                     | 3.3   | 318.9                    | -0.1  | 155.0                       | -0.6  | 839.2                  | 1.6   |

# Household Sector Balance Sheet, Income, and Saving

- Downward revisions to December retail sales mean that consumer spending has to strengthen this quarter to achieve the 3.3% rate shown below.
- This appears likely, given that strong payroll gains are continuing to boost income and confidence and the surging stock market is bolstering the household balance sheet.
- Recent reports such as the Johnson Redbook and Mitsubishi chain store sales report indicate consumer spending has remained strong in the first quarter.



**The Consumer Balance Sheet**  
(\$ billions, end of period)

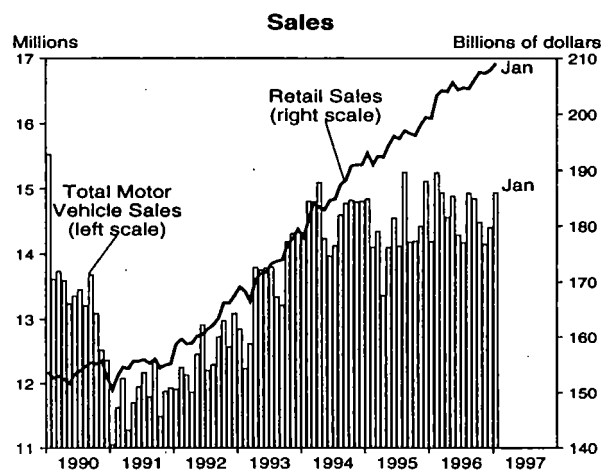
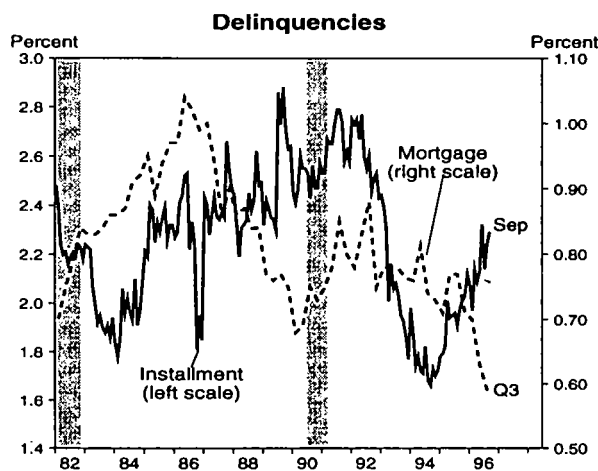
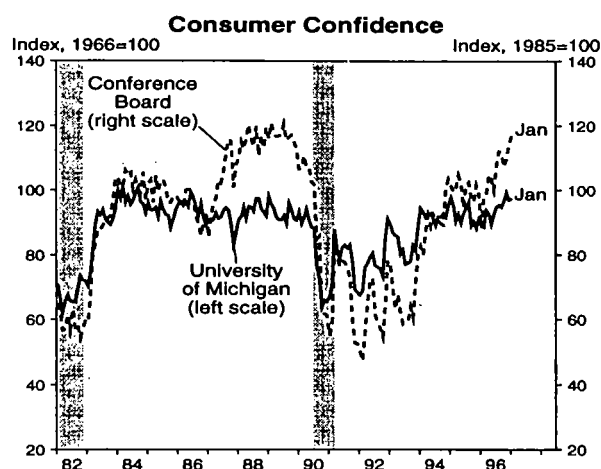
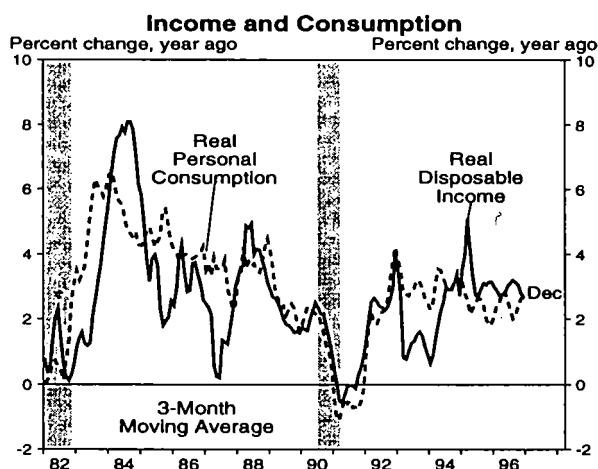
|                                              | Annual  |         |         |          |          | Quarterly |          |          |
|----------------------------------------------|---------|---------|---------|----------|----------|-----------|----------|----------|
|                                              | 1960    | 1970    | 1980    | 1990     | 1995     | 1995:3    | 1996:2   | 1996:3   |
| 1. <b>Total Assets</b>                       | \$1,794 | \$3,333 | \$9,585 | \$20,202 | \$28,598 | \$28,102  | \$29,906 | \$30,158 |
| 2. Financial assets                          | 1,305   | 2,465   | 6,296   | 14,187   | 20,832   | 20,318    | 21,852   | 22,178   |
| 3. Liquid fixed-income assets                | 388     | 753     | 1,913   | 4,703    | 5,358    | 5,340     | 5,451    | 5,495    |
| 4. Corporate stock, at market                | 377     | 613     | 949     | 2,230    | 5,438    | 5,157     | 5,902    | 5,971    |
| 5. Equity in noncorporate business           | 347     | 546     | 1,903   | 2,629    | 2,700    | 2,655     | 2,758    | 2,772    |
| 6. Ins. & pens. reserves, & misc fin. assets | 193     | 553     | 1,532   | 4,626    | 7,337    | 7,166     | 7,741    | 7,941    |
| 7. 1-4 family homes, at market               | 488     | 867     | 3,289   | 6,016    | 7,767    | 7,784     | 8,054    | 7,981    |
| 8. <b>Total Liabilities</b>                  | 220     | 472     | 1,443   | 3,764    | 5,239    | 5,126     | 5,423    | 5,526    |
| 9. Consumer credit                           | 61      | 134     | 355     | 811      | 1,132    | 1,078     | 1,151    | 1,180    |
| 10. Mortgages                                | 134     | 274     | 905     | 2,491    | 3,368    | 3,329     | 3,500    | 3,568    |
| 11. Other liabilities                        | 25      | 65      | 182     | 462      | 739      | 719       | 772      | 779      |
| 12. <b>Total Net Worth</b>                   | 1,574   | 2,861   | 8,143   | 16,438   | 23,360   | 22,976    | 24,482   | 24,633   |
| 13. Liquid net worth (3+4+5+6)               | 679     | 1,168   | 2,324   | 5,659    | 8,925    | 8,700     | 9,430    | 9,507    |
| 14. Net worth in 1-4 family homes (7-10)     | 354     | 594     | 2,384   | 3,525    | 4,399    | 4,455     | 4,553    | 4,413    |
| 15. <b>Real Net Worth, 1992 \$ (a)</b>       | 6,726   | 9,537   | 13,459  | 17,322   | 21,569   | 21,313    | 22,338   | 22,373   |

(a) Deflated using the implicit price deflator for personal consumption expenditures.

## Personal Income and Its Disposition

|        | Personal Income and Its Disposition |       |                       |       | Personal Income and Its Disposition |       |                           |       | Personal Income and Its Disposition |       |                  |       | Personal Income and Its Disposition |       |        |       |              |       |
|--------|-------------------------------------|-------|-----------------------|-------|-------------------------------------|-------|---------------------------|-------|-------------------------------------|-------|------------------|-------|-------------------------------------|-------|--------|-------|--------------|-------|
|        | Wages & Compensation                |       | Other Personal Income |       | Total Personal Income               |       | Personal Taxes & Nontaxes |       | Disposable Income                   |       | Consumer Expend. |       | Other Outlays                       |       | Saving |       | Retail Sales |       |
|        | % chg                               | % chg | bn \$                 | % chg | bn \$                               | % chg | bn \$                     | % chg | bn \$                               | % chg | bn \$            | % chg | bn \$                               | % chg | bn \$  | % chg | bn \$        | % chg |
| 1995   | 5.8                                 | 6.9   | 6,115                 | 6.3   | 794                                 | 5,321 | 6.0                       | 4,925 | 147                                 | 249   | 4.7              | 2,343 | 5.2                                 |       |        |       |              |       |
| 1996   | 5.8                                 | 5.1   | 6,453                 | 5.5   | 864                                 | 5,589 | 5.0                       | 5,152 | 163                                 | 274   | 4.9              | 2,459 | 5.0                                 |       |        |       |              |       |
| 1997   | 6.3                                 | 4.5   | 6,808                 | 5.5   | 919                                 | 5,889 | 5.4                       | 5,410 | 170                                 | 309   | 5.2              | 2,559 | 4.1                                 |       |        |       |              |       |
| 1998   | 6.0                                 | 4.0   | 7,159                 | 5.2   | 968                                 | 6,191 | 5.1                       | 5,682 | 176                                 | 333   | 5.4              | 2,659 | 3.9                                 |       |        |       |              |       |
| 1996Q1 | 4.4                                 | 5.4   | 6,309                 | 4.8   | 825                                 | 5,484 | 4.2                       | 5,061 | 158                                 | 265   | 4.8              | 2,428 | 9.1                                 |       |        |       |              |       |
| Q2     | 7.9                                 | 5.2   | 6,412                 | 6.8   | 871                                 | 5,542 | 4.3                       | 5,139 | 161                                 | 241   | 4.3              | 2,456 | 4.8                                 |       |        |       |              |       |
| Q3     | 6.0                                 | 5.2   | 6,501                 | 5.7   | 873                                 | 5,629 | 6.4                       | 5,165 | 164                                 | 299   | 5.3              | 2,462 | 0.9                                 |       |        |       |              |       |
| Q4     | 6.3                                 | 4.4   | 6,589                 | 5.5   | 887                                 | 5,702 | 5.3                       | 5,243 | 167                                 | 292   | 5.1              | 2,491 | 4.8                                 |       |        |       |              |       |
| 1997Q1 | 5.7                                 | 4.3   | 6,671                 | 5.1   | 893                                 | 5,779 | 5.5                       | 5,311 | 169                                 | 299   | 5.2              | 2,518 | 4.5                                 |       |        |       |              |       |
| Q2     | 6.7                                 | 4.1   | 6,762                 | 5.6   | 910                                 | 5,852 | 5.2                       | 5,378 | 170                                 | 304   | 5.2              | 2,548 | 4.7                                 |       |        |       |              |       |
| Q3     | 6.4                                 | 4.2   | 6,853                 | 5.4   | 920                                 | 5,932 | 5.6                       | 5,443 | 171                                 | 318   | 5.4              | 2,573 | 4.0                                 |       |        |       |              |       |
| Q4     | 6.6                                 | 4.2   | 6,945                 | 5.5   | 950                                 | 5,995 | 4.3                       | 5,509 | 172                                 | 314   | 5.2              | 2,597 | 3.8                                 |       |        |       |              |       |
| 1998Q1 | 4.9                                 | 4.1   | 7,023                 | 4.5   | 947                                 | 6,075 | 5.5                       | 5,573 | 174                                 | 329   | 5.4              | 2,617 | 3.2                                 |       |        |       |              |       |
| Q2     | 6.0                                 | 3.9   | 7,111                 | 5.1   | 961                                 | 6,150 | 5.0                       | 5,646 | 175                                 | 329   | 5.3              | 2,644 | 4.2                                 |       |        |       |              |       |
| Q3     | 7.1                                 | 3.8   | 7,210                 | 5.7   | 976                                 | 6,234 | 5.6                       | 5,718 | 176                                 | 340   | 5.5              | 2,672 | 4.3                                 |       |        |       |              |       |
| Q4     | 5.4                                 | 3.7   | 7,292                 | 4.7   | 989                                 | 6,304 | 4.5                       | 5,793 | 177                                 | 334   | 5.3              | 2,701 | 4.4                                 |       |        |       |              |       |

# Household Sector Income and Spending



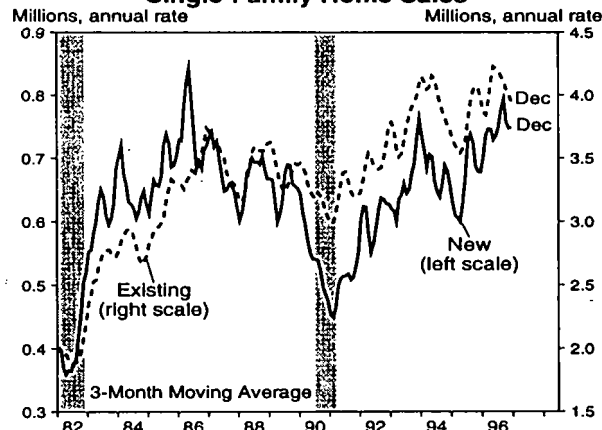
Real Disposable Income and Spending

|        | Consumer Price Deflator % chg | Real Disposable Income |       | Real Personal Consumption Expenditure |       |                        |       |                           |       |                   |       | Light Wgt. Motor Vehicle Sales mill. |
|--------|-------------------------------|------------------------|-------|---------------------------------------|-------|------------------------|-------|---------------------------|-------|-------------------|-------|--------------------------------------|
|        |                               | bn '92\$               | % chg | Total bn '92\$                        | % chg | Durable Goods bn '92\$ | % chg | Nondurable Goods bn '92\$ | % chg | Services bn '92\$ | % chg |                                      |
| 1995   | 2.4                           | 4,946                  | 3.5   | 4,578                                 | 2.3   | 580                    | 3.2   | 1,422                     | 2.3   | 2,577             | 2.2   | 14.4                                 |
| 1996   | 2.1                           | 5,088                  | 2.9   | 4,691                                 | 2.5   | 612                    | 5.5   | 1,442                     | 1.4   | 2,638             | 2.4   | 14.6                                 |
| 1997   | 2.5                           | 5,231                  | 2.8   | 4,806                                 | 2.5   | 633                    | 3.5   | 1,467                     | 1.8   | 2,706             | 2.6   | 14.2                                 |
| 1998   | 3.2                           | 5,329                  | 1.9   | 4,891                                 | 1.8   | 636                    | 0.4   | 1,494                     | 1.8   | 2,762             | 2.1   | 14.1                                 |
| 1996Q1 | 2.2                           | 5,038                  | 2.0   | 4,649                                 | 3.5   | 599                    | 8.2   | 1,436                     | 3.7   | 2,615             | 2.4   | 14.8                                 |
| Q2     | 2.9                           | 5,055                  | 1.3   | 4,688                                 | 3.4   | 616                    | 11.4  | 1,441                     | 1.3   | 2,632             | 2.7   | 14.6                                 |
| Q3     | 1.5                           | 5,115                  | 4.8   | 4,694                                 | 0.5   | 612                    | -2.6  | 1,442                     | 0.4   | 2,641             | 1.3   | 14.7                                 |
| Q4     | 2.7                           | 5,147                  | 2.5   | 4,732                                 | 3.3   | 620                    | 5.4   | 1,448                     | 1.7   | 2,665             | 3.8   | 14.3                                 |
| 1997Q1 | 2.2                           | 5,188                  | 3.2   | 4,768                                 | 3.0   | 630                    | 6.8   | 1,455                     | 2.0   | 2,683             | 2.7   | 14.5                                 |
| Q2     | 2.8                           | 5,218                  | 2.4   | 4,796                                 | 2.4   | 634                    | 2.3   | 1,464                     | 2.5   | 2,699             | 2.3   | 14.3                                 |
| Q3     | 2.8                           | 5,253                  | 2.7   | 4,820                                 | 2.0   | 635                    | 0.9   | 1,472                     | 2.0   | 2,714             | 2.2   | 14.1                                 |
| Q4     | 3.2                           | 5,267                  | 1.1   | 4,840                                 | 1.7   | 634                    | -0.6  | 1,478                     | 1.8   | 2,729             | 2.2   | 14.0                                 |
| 1998Q1 | 3.3                           | 5,295                  | 2.1   | 4,857                                 | 1.4   | 631                    | -1.8  | 1,484                     | 1.6   | 2,742             | 2.0   | 14.0                                 |
| Q2     | 3.7                           | 5,311                  | 1.2   | 4,876                                 | 1.6   | 632                    | 0.8   | 1,490                     | 1.7   | 2,754             | 1.8   | 14.1                                 |
| Q3     | 3.0                           | 5,344                  | 2.5   | 4,901                                 | 2.1   | 637                    | 2.7   | 1,497                     | 1.9   | 2,768             | 2.0   | 14.2                                 |
| Q4     | 2.9                           | 5,365                  | 1.6   | 4,930                                 | 2.4   | 643                    | 4.2   | 1,504                     | 1.9   | 2,783             | 2.2   | 14.3                                 |

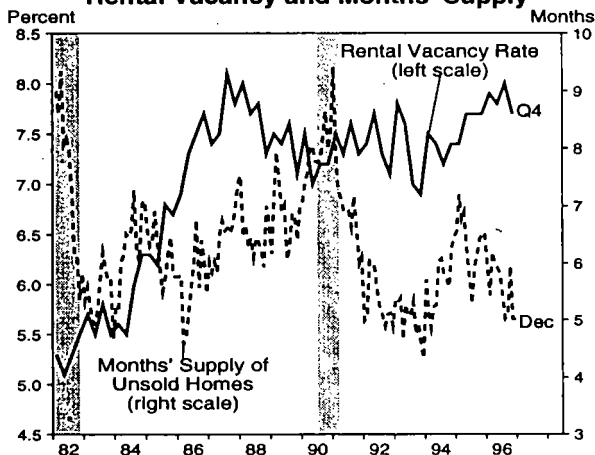
# Housing Sector

- Although housing starts and new home sales fell in December, probably hurt by bad weather in the Northwest, the surprise of 1996 was how easily the housing sector shrugged off a backup in mortgage rates early in the year. For the year as a whole, new home sales and housing starts both posted sizable advances.
- Given the low level of unsold new homes relative to sales, housing starts appear likely to move higher over the next few months.
- The housing sector continues to gain support from rising consumer confidence, a surging stock market, and a large influx of immigration.

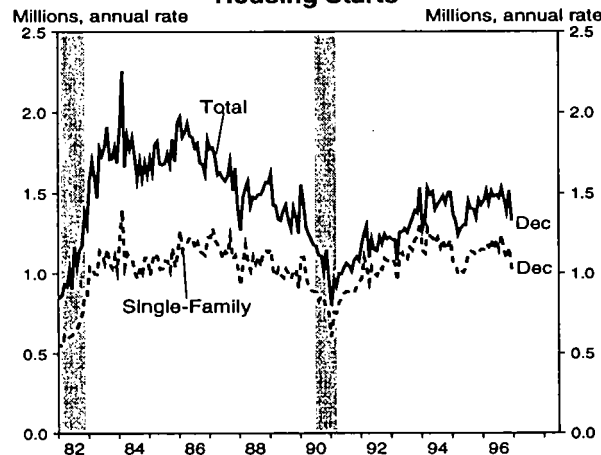
Single-Family Home Sales



Rental Vacancy and Months' Supply



Housing Starts

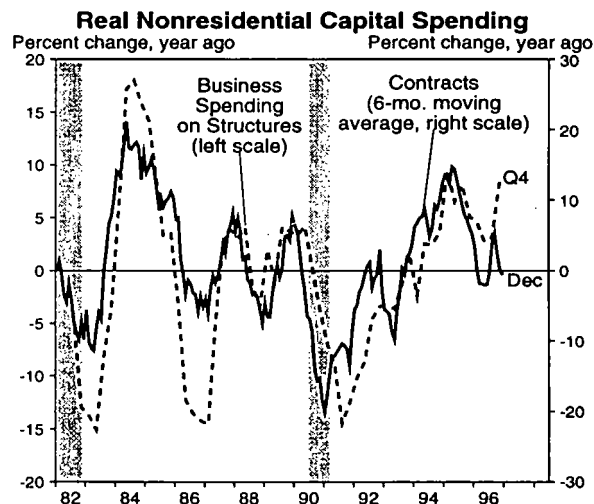
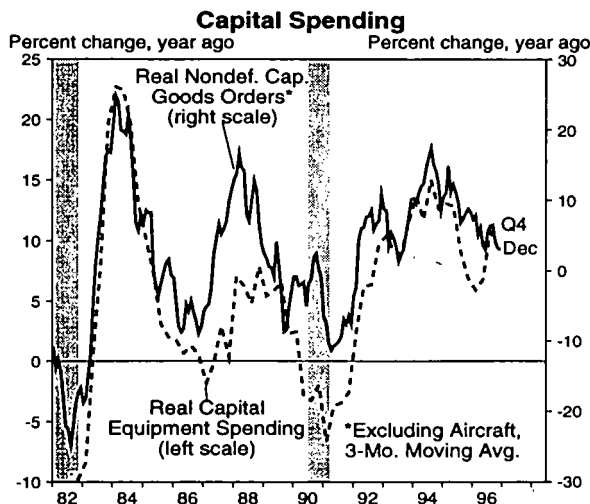
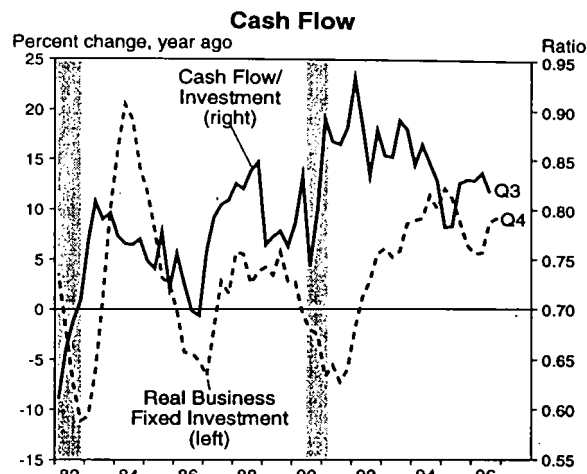


Housing Activity

|        | Mortgage Rate % | Home Sales thousands, annualized |     |          | Housing Starts thousands, annualized |               |              | Residential Investment bn \$ % chg |       | Price Index % chg |       | Real Residential Investment bn '92\$ % chg |       |
|--------|-----------------|----------------------------------|-----|----------|--------------------------------------|---------------|--------------|------------------------------------|-------|-------------------|-------|--------------------------------------------|-------|
|        |                 | Total                            | New | Existing | Total                                | Single-family | Multi-family | bn \$                              | % chg | % chg             | % chg | bn '92\$                                   | % chg |
| 1995   | 7.69            | 4,473                            | 669 | 3,804    | 1,358                                | 1,078         | 280          | 289.8                              | 0.7   | 3.1               |       | 262.7                                      | -2.3  |
| 1996   | 7.58            | 4,812                            | 756 | 4,056    | 1,477                                | 1,155         | 323          | 310.2                              | 7.0   | 1.6               |       | 276.8                                      | 5.4   |
| 1997   | 7.91            | 4,550                            | 713 | 3,838    | 1,396                                | 1,106         | 290          | 310.0                              | -0.1  | 1.5               |       | 272.5                                      | -1.6  |
| 1998   | 7.81            | 4,281                            | 681 | 3,600    | 1,316                                | 1,081         | 235          | 293.3                              | -5.4  | 2.0               |       | 252.8                                      | -7.2  |
| 1996Q1 | 7.29            | 4,700                            | 747 | 3,953    | 1,469                                | 1,164         | 305          | 301.7                              | 7.2   | -0.2              |       | 271.1                                      | 7.4   |
| Q2     | 7.77            | 4,949                            | 736 | 4,213    | 1,493                                | 1,187         | 306          | 314.2                              | 17.6  | 1.2               |       | 281.5                                      | 16.3  |
| Q3     | 7.78            | 4,900                            | 793 | 4,107    | 1,488                                | 1,176         | 312          | 312.6                              | -2.0  | 3.3               |       | 277.8                                      | -5.2  |
| Q4     | 7.49            | 4,700                            | 750 | 3,950    | 1,460                                | 1,091         | 369          | 312.2                              | -0.5  | 0.8               |       | 276.9                                      | -1.3  |
| 1997Q1 | 7.65            | 4,700                            | 750 | 3,950    | 1,470                                | 1,150         | 320          | 312.2                              | 0.0   | 1.0               |       | 276.2                                      | -1.0  |
| Q2     | 7.80            | 4,625                            | 725 | 3,900    | 1,425                                | 1,125         | 300          | 314.2                              | 2.6   | 1.5               |       | 277.0                                      | 1.1   |
| Q3     | 8.00            | 4,500                            | 700 | 3,800    | 1,380                                | 1,100         | 280          | 311.8                              | -3.0  | 2.0               |       | 273.5                                      | -4.9  |
| Q4     | 8.20            | 4,375                            | 675 | 3,700    | 1,310                                | 1,050         | 260          | 301.8                              | -12.2 | 2.0               |       | 263.4                                      | -13.9 |
| 1998Q1 | 8.00            | 4,250                            | 650 | 3,600    | 1,275                                | 1,025         | 250          | 293.1                              | -11.0 | 2.0               |       | 254.6                                      | -12.8 |
| Q2     | 7.90            | 4,175                            | 675 | 3,500    | 1,315                                | 1,075         | 240          | 288.8                              | -5.7  | 2.0               |       | 249.6                                      | -7.6  |
| Q3     | 7.75            | 4,300                            | 700 | 3,600    | 1,330                                | 1,100         | 230          | 292.9                              | 5.8   | 2.0               |       | 251.9                                      | 3.7   |
| Q4     | 7.60            | 4,400                            | 700 | 3,700    | 1,345                                | 1,125         | 220          | 298.3                              | 7.6   | 2.0               |       | 255.2                                      | 5.4   |

## Corporate Sector Fixed Investment

- The composition of business fixed investment swung sharply toward structures (+22.7% annualized) and away from equipment (-1.7%) in Q4. But the downtick in equipment spending mainly reflects the extraordinary growth pace in Q3, rather than the start of sustained weakness.
- The rapid growth in capacity generated by four years of strong investment gains implies a slowdown in capital spending in 1997. The retrenchment should be moderate, however, as corporate cash flows remain firm and capacity utilization rates relatively high. The strong stock market has also reduced the cost of equity.

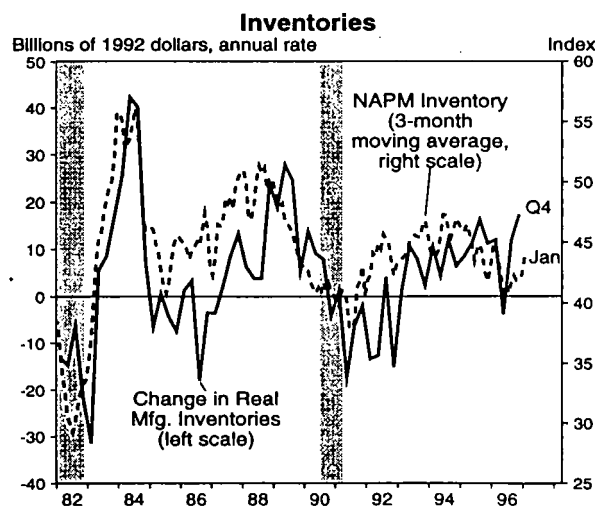
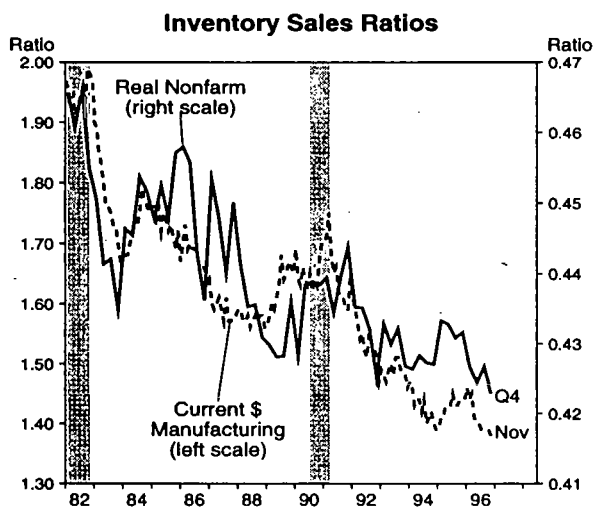
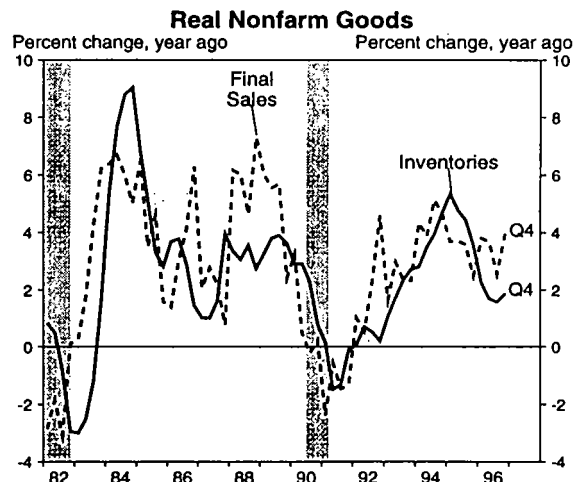


### Nonresidential Fixed Investment

|        | Cash Flow |       | Mfg. Utiliz. Index | Nominal Investment |       | Real Investment Structures |       |         |       | Equipment |       | Government Investment |       |
|--------|-----------|-------|--------------------|--------------------|-------|----------------------------|-------|---------|-------|-----------|-------|-----------------------|-------|
|        | bn \$     | % chg |                    | bn \$              | % chg | bn 92\$                    | % chg | bn 92\$ | % chg | bn 92\$   | % chg | bn 92\$               | % chg |
| 1995   | 622.7     | 7.8   | 83.1               | 738.5              | 10.7  | 714.3                      | 9.5   | 181.1   | 7.3   | 534.4     | 10.4  | 207.7                 | 1.9   |
| 1996   | 660.6     | 6.1   | 82.1               | 790.4              | 7.0   | 766.2                      | 7.3   | 189.7   | 4.7   | 578.3     | 8.2   | 213.3                 | 2.7   |
| 1997   | 689.5     | 4.4   | 82.4               | 842.1              | 6.5   | 822.7                      | 7.4   | 199.3   | 5.1   | 625.1     | 8.1   | 216.8                 | 1.7   |
| 1998   | 699.4     | 1.4   | 82.3               | 888.3              | 5.5   | 861.3                      | 4.7   | 206.3   | 3.5   | 656.5     | 5.0   | 219.5                 | 1.2   |
| 1996Q1 | 654.8     | 16.1  | 81.7               | 769.0              | 10.7  | 743.5                      | 11.6  | 186.6   | 7.6   | 558.3     | 13.1  | 210.9                 | 13.1  |
| Q2     | 658.4     | 2.2   | 82.1               | 773.8              | 2.5   | 750.5                      | 3.8   | 184.9   | -3.6  | 567.5     | 6.8   | 214.6                 | 7.2   |
| Q3     | 657.7     | -0.4  | 82.3               | 807.0              | 18.3  | 781.4                      | 17.5  | 188.6   | 8.2   | 595.0     | 20.8  | 213.2                 | -2.6  |
| Q4     | 671.3     | 8.5   | 82.3               | 811.7              | 2.4   | 789.4                      | 4.2   | 198.5   | 22.7  | 592.5     | -1.7  | 214.3                 | 2.1   |
| 1997Q1 | 680.6     | 5.6   | 82.3               | 819.3              | 3.8   | 799.6                      | 5.2   | 193.3   | -10.0 | 607.9     | 10.8  | 215.5                 | 2.2   |
| Q2     | 688.3     | 4.6   | 82.4               | 835.6              | 8.2   | 816.8                      | 8.9   | 198.0   | 10.0  | 620.5     | 8.6   | 216.6                 | 2.1   |
| Q3     | 692.5     | 2.5   | 82.5               | 850.3              | 7.2   | 831.6                      | 7.4   | 201.6   | 7.5   | 631.7     | 7.4   | 217.3                 | 1.4   |
| Q4     | 696.7     | 2.5   | 82.6               | 863.0              | 6.1   | 843.0                      | 5.6   | 204.1   | 5.0   | 640.5     | 5.7   | 217.9                 | 1.1   |
| 1998Q1 | 700.2     | 2.0   | 82.7               | 873.6              | 5.0   | 851.6                      | 4.1   | 205.4   | 2.5   | 647.8     | 4.7   | 218.6                 | 1.2   |
| Q2     | 701.2     | 0.6   | 82.5               | 882.8              | 4.3   | 858.1                      | 3.1   | 205.4   | 0.0   | 654.3     | 4.1   | 219.2                 | 1.2   |
| Q3     | 693.4     | -4.3  | 82.1               | 892.9              | 4.7   | 864.2                      | 2.9   | 206.6   | 2.5   | 659.1     | 2.9   | 219.9                 | 1.2   |
| Q4     | 702.8     | 5.5   | 82.1               | 903.9              | 5.0   | 871.3                      | 3.3   | 207.9   | 2.5   | 664.8     | 3.5   | 220.5                 | 1.1   |

## Corporate Sector Inventory Management

- The pace of inventory accumulation moderated slightly in Q4. December data on manufacturing and trade inventories suggest that the estimated rate of accumulation might be revised down.
- Looking forward, inventories are likely to add to the economy's momentum in 1997. The inventories are rising more slowly than final sales, and inventory-to-sales ratios are depressed.
- The inventory situation is virtually the opposite from circumstances in early 1995. This is one reason why a recession remains an unusually low risk in 1997.

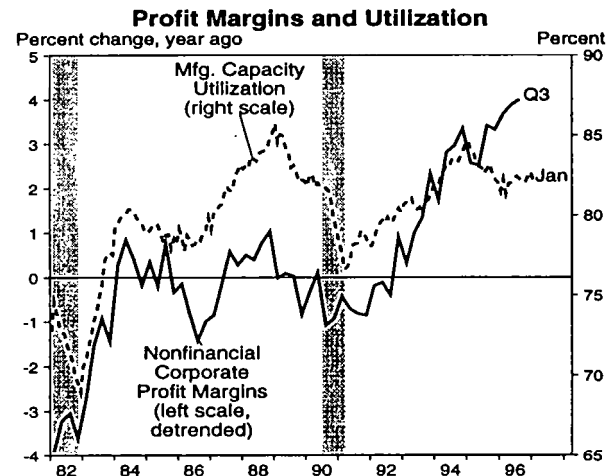
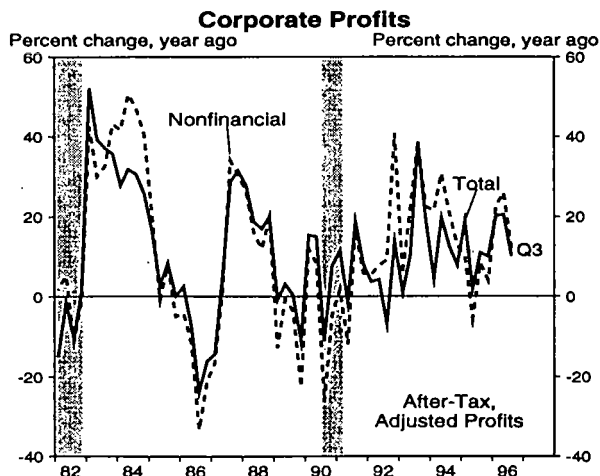
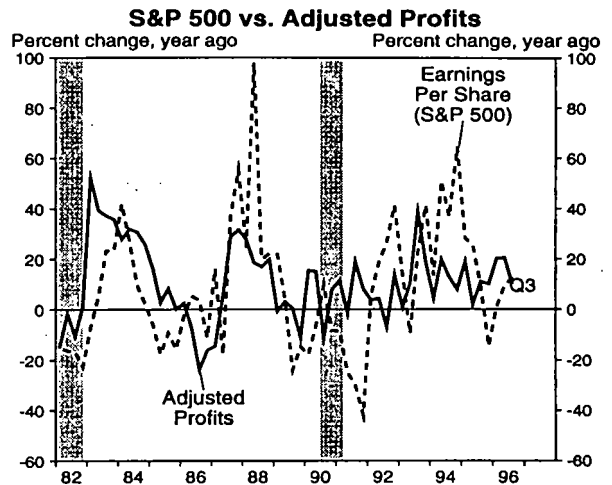


### Inventories

|        | Final Sales of Goods |       |         |       | Inventory Accumulation |         |               |                         |                 |                           |               | I/S Ratio         |                  |
|--------|----------------------|-------|---------|-------|------------------------|---------|---------------|-------------------------|-----------------|---------------------------|---------------|-------------------|------------------|
|        | Total                |       | Nonfarm |       | Total                  | Nonfarm | Mfg.<br>bn \$ | Whole-<br>sale<br>bn \$ | Retail<br>bn \$ | Other<br>Nonfarm<br>bn \$ | Farm<br>bn \$ | Nonfarm<br>Sector | Manuf.<br>Sector |
| bn \$  | % chg                | bn \$ | % chg   | bn \$ | bn \$                  |         |               |                         |                 |                           |               |                   |                  |
| 1995   | 2554.8               | 3.7   | 2635.6  | 3.9   | 33.2                   | 37.2    | 11.8          | 14.3                    | 3.5             | 7.6                       | -4.7          | 0.433             | 1.43             |
| 1996   | 2648.3               | 3.7   | 2735.3  | 3.8   | 17.6                   | 20.2    | 9.4           | 4.2                     | 2.6             | 4.0                       | -3.0          | 0.427             | 1.41             |
| 1997   | 2731.6               | 3.1   | 2822.2  | 3.2   | 41.3                   | 38.6    | 14.4          | 4.4                     | 15.0            | 5.0                       | 2.5           | 0.427             | 1.37             |
| 1998   | 2806.8               | 2.8   | 2901.1  | 2.8   | 42.8                   | 40.3    | 10.6          | 10.0                    | 15.0            | 5.0                       | 2.5           | 0.433             | 1.35             |
| 1996Q1 | 2617.7               | 5.7   | 2703.3  | 6.4   | -3.0                   | 2.9     | 12.0          | 6.4                     | -21.7           | 6.1                       | -6.5          | 0.428             | 1.45             |
| Q2     | 2640.0               | 3.5   | 2727.9  | 3.7   | 7.1                    | 11.7    | -3.9          | 7.3                     | 5.2             | 3.1                       | -5.1          | 0.427             | 1.40             |
| Q3     | 2646.7               | 1.0   | 2734.2  | 0.9   | 34.5                   | 34.6    | 11.9          | -3.6                    | 22.7            | 3.6                       | -0.4          | 0.429             | 1.39             |
| Q4     | 2688.6               | 6.5   | 2775.7  | 6.2   | 31.9                   | 31.5    | 17.4          | 6.8                     | 4.3             | 3.1                       | 0.1           | 0.425             | 1.39             |
| 1997Q1 | 2694.8               | 0.9   | 2782.6  | 1.0   | 35.2                   | 32.4    | 12.5          | 5.0                     | 10.0            | 5.0                       | 2.5           | 0.427             | 1.38             |
| Q2     | 2715.9               | 3.2   | 2805.9  | 3.4   | 45.1                   | 42.4    | 15.0          | 7.5                     | 15.0            | 5.0                       | 2.5           | 0.428             | 1.37             |
| Q3     | 2733.3               | 2.6   | 2824.9  | 2.7   | 55.0                   | 52.3    | 17.5          | 10.0                    | 20.0            | 5.0                       | 2.5           | 0.430             | 1.36             |
| Q4     | 2782.5               | 7.4   | 2875.3  | 7.3   | 29.9                   | 27.3    | 12.5          | -5.0                    | 15.0            | 5.0                       | 2.5           | 0.425             | 1.35             |
| 1998Q1 | 2769.5               | -1.8  | 2863.0  | -1.7  | 64.8                   | 62.2    | 20.0          | 15.0                    | 22.5            | 5.0                       | 2.5           | 0.433             | 1.35             |
| Q2     | 2783.5               | 2.0   | 2877.5  | 2.0   | 59.7                   | 57.2    | 15.0          | 17.5                    | 20.0            | 5.0                       | 2.5           | 0.436             | 1.35             |
| Q3     | 2812.4               | 4.2   | 2907.0  | 4.2   | 37.1                   | 34.7    | 5.0           | 12.5                    | 12.5            | 5.0                       | 2.5           | 0.435             | 1.34             |
| Q4     | 2861.6               | 7.2   | 2956.8  | 7.0   | 9.5                    | 7.1     | 2.5           | -5.0                    | 5.0             | 5.0                       | 2.5           | 0.428             | 1.33             |

## Corporate Sector Profits

- Growth in after-tax, adjusted corporate profits appeared to remain firm in Q4, rising at an estimated 10.9% annual rate. But this still represents a deceleration from the first half of 1996, when profits advanced 20.3% at an annual rate.
- In 1997, the growth rate of profits is likely to slow to around 5%. This reflects the impact of rising compensation costs and continued slow productivity growth in a mature economic expansion. S&P 500 firms, however, should be able to grow earnings per share more quickly given their larger productivity gains and a continuation of share buybacks.

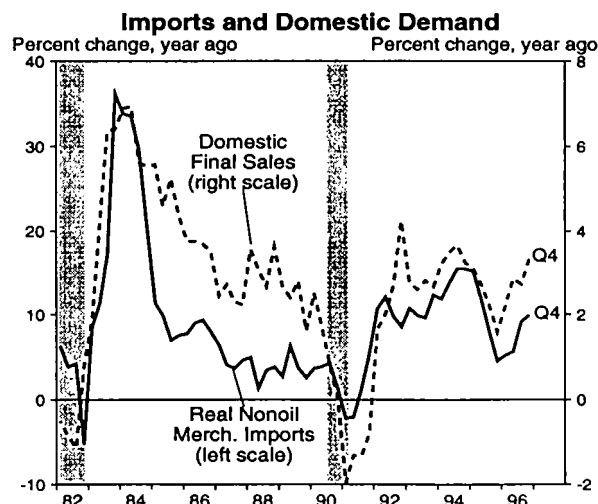
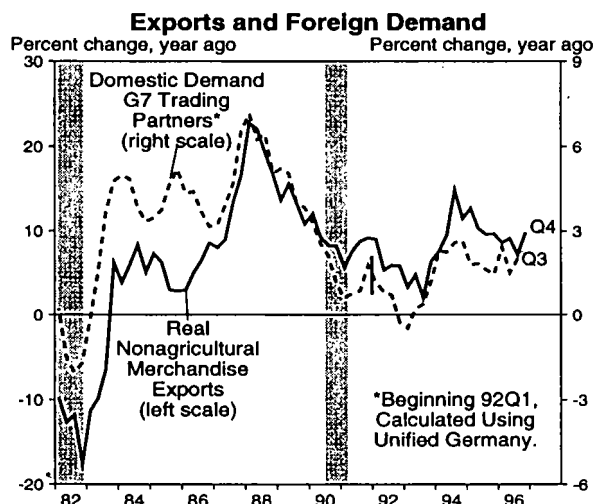
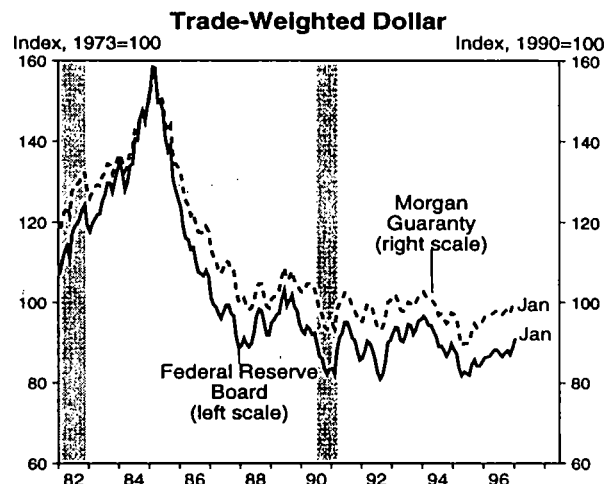


### Corporate Profits

|        | Pretax Profits (reported) | Corp. Income Taxes | After-tax Profits | Dividends | Retained Earnings | Inventory Valuation Adjust. | Capital Consump. Adjust. | Profits After Adjustments |       |       |       | Gross Invest. + Invent. Ch. |
|--------|---------------------------|--------------------|-------------------|-----------|-------------------|-----------------------------|--------------------------|---------------------------|-------|-------|-------|-----------------------------|
|        | bn \$                     | bn \$              | bn \$             | bn \$     | bn \$             | bn \$                       | bn \$                    | bn \$                     | % chg | bn \$ | % chg | bn \$                       |
| 1995   | 598.9                     | 218.7              | 380.2             | 227.4     | 140.6             | -28.1                       | 15.9                     | 586.7                     | 10.8  | 368.0 | 10.1  | 775.5                       |
| 1996   | 642.6                     | 234.9              | 407.7             | 244.2     | 179.5             | -7.2                        | 23.3                     | 658.6                     | 12.3  | 423.7 | 15.1  | 809.7                       |
| 1997   | 676.9                     | 247.6              | 429.3             | 260.3     | 184.5             | -10.9                       | 26.3                     | 692.4                     | 5.1   | 444.8 | 5.0   | 885.5                       |
| 1998   | 695.2                     | 254.3              | 440.9             | 279.8     | 169.9             | -14.6                       | 23.3                     | 704.0                     | 1.7   | 449.7 | 1.1   | 933.7                       |
| 1996Q1 | 642.2                     | 233.4              | 408.8             | 239.9     | 171.8             | -17.4                       | 20.4                     | 645.1                     | 15.2  | 411.8 | 20.2  | 767.3                       |
| Q2     | 644.6                     | 236.4              | 408.1             | 243.1     | 176.3             | -11.0                       | 22.3                     | 655.8                     | 16.6  | 419.4 | 20.5  | 781.8                       |
| Q3     | 635.6                     | 233.4              | 402.2             | 245.2     | 182.5             | 2.0                         | 23.6                     | 661.2                     | 8.0   | 427.7 | 10.2  | 843.6                       |
| Q4     | 648.0                     | 236.4              | 411.6             | 248.7     | 187.3             | -2.5                        | 26.9                     | 672.4                     | 9.9   | 436.0 | 10.9  | 846.0                       |
| 1997Q1 | 670.4                     | 245.0              | 425.4             | 253.2     | 186.8             | -8.9                        | 23.6                     | 685.1                     | 6.2   | 440.1 | 6.9   | 856.4                       |
| Q2     | 671.7                     | 245.9              | 425.8             | 257.9     | 192.4             | -4.3                        | 28.7                     | 696.1                     | 6.1   | 450.2 | 7.4   | 882.7                       |
| Q3     | 684.4                     | 250.4              | 434.0             | 262.6     | 183.4             | -11.9                       | 23.9                     | 696.4                     | 5.3   | 446.0 | 4.3   | 907.6                       |
| Q4     | 681.4                     | 249.1              | 432.3             | 267.4     | 175.5             | -18.5                       | 29.0                     | 691.9                     | 2.9   | 442.8 | 1.6   | 895.3                       |
| 1998Q1 | 697.7                     | 255.2              | 442.5             | 272.2     | 174.8             | -18.3                       | 22.8                     | 702.2                     | 2.5   | 447.0 | 1.6   | 940.8                       |
| Q2     | 694.3                     | 254.0              | 440.3             | 277.2     | 173.4             | -15.6                       | 25.9                     | 704.6                     | 1.2   | 450.6 | 0.1   | 945.0                       |
| Q3     | 691.1                     | 252.8              | 438.3             | 282.3     | 163.0             | -13.3                       | 20.2                     | 698.0                     | 0.2   | 445.2 | -0.2  | 932.7                       |
| Q4     | 697.8                     | 255.2              | 442.6             | 287.4     | 168.4             | -11.1                       | 24.3                     | 711.0                     | 2.8   | 455.8 | 2.9   | 916.1                       |

# Merchandise Trade

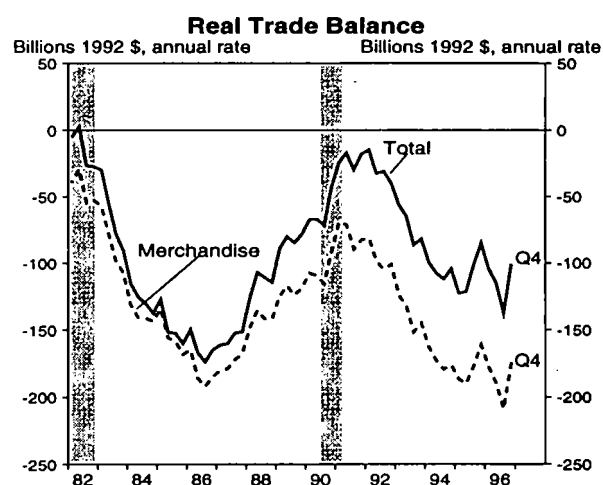
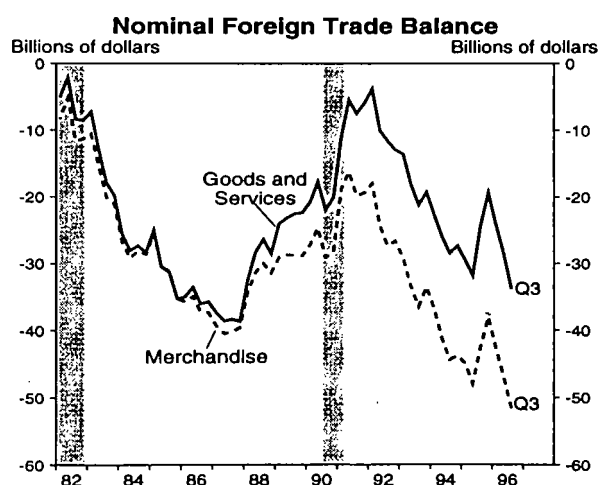
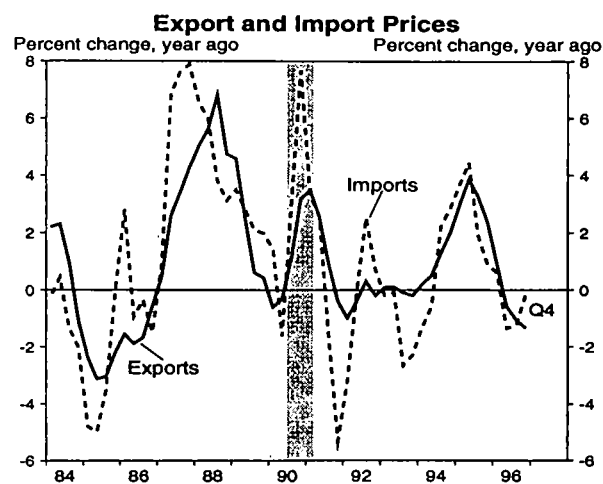
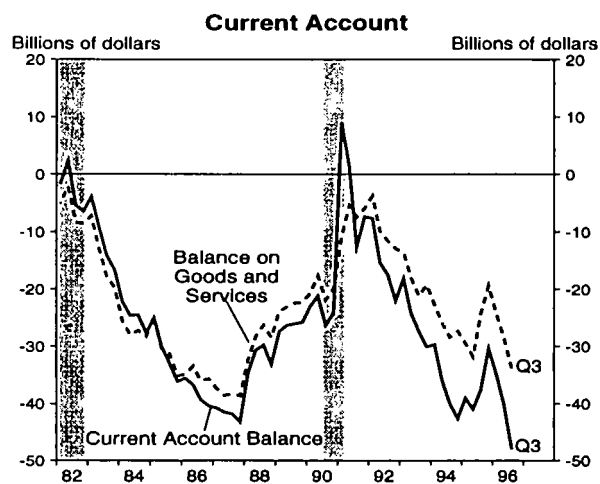
- Trade data for October and November showed a significant narrowing of the deficit to \$8.2 billion on average versus a third-quarter monthly average of \$11.2 billion. Much of the swing probably relates to seasonal adjustment factors and is likely to be reversed in the first quarter.
- For 1997, trade is likely to be only a slight drag on economic activity. Although the recent strength of the dollar will hurt U.S. trade competitiveness, this should be offset by more rapid domestic demand growth in Canada, Mexico, and Europe.



## Merchandise Trade

|        |       | Current Dollar Trade Flows NIPA basis |                |              |                 |                |                  | Real Trade Flows |       |          |       |                     |               |          |       |
|--------|-------|---------------------------------------|----------------|--------------|-----------------|----------------|------------------|------------------|-------|----------|-------|---------------------|---------------|----------|-------|
|        |       | Imports                               |                |              |                 | Trade Balance  |                  | Exports          |       | Imports  |       |                     | Trade Balance |          |       |
|        |       | Exports<br>bn \$                      | Total<br>bn \$ | Oil<br>bn \$ | Nonoil<br>bn \$ | Total<br>bn \$ | Ex. Oil<br>bn \$ | bn '92\$         | % chg | bn '92\$ | % chg | Ex. Oil<br>bn '92\$ | % chg         | bn '92\$ | % chg |
| 1995   | 581.5 | 757.0                                 | 55.1           | 701.9        | -175.5          | -120.5         | 565.9            | 10.6             | 744.7 | 8.9      | 9.9   | -178.8              | -119.6        |          |       |
| 1996   | 615.4 | 803.0                                 | 68.3           | 734.7        | -187.6          | -119.3         | 609.3            | 7.7              | 796.8 | 7.0      | 7.5   | -187.5              | -127.8        |          |       |
| 1997   | 662.0 | 862.4                                 | 71.0           | 791.5        | -200.5          | -129.5         | 669.9            | 9.9              | 863.4 | 8.4      | 9.3   | -193.5              | -135.7        |          |       |
| 1998   | 734.3 | 940.8                                 | 70.8           | 870.0        | -206.5          | -135.7         | 739.1            | 10.3             | 922.0 | 6.8      | 7.7   | -182.9              | -128.9        |          |       |
| 1996Q1 | 603.6 | 776.7                                 | 55.9           | 720.8        | -173.1          | -117.2         | 590.9            | 1.4              | 768.4 | 10.2     | 13.3  | -177.5              | -122.3        |          |       |
| Q2     | 610.4 | 798.2                                 | 70.1           | 728.1        | -187.8          | -117.7         | 600.6            | 6.7              | 789.9 | 11.7     | 8.5   | -189.3              | -127.3        |          |       |
| Q3     | 605.4 | 812.1                                 | 71.5           | 740.6        | -206.7          | -135.2         | 601.1            | 0.3              | 810.0 | 10.6     | 10.9  | -208.9              | -145.8        |          |       |
| Q4     | 642.1 | 824.8                                 | 75.7           | 749.1        | -182.7          | -107.0         | 644.6            | 32.2             | 819.0 | 4.5      | 7.4   | -174.4              | -115.8        |          |       |
| 1997Q1 | 633.4 | 838.3                                 | 67.3           | 770.9        | -204.8          | -137.5         | 642.3            | -1.4             | 838.3 | 9.8      | 13.4  | -196.0              | -142.4        |          |       |
| Q2     | 649.0 | 858.2                                 | 75.8           | 782.5        | -209.3          | -133.5         | 657.3            | 9.7              | 858.9 | 10.2     | 7.2   | -201.5              | -141.1        |          |       |
| Q3     | 663.2 | 874.1                                 | 75.4           | 798.7        | -210.9          | -135.5         | 671.1            | 8.6              | 876.2 | 8.3      | 8.1   | -205.1              | -143.0        |          |       |
| Q4     | 702.3 | 879.2                                 | 65.5           | 813.7        | -176.9          | -111.4         | 709.0            | 24.6             | 880.4 | 1.9      | 5.6   | -171.4              | -116.3        |          |       |
| 1998Q1 | 693.5 | 904.7                                 | 61.9           | 842.9        | -211.2          | -149.3         | 702.3            | -3.7             | 897.7 | 8.1      | 11.4  | -195.4              | -145.5        |          |       |
| Q2     | 715.9 | 932.9                                 | 73.0           | 859.9        | -216.9          | -144.0         | 720.9            | 11.0             | 917.2 | 9.0      | 6.1   | -196.3              | -139.6        |          |       |
| Q3     | 747.7 | 958.0                                 | 79.1           | 878.8        | -210.3          | -131.1         | 749.9            | 17.1             | 934.3 | 7.7      | 7.0   | -184.4              | -125.1        |          |       |
| Q4     | 780.1 | 967.7                                 | 69.3           | 898.5        | -187.6          | -118.4         | 783.3            | 19.0             | 938.8 | 1.9      | 6.5   | -155.5              | -105.6        |          |       |

# Balance of Payments



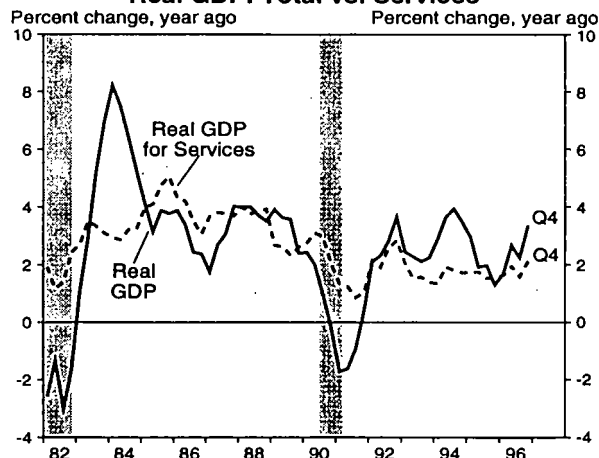
## Balance of Payments

|        | Trade Balance, BOP Basis  |                 |                   | Net Inv.<br>Income<br>& Transf | Current<br>Account<br>Balance | Real Bal.<br>of Goods<br>& Serv. | Real Exports<br>of Goods &<br>Services |       | Real Imports<br>of Goods &<br>Services |       | Price<br>Index for<br>Exports |                               | Terms<br>of<br>Trade |
|--------|---------------------------|-----------------|-------------------|--------------------------------|-------------------------------|----------------------------------|----------------------------------------|-------|----------------------------------------|-------|-------------------------------|-------------------------------|----------------------|
|        | Total<br>Balance<br>bn \$ | Merch.<br>bn \$ | Services<br>bn \$ |                                |                               |                                  | bn \$                                  | % chg | bn \$                                  | % chg | % chg                         | Index for<br>Imports<br>% chg |                      |
| 1995   | -105.1                    | -173.4          | 68.4              | -43.1                          | -148.2                        | -107.6                           | 775.4                                  | 8.9   | 883.0                                  | 8.0   | 3.1                           | 2.7                           | 0.4                  |
| 1996   | -114.4                    | -188.0          | 73.6              | -50.9                          | -165.3                        | -114.2                           | 826.1                                  | 6.5   | 940.3                                  | 6.5   | -0.5                          | -0.6                          | 0.1                  |
| 1997   | -125.4                    | -200.7          | 75.4              | -59.1                          | -184.5                        | -121.8                           | 893.2                                  | 8.1   | 1015.0                                 | 7.9   | -0.8                          | -0.3                          | -0.4                 |
| 1998   | -125.2                    | -206.7          | 81.5              | -61.1                          | -186.3                        | -107.6                           | 972.4                                  | 8.9   | 1080.1                                 | 6.4   | 1.4                           | 2.5                           | -1.1                 |
| 1996Q1 | -24.2                     | -42.7           | 18.5              | -10.6                          | -34.9                         | -104.0                           | 806.7                                  | 1.8   | 910.7                                  | 10.6  | -0.6                          | -0.7                          | 0.1                  |
| Q2     | -28.6                     | -47.0           | 18.4              | -11.6                          | -40.2                         | -114.7                           | 817.9                                  | 5.7   | 932.6                                  | 10.0  | -0.5                          | 0.5                           | -1.0                 |
| Q3     | -33.8                     | -51.6           | 17.8              | -14.1                          | -48.0                         | -137.4                           | 816.1                                  | -0.9  | 953.5                                  | 9.3   | -1.8                          | -2.4                          | 0.7                  |
| Q4     | -27.7                     | -46.7           | 18.9              | -14.5                          | -42.2                         | -100.7                           | 863.8                                  | 25.5  | 964.5                                  | 4.7   | -2.6                          | 1.9                           | -4.4                 |
| 1997Q1 | -33.4                     | -51.4           | 18.1              | -14.7                          | -48.1                         | -126.2                           | 862.4                                  | -0.6  | 988.6                                  | 10.4  | -1.9                          | -2.0                          | 0.1                  |
| Q2     | -33.8                     | -52.6           | 18.8              | -14.6                          | -48.4                         | -129.7                           | 880.5                                  | 8.6   | 1010.2                                 | 9.0   | 1.4                           | 0.2                           | 1.1                  |
| Q3     | -33.6                     | -52.2           | 18.7              | -14.8                          | -48.4                         | -134.4                           | 893.1                                  | 5.9   | 1027.6                                 | 7.1   | 1.0                           | -0.1                          | 1.1                  |
| Q4     | -24.7                     | -44.5           | 19.9              | -15.0                          | -39.6                         | -97.0                            | 936.6                                  | 20.9  | 1033.6                                 | 2.4   | 1.4                           | 1.1                           | 0.3                  |
| 1998Q1 | -33.5                     | -52.9           | 19.4              | -15.1                          | -48.6                         | -123.3                           | 932.3                                  | -1.8  | 1055.7                                 | 8.8   | 0.5                           | 3.9                           | -3.3                 |
| Q2     | -34.0                     | -54.3           | 20.3              | -15.2                          | -49.2                         | -121.5                           | 953.9                                  | 9.6   | 1075.4                                 | 7.7   | 2.9                           | 4.0                           | -1.1                 |
| Q3     | -32.1                     | -52.5           | 20.4              | -15.4                          | -47.5                         | -109.2                           | 982.2                                  | 12.4  | 1091.4                                 | 6.1   | 1.7                           | 3.5                           | -1.7                 |
| Q4     | -25.5                     | -47.1           | 21.5              | -15.5                          | -41.0                         | -76.4                            | 1021.4                                 | 16.9  | 1097.8                                 | 2.4   | 0.5                           | 2.8                           | -2.3                 |

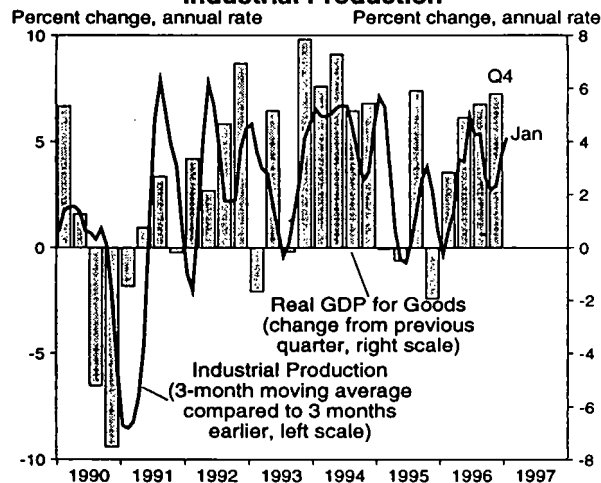
## Output Composition By Major Product Type

- Real GDP growth remains well-balanced, with goods, structures, and services output growth all climbing in 1996. A further pickup in goods and services output appears likely in 1997.
- Goods output should be supported by strong demand growth and stock replenishment. Construction activity, on the other hand, will probably flatten, especially given the large surge upward (8.8% annualized) in the fourth quarter of 1996.

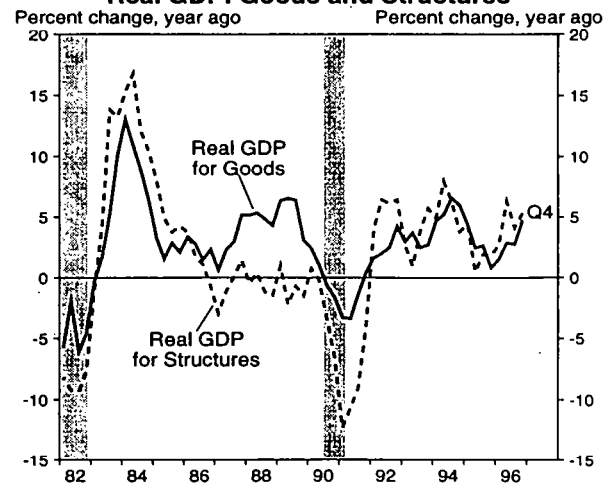
Real GDP: Total vs. Services



Industrial Production



Real GDP: Goods and Structures

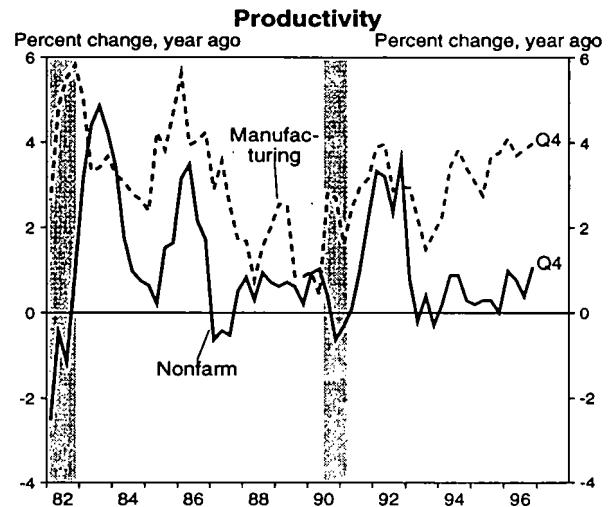
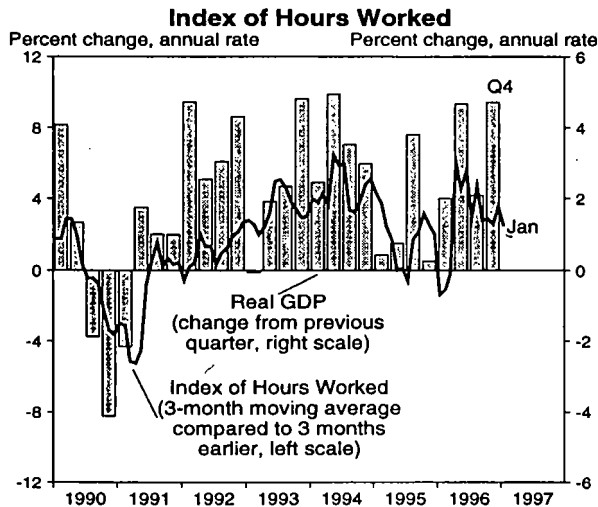
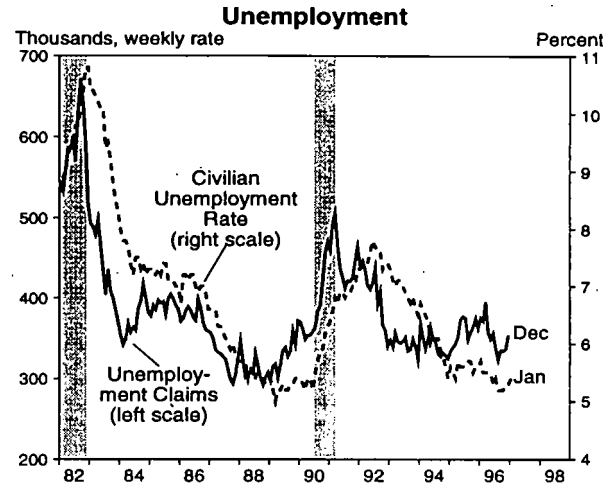


Output Composition by Major Product Type

|        | Real GDP |       | Goods    |       | Structures |       | Services |       | Industrial Production |       | Mfg. Industrial Production |       |
|--------|----------|-------|----------|-------|------------|-------|----------|-------|-----------------------|-------|----------------------------|-------|
|        | bn '92\$ | % chg | bn '92\$ | % chg | bn '92\$   | % chg | bn '92\$ | % chg | Index                 | % chg | Index                      | % chg |
| 1995   | 6,743    | 2.0   | 2,589    | 2.6   | 572        | 2.2   | 3,584    | 1.6   | 112.1                 | 3.3   | 113.2                      | 3.5   |
| 1996   | 6,911    | 2.5   | 2,666    | 3.0   | 598        | 4.6   | 3,649    | 1.8   | 115.2                 | 2.7   | 116.4                      | 2.8   |
| 1997   | 7,114    | 2.9   | 2,780    | 4.3   | 607        | 1.4   | 3,732    | 2.3   | 119.7                 | 3.9   | 121.5                      | 4.4   |
| 1998   | 7,244    | 1.8   | 2,856    | 2.7   | 596        | -1.8  | 3,802    | 1.9   | 123.2                 | 2.9   | 125.4                      | 3.2   |
| 1996Q1 | 6,814    | 2.0   | 2,616    | 2.8   | 586        | 4.9   | 3,614    | 1.0   | 113.1                 | 1.6   | 114.0                      | 1.1   |
| Q2     | 6,893    | 4.7   | 2,647    | 4.9   | 599        | 8.7   | 3,649    | 3.9   | 114.8                 | 6.2   | 115.8                      | 6.3   |
| Q3     | 6,928    | 2.1   | 2,682    | 5.4   | 598        | -0.9  | 3,652    | 0.4   | 115.8                 | 3.3   | 117.2                      | 5.0   |
| Q4     | 7,009    | 4.7   | 2,720    | 5.8   | 610        | 8.8   | 3,682    | 3.3   | 117.0                 | 4.3   | 118.5                      | 4.6   |
| 1997Q1 | 7,039    | 1.8   | 2,737    | 2.5   | 604        | -4.2  | 3,702    | 2.2   | 118.0                 | 3.3   | 119.6                      | 3.6   |
| Q2     | 7,098    | 3.4   | 2,768    | 4.6   | 610        | 4.2   | 3,725    | 2.4   | 119.2                 | 4.1   | 120.9                      | 4.4   |
| Q3     | 7,141    | 2.5   | 2,795    | 4.0   | 611        | 0.6   | 3,741    | 1.7   | 120.4                 | 4.1   | 122.2                      | 4.4   |
| Q4     | 7,177    | 2.0   | 2,819    | 3.5   | 603        | -5.0  | 3,762    | 2.3   | 121.4                 | 3.6   | 123.4                      | 3.9   |
| 1998Q1 | 7,204    | 1.5   | 2,841    | 3.1   | 596        | -4.6  | 3,775    | 1.5   | 122.4                 | 3.3   | 124.4                      | 3.5   |
| Q2     | 7,225    | 1.1   | 2,850    | 1.2   | 592        | -3.0  | 3,793    | 1.8   | 123.0                 | 1.9   | 125.1                      | 2.1   |
| Q3     | 7,250    | 1.4   | 2,856    | 0.9   | 595        | 2.6   | 3,809    | 1.7   | 123.3                 | 1.2   | 125.5                      | 1.4   |
| Q4     | 7,297    | 2.6   | 2,878    | 3.1   | 600        | 3.1   | 3,831    | 2.3   | 124.2                 | 2.7   | 126.4                      | 2.9   |

# Employment and Productivity

- Payroll trends remain strong, with January payrolls rising 271,000. The decline in initial unemployment claims in recent weeks indicates that this trend remains intact.
- The sharp rise in non-farm productivity in Q4 simply reflects the trade-inflated surge in output. As the unwinding of this distortion suppresses Q1 growth, productivity growth could turn negative for a quarter.
- As labor force growth slows in 1997 from an unsustainably firm pace, rapid payroll gains should lead to a swifter drop in the unemployment rate. By midyear, it should fall to around 5%.

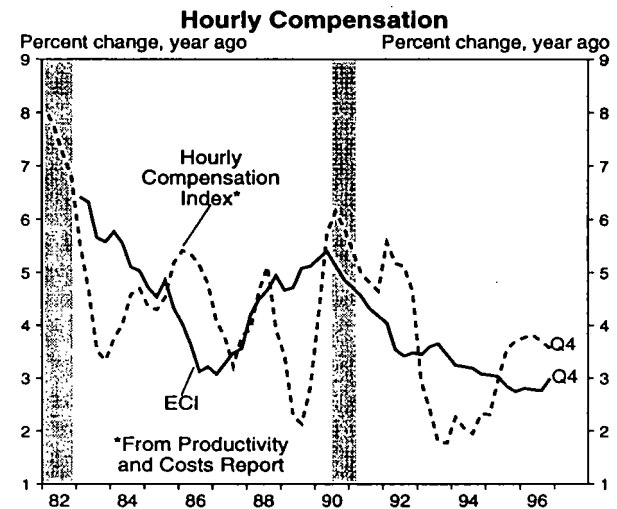
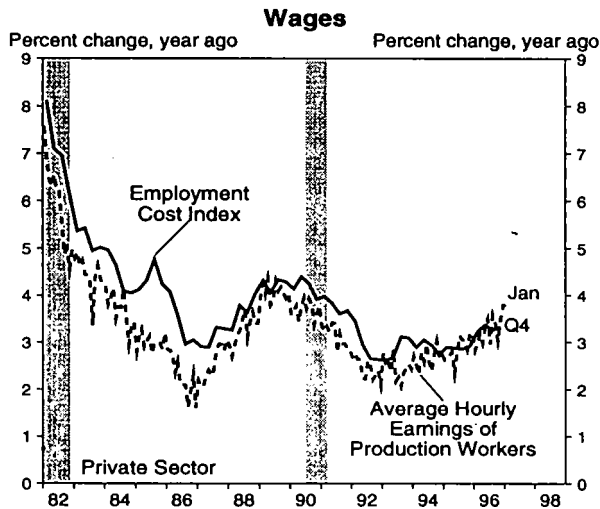
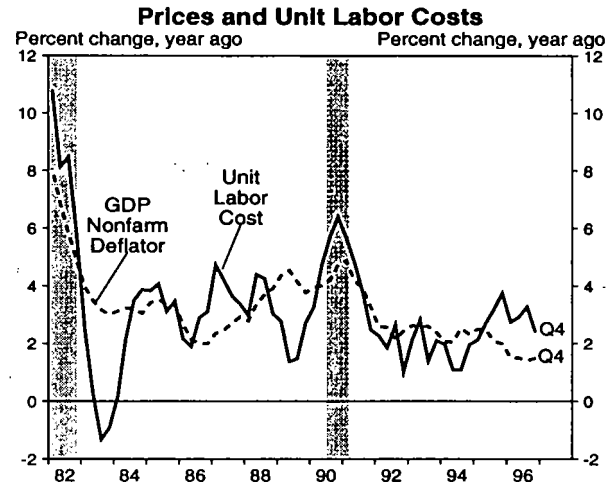


## Employment and Productivity

|        | Labor Force mill. | Employment mill. | % chg | Unempl. mill. | Unempl. Rate % | Nonfarm Payrolls Level mill. | Avg. Mo. Ch. thou. | Manuf. mill. | Other mill. | Hours Worked % chg | Hours Worked Manuf. % chg | Nonfarm Prod. % chg | Manuf. Prod. % chg |
|--------|-------------------|------------------|-------|---------------|----------------|------------------------------|--------------------|--------------|-------------|--------------------|---------------------------|---------------------|--------------------|
| 1995   | 132.3             | 124.9            | 1.5   | 7.4           | 5.6            | 117.2                        | 193                | 18.5         | 98.7        | 2.4                | 0.2                       | 0.2                 | 3.3                |
| 1996   | 133.9             | 126.7            | 1.4   | 7.2           | 5.4            | 119.6                        | 192                | 18.3         | 101.3       | 2.1                | -1.1                      | 0.8                 | 3.9                |
| 1997   | 136.0             | 129.1            | 1.9   | 6.9           | 5.1            | 121.8                        | 168                | 18.4         | 103.4       | 2.1                | 1.1                       | 0.9                 | 3.3                |
| 1998   | 137.5             | 130.3            | 0.9   | 7.3           | 5.3            | 123.3                        | 91                 | 18.4         | 104.8       | 1.3                | 0.1                       | 0.6                 | 3.1                |
| 1996Q1 | 133.1             | 125.7            | 1.8   | 7.5           | 5.6            | 118.5                        | 179                | 18.3         | 100.2       | 1.1                | -3.1                      | 1.6                 | 4.0                |
| Q2     | 133.6             | 126.4            | 2.2   | 7.3           | 5.4            | 119.3                        | 266                | 18.3         | 101.0       | 4.1                | 4.0                       | 0.8                 | 2.2                |
| Q3     | 134.1             | 127.0            | 2.1   | 7.1           | 5.3            | 120.0                        | 231                | 18.3         | 101.7       | 1.8                | -0.8                      | 0.0                 | 5.8                |
| Q4     | 134.8             | 127.7            | 2.1   | 7.1           | 5.3            | 120.5                        | 187                | 18.3         | 102.3       | 3.4                | 1.2                       | 2.3                 | 3.3                |
| 1997Q1 | 135.3             | 128.1            | 1.3   | 7.2           | 5.3            | 120.9                        | 129                | 18.3         | 102.6       | 1.3                | 1.3                       | -0.1                | 2.4                |
| Q2     | 135.8             | 128.9            | 2.4   | 6.9           | 5.1            | 121.6                        | 236                | 18.4         | 103.2       | 2.1                | 1.5                       | 1.4                 | 2.9                |
| Q3     | 136.2             | 129.6            | 2.1   | 6.7           | 4.9            | 122.3                        | 216                | 18.4         | 103.8       | 1.6                | 0.8                       | 0.9                 | 3.7                |
| Q4     | 136.6             | 129.8            | 0.7   | 6.9           | 5.0            | 122.5                        | 90                 | 18.5         | 104.1       | 0.6                | 0.0                       | 1.6                 | 3.9                |
| 1998Q1 | 137.0             | 129.9            | 0.3   | 7.1           | 5.2            | 122.8                        | 83                 | 18.5         | 104.3       | 0.8                | 0.0                       | 0.7                 | 3.5                |
| Q2     | 137.4             | 130.1            | 0.7   | 7.2           | 5.3            | 123.1                        | 106                | 18.5         | 104.6       | 1.5                | -0.5                      | -0.4                | 2.6                |
| Q3     | 137.7             | 130.6            | 1.4   | 7.1           | 5.2            | 123.6                        | 171                | 18.4         | 105.2       | 2.7                | 0.0                       | -1.2                | 1.4                |
| Q4     | 138.0             | 130.5            | -0.3  | 7.5           | 5.4            | 123.6                        | 4                  | 18.4         | 105.2       | 1.0                | 0.5                       | 1.8                 | 2.4                |

## Inflation: Labor Costs and Margins

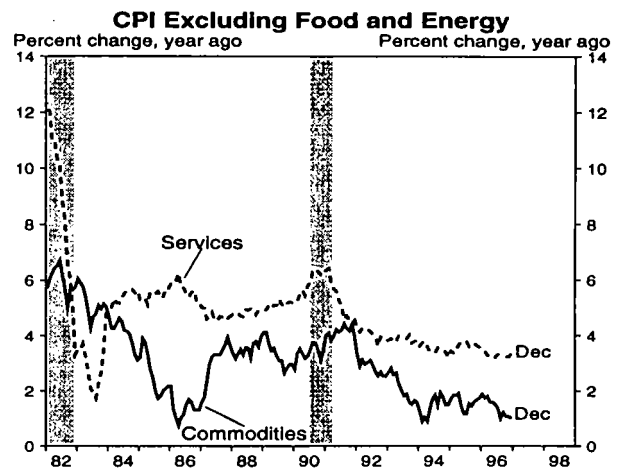
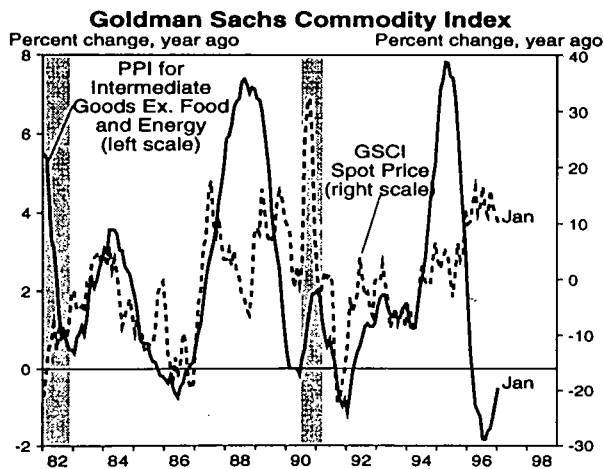
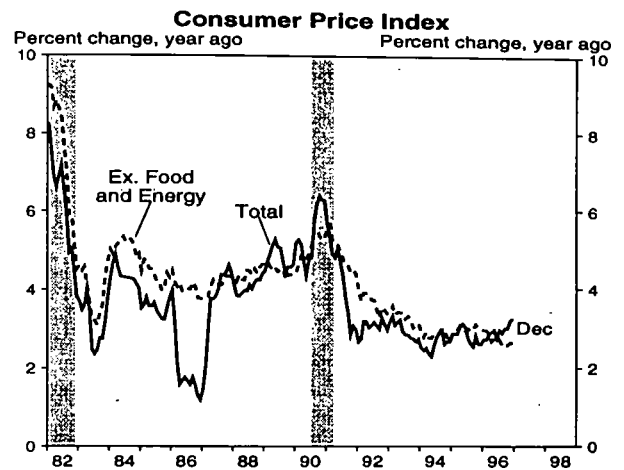
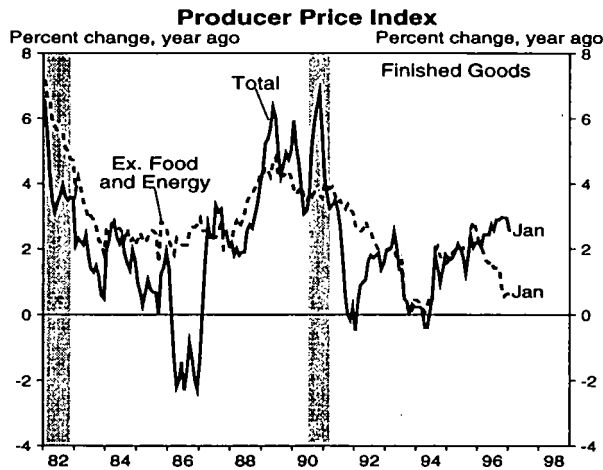
- Average hourly earnings accelerated in 1996, rising at a 3.3% annual rate, up from 2.9% in 1995. This indicates that the unemployment rate (5.4% in January) is below the rate consistent with stable inflation.
- Coupled with last year's rise in energy prices, this sets the stage for a rise in inflation in 1997, after a year in which broad-based measures of price inflation were suppressed by factors both temporary (declining benefit costs and a steeper-than-trend computer price decline) and technical (a partial CPI fix) in nature.



### Labor Costs and Margins

|        | Average Hourly Earnings |       |                     |       | Nonfarm Business        |                    |                       | Manufacturing           |                    |                       | Pretax Profit Margin % GDP |
|--------|-------------------------|-------|---------------------|-------|-------------------------|--------------------|-----------------------|-------------------------|--------------------|-----------------------|----------------------------|
|        | Nonfarm \$/hr           | % chg | Manufacturing \$/hr | % chg | Compens. per Hour % chg | Productivity % chg | Unit Labor Cost % chg | Compens. per Hour % chg | Productivity % chg | Unit Labor Cost % chg |                            |
| 1995   | 11.44                   | 2.9   | 12.37               | 2.6   | 3.1                     | 0.2                | 2.9                   | 3.6                     | 3.3                | 0.3                   | 8.1                        |
| 1996   | 11.81                   | 3.3   | 12.78               | 3.3   | 3.8                     | 0.8                | 2.9                   | 3.7                     | 3.9                | -0.2                  | 8.7                        |
| 1997   | 12.27                   | 3.9   | 13.29               | 4.0   | 4.4                     | 0.9                | 3.5                   | 4.7                     | 3.3                | 1.4                   | 8.7                        |
| 1998   | 12.77                   | 4.0   | 13.85               | 4.2   | 4.7                     | 0.6                | 4.1                   | 5.0                     | 3.1                | 1.9                   | 8.5                        |
| 1996Q1 | 11.65                   | 2.3   | 12.58               | 3.0   | 3.3                     | 1.6                | 1.5                   | 0.4                     | 4.0                | -3.9                  | 8.7                        |
| Q2     | 11.76                   | 3.9   | 12.75               | 5.4   | 4.1                     | 0.8                | 3.4                   | 5.5                     | 2.2                | 3.7                   | 8.7                        |
| Q3     | 11.86                   | 3.4   | 12.85               | 3.3   | 3.3                     | 0.0                | 3.3                   | 4.7                     | 5.8                | -1.2                  | 8.7                        |
| Q4     | 11.98                   | 4.0   | 12.94               | 2.8   | 4.4                     | 2.3                | 2.1                   | 3.7                     | 3.3                | 0.3                   | 8.7                        |
| 1997Q1 | 12.09                   | 3.6   | 13.06               | 3.8   | 4.4                     | -0.1               | 4.5                   | 4.5                     | 2.4                | 2.1                   | 8.8                        |
| Q2     | 12.20                   | 3.8   | 13.24               | 5.7   | 4.6                     | 1.4                | 3.2                   | 6.2                     | 2.9                | 3.3                   | 8.8                        |
| Q3     | 12.32                   | 4.0   | 13.37               | 3.8   | 4.7                     | 0.9                | 3.8                   | 4.4                     | 3.7                | 0.8                   | 8.7                        |
| Q4     | 12.47                   | 5.0   | 13.49               | 3.8   | 5.9                     | 1.6                | 4.4                   | 4.6                     | 3.9                | 0.7                   | 8.5                        |
| 1998Q1 | 12.58                   | 3.5   | 13.61               | 3.7   | 4.1                     | 0.7                | 3.3                   | 4.5                     | 3.5                | 0.9                   | 8.6                        |
| Q2     | 12.70                   | 4.0   | 13.81               | 5.9   | 4.5                     | -0.4               | 4.9                   | 6.7                     | 2.6                | 4.2                   | 8.5                        |
| Q3     | 12.83                   | 4.0   | 13.94               | 3.8   | 4.4                     | -1.2               | 5.6                   | 4.6                     | 1.4                | 3.2                   | 8.4                        |
| Q4     | 12.95                   | 4.0   | 14.04               | 2.8   | 4.4                     | 1.8                | 2.5                   | 3.7                     | 2.4                | 1.3                   | 8.4                        |

# Inflation: Commodity and Finished Goods Prices



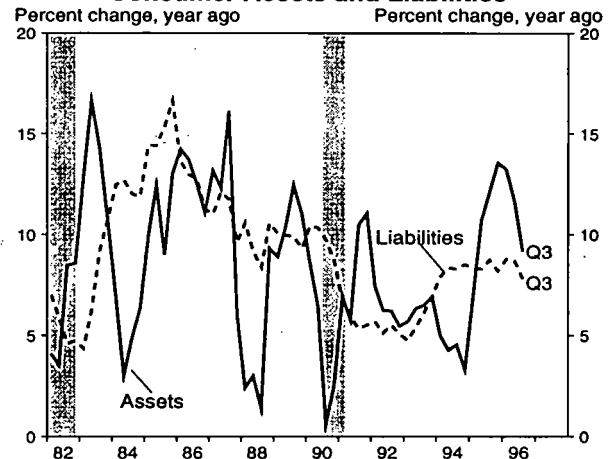
## Retail and Producer Prices

|        | Consumer Price Index        |     |               |                 |                                 |                     |                          |                           | Producer Price Index             |     |                    |      |                 |  |
|--------|-----------------------------|-----|---------------|-----------------|---------------------------------|---------------------|--------------------------|---------------------------|----------------------------------|-----|--------------------|------|-----------------|--|
|        | All Items<br>Index    % chg |     | Food<br>% chg | Energy<br>% chg | Core Index excl.                |                     | Core<br>Commod.<br>% chg | Core<br>Services<br>% chg | Finished Goods<br>Index    % chg |     | Core PPI           |      | Intermed. goods |  |
|        |                             |     |               |                 | Food & Energy<br>Index    % chg | Total Ind.<br>% chg |                          |                           |                                  |     | Core Ind.<br>% chg |      |                 |  |
|        |                             |     |               |                 |                                 |                     |                          |                           |                                  |     |                    |      |                 |  |
| 1995   | 152.5                       | 2.8 | 2.7           | 0.6             | 161.4                           | 3.0                 | 1.6                      | 3.6                       | 127.9                            | 1.9 | 2.1                | 5.4  | 6.4             |  |
| 1996   | 157.0                       | 2.9 | 3.2           | 4.7             | 165.8                           | 2.7                 | 1.4                      | 3.3                       | 131.3                            | 2.6 | 1.4                | 0.6  | -0.9            |  |
| 1997   | 162.0                       | 3.2 | 4.0           | 4.9             | 170.6                           | 2.9                 | 1.8                      | 3.4                       | 134.3                            | 2.3 | 1.4                | 2.1  | 1.8             |  |
| 1998   | 167.6                       | 3.4 | 4.0           | 1.7             | 176.6                           | 3.5                 | 2.8                      | 3.8                       | 139.0                            | 3.5 | 3.4                | 4.0  | 4.5             |  |
| 1996Q1 | 155.1                       | 3.3 | 2.8           | 11.2            | 164.2                           | 2.6                 | 1.7                      | 3.1                       | 129.9                            | 3.0 | 0.9                | -0.6 | -3.3            |  |
| Q2     | 156.4                       | 3.4 | 3.7           | 14.0            | 165.3                           | 2.6                 | 0.8                      | 3.3                       | 130.9                            | 2.9 | 0.9                | 1.8  | -1.3            |  |
| Q3     | 157.5                       | 2.7 | 5.3           | -4.0            | 166.3                           | 2.5                 | 0.4                      | 3.6                       | 131.6                            | 2.3 | 1.0                | 0.0  | -0.5            |  |
| Q4     | 158.8                       | 3.3 | 4.6           | 10.2            | 167.4                           | 2.6                 | 1.4                      | 3.1                       | 132.8                            | 3.6 | 0.0                | 1.3  | 0.2             |  |
| 1997Q1 | 160.2                       | 3.6 | 1.5           | 15.0            | 168.5                           | 2.8                 | 1.7                      | 3.2                       | 133.2                            | 1.2 | 0.8                | 2.5  | 1.3             |  |
| Q2     | 161.3                       | 2.8 | 5.3           | -5.0            | 169.8                           | 3.1                 | 2.5                      | 3.4                       | 133.6                            | 1.2 | 2.0                | 2.0  | 2.5             |  |
| Q3     | 162.6                       | 3.4 | 5.0           | 0.0             | 171.2                           | 3.4                 | 2.9                      | 3.6                       | 134.6                            | 3.2 | 3.0                | 3.5  | 5.0             |  |
| Q4     | 164.1                       | 3.7 | 4.5           | 2.5             | 172.8                           | 3.6                 | 3.2                      | 3.8                       | 136.0                            | 4.1 | 4.0                | 5.0  | 7.5             |  |
| 1998Q1 | 165.6                       | 3.6 | 4.0           | 2.5             | 174.3                           | 3.7                 | 3.0                      | 4.0                       | 137.3                            | 4.0 | 4.0                | 4.5  | 5.0             |  |
| Q2     | 167.0                       | 3.4 | 3.5           | 2.5             | 175.8                           | 3.5                 | 2.7                      | 3.9                       | 138.5                            | 3.6 | 3.5                | 4.0  | 2.5             |  |
| Q3     | 168.3                       | 3.2 | 3.0           | 2.5             | 177.3                           | 3.4                 | 2.5                      | 3.8                       | 139.6                            | 3.1 | 3.0                | 3.5  | 2.5             |  |
| Q4     | 169.6                       | 3.1 | 2.5           | 2.5             | 178.7                           | 3.3                 | 2.2                      | 3.7                       | 140.5                            | 2.7 | 2.5                | 3.0  | 5.0             |  |

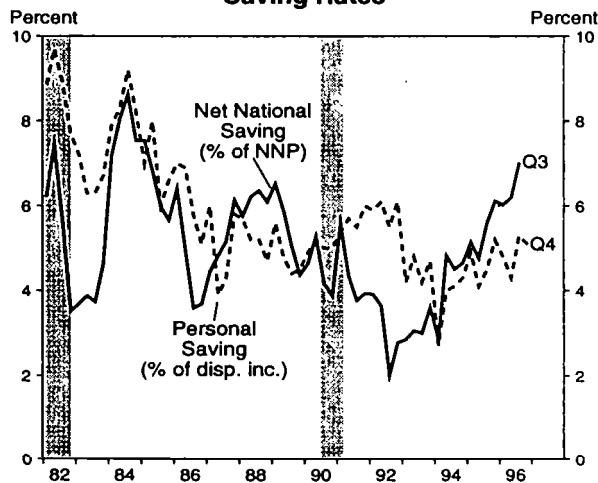
## Sources of National Saving

- Net national saving appears to have risen sharply in 1996, boosted by a rise in the household saving rate, strong corporate profit growth, and a drop in government dissaving as the federal budget deficit dropped sharply. The rise, however, did not reduce the dependence of the U.S. on foreign capital because investment spending rose about as fast.
- Total private borrowing growth moderated a bit in 1996, with the most substantial slowdown taking place in the growth rate of consumer installment debt. Debt growth does not appear excessive, suggesting no retrenchment is likely.

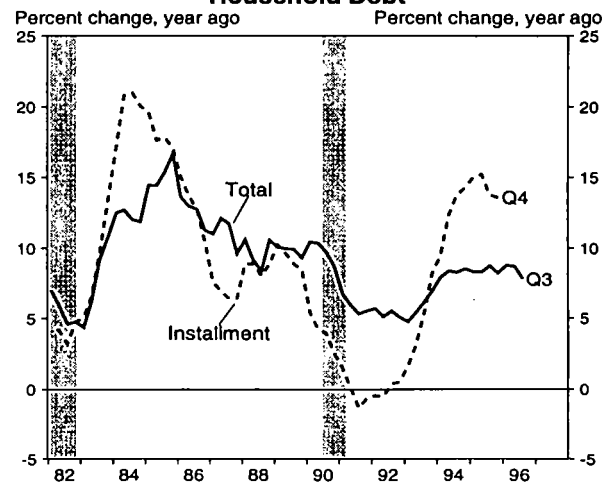
### Consumer Assets and Liabilities



### Saving Rates



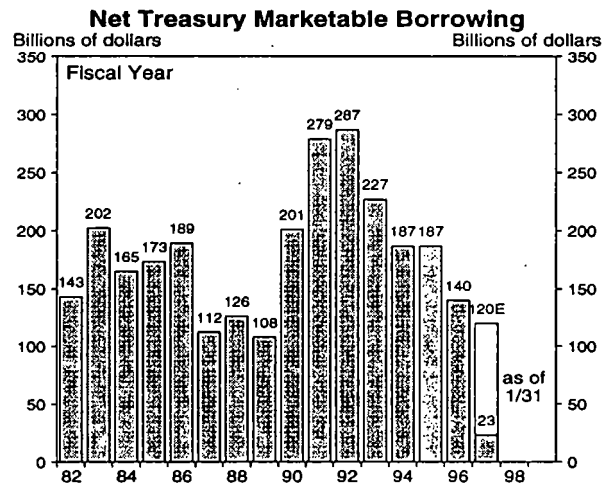
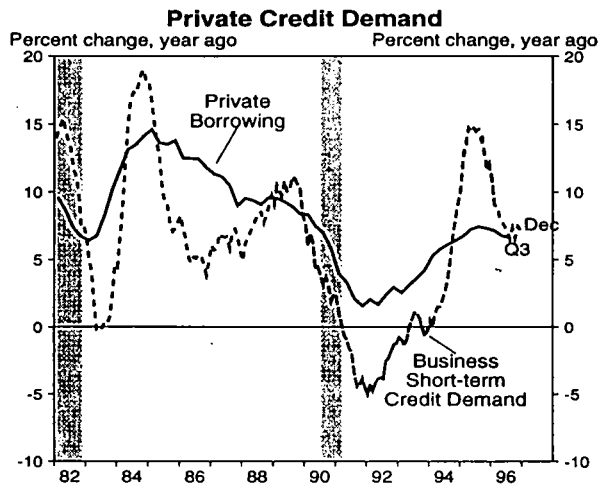
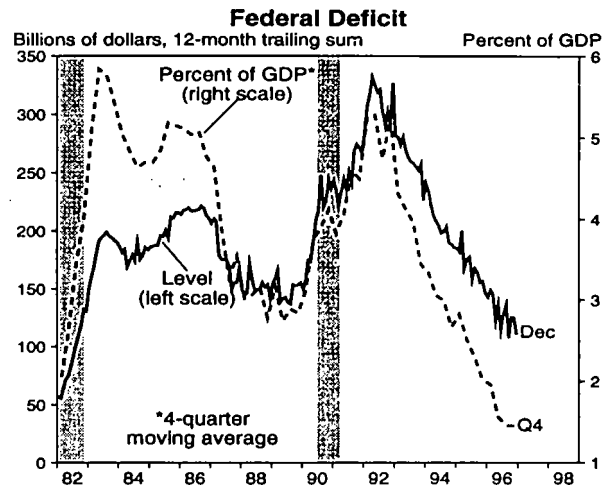
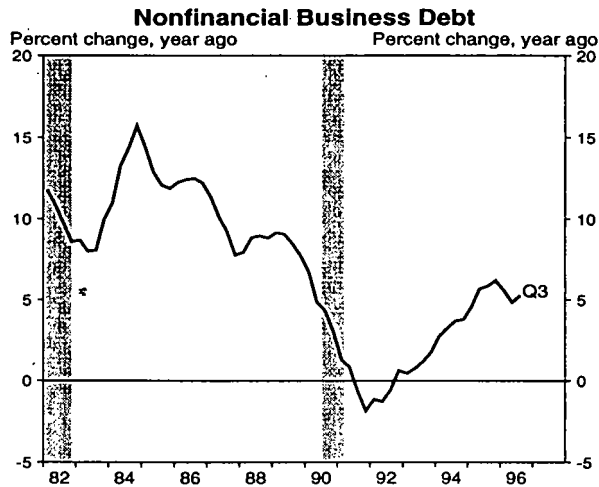
### Household Debt



### Sources of National Saving

|        | Dispos.<br>Income<br>bn \$ | less:<br>Consumer<br>Outlays<br>bn \$ | equals:<br>Personal<br>Saving<br>bn \$ | Retained<br>Earnings<br>bn \$ | plus:<br>Deprec.<br>Allow. &<br>Other<br>bn \$ | equals:<br>Gross<br>Bus.<br>Saving<br>bn \$ | Federal<br>Saving<br>bn \$ | plus:<br>St./Loc.<br>Saving<br>bn \$ | equals:<br>Gov't.<br>Saving<br>bn \$ | Gross National<br>Saving<br>bn \$ | % GDP | Net National<br>Saving<br>bn \$ | % NNP |
|--------|----------------------------|---------------------------------------|----------------------------------------|-------------------------------|------------------------------------------------|---------------------------------------------|----------------------------|--------------------------------------|--------------------------------------|-----------------------------------|-------|---------------------------------|-------|
| 1995   | 5,321                      | 5,072                                 | 249                                    | 141                           | 682                                            | 823                                         | -88                        | 168                                  | 80                                   | 1,152                             | 15.9  | 326                             | 5.1   |
| 1996   | 5,589                      | 5,315                                 | 274                                    | 179                           | 709                                            | 888                                         | -53                        | 168                                  | 116                                  | 1,278                             | 16.9  | 421                             | 6.3   |
| 1997   | 5,889                      | 5,581                                 | 309                                    | 185                           | 741                                            | 925                                         | -6                         | 159                                  | 153                                  | 1,387                             | 17.4  | 492                             | 7.0   |
| 1998   | 6,191                      | 5,858                                 | 333                                    | 170                           | 773                                            | 942                                         | 45                         | 159                                  | 205                                  | 1,480                             | 17.8  | 547                             | 7.4   |
| 1996Q1 | 5,484                      | 5,218                                 | 265                                    | 172                           | 697                                            | 868                                         | -82                        | 166                                  | 84                                   | 1,218                             | 16.4  | 375                             | 5.7   |
| Q2     | 5,542                      | 5,301                                 | 241                                    | 176                           | 704                                            | 881                                         | -54                        | 177                                  | 123                                  | 1,245                             | 16.5  | 392                             | 5.9   |
| Q3     | 5,629                      | 5,330                                 | 299                                    | 183                           | 715                                            | 897                                         | -48                        | 166                                  | 118                                  | 1,314                             | 17.3  | 450                             | 6.7   |
| Q4     | 5,702                      | 5,410                                 | 292                                    | 187                           | 720                                            | 907                                         | -26                        | 164                                  | 138                                  | 1,338                             | 17.3  | 466                             | 6.8   |
| 1997Q1 | 5,779                      | 5,479                                 | 299                                    | 187                           | 726                                            | 913                                         | -30                        | 159                                  | 129                                  | 1,341                             | 17.2  | 463                             | 6.7   |
| Q2     | 5,852                      | 5,548                                 | 304                                    | 192                           | 737                                            | 929                                         | -16                        | 157                                  | 141                                  | 1,374                             | 17.4  | 483                             | 6.9   |
| Q3     | 5,932                      | 5,614                                 | 318                                    | 183                           | 746                                            | 929                                         | -2                         | 159                                  | 157                                  | 1,404                             | 17.5  | 504                             | 7.1   |
| Q4     | 5,995                      | 5,681                                 | 314                                    | 175                           | 754                                            | 929                                         | 23                         | 162                                  | 185                                  | 1,428                             | 17.6  | 517                             | 7.2   |
| 1998Q1 | 6,075                      | 5,746                                 | 329                                    | 175                           | 761                                            | 935                                         | 25                         | 161                                  | 186                                  | 1,450                             | 17.7  | 531                             | 7.3   |
| Q2     | 6,150                      | 5,821                                 | 329                                    | 173                           | 768                                            | 942                                         | 38                         | 158                                  | 196                                  | 1,467                             | 17.7  | 539                             | 7.3   |
| Q3     | 6,234                      | 5,894                                 | 340                                    | 163                           | 776                                            | 939                                         | 52                         | 158                                  | 210                                  | 1,489                             | 17.8  | 552                             | 7.5   |
| Q4     | 6,304                      | 5,970                                 | 334                                    | 168                           | 785                                            | 954                                         | 67                         | 160                                  | 227                                  | 1,514                             | 17.9  | 566                             | 7.6   |

# Uses of National Saving

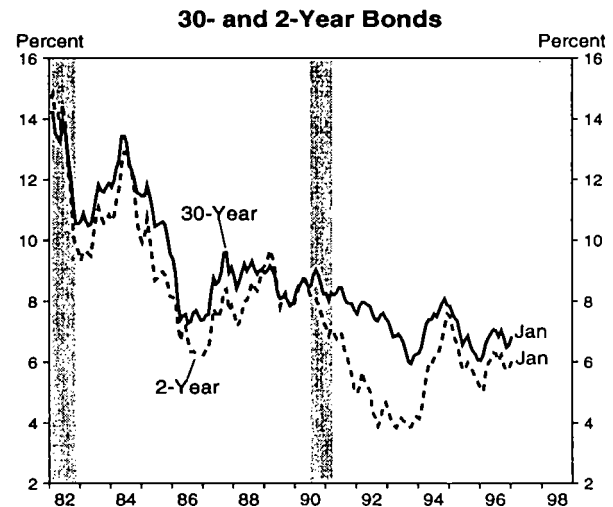
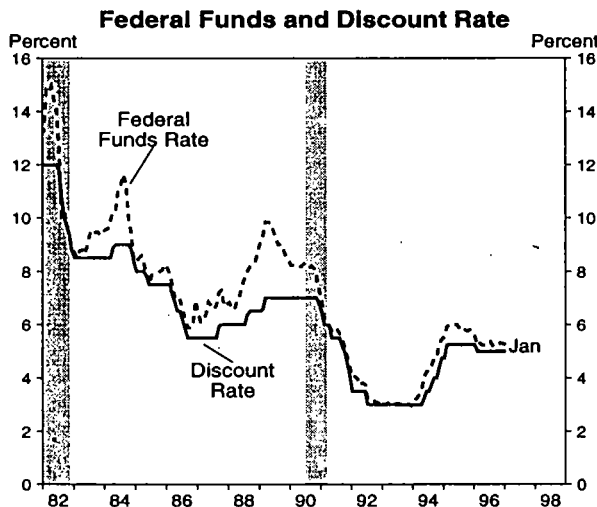
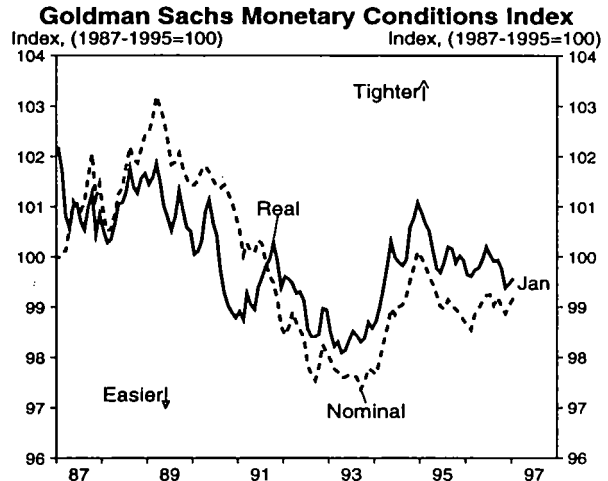


## Uses of National Saving and Sector Balances

|        | Business<br>Fixed<br>Invest.<br>bn \$ | plus:<br>Inventory<br>Change<br>bn \$ | plus:<br>Resident<br>Invest.<br>bn \$ | plus:<br>Gross Priv.<br>Domestic<br>Invest.<br>bn \$ | plus:<br>Govt.<br>Invest.<br>bn \$ | plus:<br>Net<br>Foreign<br>Invest.<br>bn \$ | plus:<br>Gross<br>Invest.<br>bn \$ | less:<br>Statistical<br>Discrep.<br>bn \$ | plus:<br>Gross<br>National<br>Saving<br>bn \$ | Household<br>Sector<br>Balance<br>bn \$ | Business<br>Sector<br>Balance<br>bn \$ | Gov't.<br>Sector<br>Balance<br>bn \$ |
|--------|---------------------------------------|---------------------------------------|---------------------------------------|------------------------------------------------------|------------------------------------|---------------------------------------------|------------------------------------|-------------------------------------------|-----------------------------------------------|-----------------------------------------|----------------------------------------|--------------------------------------|
| 1995   | 739                                   | 37                                    | 290                                   | 1,065                                                | 222                                | -136                                        | 1,151                              | -1                                        | 1,071                                         | -40                                     | 47                                     | -142                                 |
| 1996   | 790                                   | 19                                    | 310                                   | 1,120                                                | 233                                | -151                                        | 1,202                              | -75                                       | 1,115                                         | -36                                     | 79                                     | -117                                 |
| 1997   | 842                                   | 43                                    | 310                                   | 1,196                                                | 240                                | -170                                        | 1,266                              | -76                                       | 1,103                                         | -1                                      | 40                                     | -87                                  |
| 1998   | 888                                   | 45                                    | 293                                   | 1,227                                                | 250                                | -171                                        | 1,306                              | -22                                       | 1,169                                         | 40                                      | 9                                      | -45                                  |
| 1996Q1 | 769                                   | -2                                    | 302                                   | 1,069                                                | 229                                | -130                                        | 1,168                              | -50                                       | 1,218                                         | -36                                     | 101                                    | -145                                 |
| Q2     | 774                                   | 8                                     | 314                                   | 1,096                                                | 235                                | -144                                        | 1,187                              | -58                                       | 1,245                                         | -73                                     | 99                                     | -112                                 |
| Q3     | 807                                   | 37                                    | 313                                   | 1,156                                                | 234                                | -175                                        | 1,216                              | -98                                       | 1,314                                         | -14                                     | 54                                     | -116                                 |
| Q4     | 812                                   | 34                                    | 312                                   | 1,158                                                | 234                                | -155                                        | 1,237                              | -96                                       | 1,338                                         | -20                                     | 61                                     | -96                                  |
| 1997Q1 | 819                                   | 37                                    | 312                                   | 1,169                                                | 236                                | -178                                        | 1,226                              | -81                                       | 1,341                                         | -13                                     | 57                                     | -107                                 |
| Q2     | 836                                   | 47                                    | 314                                   | 1,197                                                | 240                                | -178                                        | 1,258                              | -81                                       | 1,374                                         | -10                                     | 47                                     | -99                                  |
| Q3     | 850                                   | 57                                    | 312                                   | 1,219                                                | 241                                | -178                                        | 1,282                              | -74                                       | 1,404                                         | 6                                       | 21                                     | -84                                  |
| Q4     | 863                                   | 32                                    | 302                                   | 1,197                                                | 244                                | -144                                        | 1,298                              | -66                                       | 1,428                                         | 12                                      | 34                                     | -60                                  |
| 1998Q1 | 874                                   | 67                                    | 293                                   | 1,234                                                | 246                                | -180                                        | 1,301                              | -47                                       | 1,450                                         | 36                                      | -5                                     | -61                                  |
| Q2     | 883                                   | 62                                    | 289                                   | 1,234                                                | 249                                | -182                                        | 1,301                              | -30                                       | 1,467                                         | 40                                      | -3                                     | -53                                  |
| Q3     | 893                                   | 40                                    | 293                                   | 1,226                                                | 251                                | -175                                        | 1,302                              | -9                                        | 1,489                                         | 47                                      | 6                                      | -41                                  |
| Q4     | 904                                   | 12                                    | 298                                   | 1,214                                                | 253                                | -149                                        | 1,318                              | 0                                         | 1,514                                         | 35                                      | 37                                     | -26                                  |

# Interest Rates

- The decision by Federal Reserve officials to keep monetary policy on hold has reinvigorated the bond market. Treasury long bond yields appear likely to remain in a 6½%-7% range until it becomes clear that Fed officials will actually tighten. Once tightening commences, then yields are likely to shoot back above 7%.
- The outlook built into the Eurodollar curve seems too benign. Judging from the GS-MCI, monetary policy is not tight. To make it tight enough to slow growth and cap inflation pressures, the Fed will probably have to lift short-term rates by about 125 basis points over the next year.



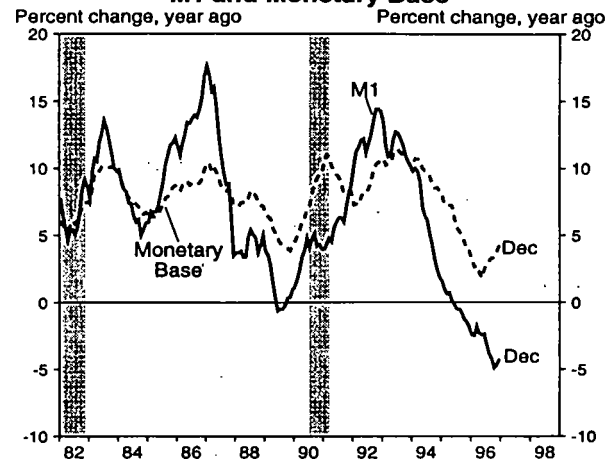
## Interest Rates and Money Balances

|        | Interest Rates     |               |                       |                           |                            |                            | Monetary Aggregates |                |                |                |        |       |
|--------|--------------------|---------------|-----------------------|---------------------------|----------------------------|----------------------------|---------------------|----------------|----------------|----------------|--------|-------|
|        | Federal Funds Rate | Discount Rate | 3-Month Treasury Rate | 2-Year Treasury Bond Rate | 10-Year Treasury Bond Rate | 30-Year Treasury Bond Rate | Monetary Base       | M <sub>1</sub> | M <sub>2</sub> | M <sub>3</sub> | % chg  | % chg |
|        | %                  | %             | %                     | %                         | %                          | %                          | bn \$               | % chg          | bn \$          | % chg          | bn \$  | % chg |
| 1995   | 5.84               | 5.21          | 6.04                  | 6.16                      | 6.58                       | 6.88                       | 429.0               | 5.9            | 1142.7         | -0.2           | 3572.3 | 2.1   |
| 1996   | 5.30               | 5.00          | 5.54                  | 6.00                      | 6.58                       | 6.81                       | 441.8               | 3.0            | 1105.6         | -3.2           | 3748.2 | 4.9   |
| 1997   | 6.06               | 5.56          | 6.33                  | 6.65                      | 7.05                       | 7.30                       | 461.6               | 4.5            | 1056.2         | -4.5           | 3926.1 | 4.7   |
| 1998   | 6.44               | 6.00          | 6.66                  | 6.65                      | 6.81                       | 6.98                       | 481.1               | 4.2            | 1037.9         | -1.7           | 4091.4 | 4.2   |
| 1996Q1 | 5.31               | 5.00          | 5.39                  | 5.66                      | 6.27                       | 6.60                       | 435.0               | 1.3            | 1122.7         | -3.4           | 3689.6 | 5.4   |
| Q2     | 5.31               | 5.00          | 5.57                  | 6.31                      | 6.93                       | 7.07                       | 438.2               | 3.0            | 1118.7         | -1.4           | 3730.7 | 4.5   |
| Q3     | 5.30               | 5.00          | 5.63                  | 6.23                      | 6.83                       | 7.03                       | 444.1               | 5.5            | 1100.6         | -6.3           | 3762.7 | 3.5   |
| Q4     | 5.29               | 5.00          | 5.59                  | 5.78                      | 6.30                       | 6.55                       | 449.8               | 5.2            | 1080.4         | -7.2           | 3809.9 | 5.1   |
| 1997Q1 | 5.50               | 5.00          | 5.80                  | 6.30                      | 6.90                       | 7.10                       | 452.9               | 2.8            | 1064.9         | -5.6           | 3852.7 | 4.6   |
| Q2     | 6.00               | 5.50          | 6.20                  | 6.60                      | 7.00                       | 7.30                       | 459.1               | 5.6            | 1060.3         | -1.7           | 3905.1 | 5.5   |
| Q3     | 6.25               | 5.75          | 6.50                  | 6.80                      | 7.10                       | 7.40                       | 464.5               | 4.8            | 1052.7         | -2.8           | 3949.8 | 4.7   |
| Q4     | 6.50               | 6.00          | 6.80                  | 6.90                      | 7.20                       | 7.40                       | 469.8               | 4.7            | 1046.8         | -2.2           | 3996.9 | 4.9   |
| 1998Q1 | 6.50               | 6.00          | 6.80                  | 6.80                      | 7.00                       | 7.20                       | 473.8               | 3.4            | 1041.3         | -2.1           | 4030.8 | 3.4   |
| Q2     | 6.50               | 6.00          | 6.75                  | 6.75                      | 6.90                       | 7.10                       | 478.5               | 4.1            | 1038.1         | -1.2           | 4070.1 | 4.0   |
| Q3     | 6.50               | 6.00          | 6.70                  | 6.65                      | 6.75                       | 6.90                       | 483.1               | 3.9            | 1035.5         | -1.0           | 4108.4 | 3.8   |
| Q4     | 6.25               | 6.00          | 6.40                  | 6.40                      | 6.60                       | 6.70                       | 488.8               | 4.8            | 1036.5         | 0.4            | 4156.1 | 4.7   |

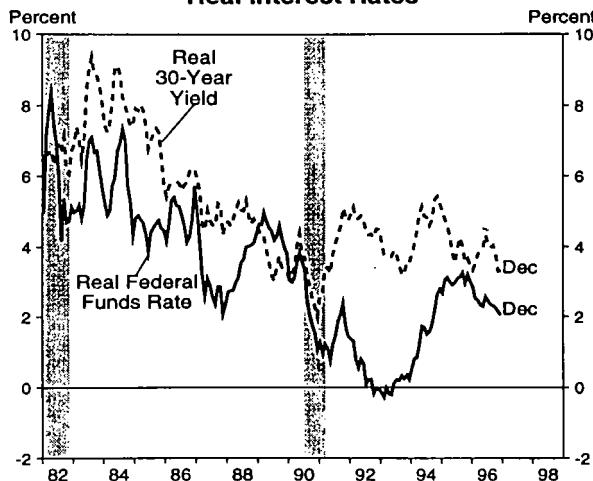
## Money Balances and Nonfinancial Debt

- Growth in M2 and M3 has picked up, along with the pickup in real activity. This has caused some Federal Reserve officials to begin to worry that monetary policy may be too accommodative. After all, when Fed officials are pegging the federal funds, rapid money growth is often one of the first signs that the peg has been set at too low a level.
- But Fed officials are unlikely to put too much weight on the behavior of the monetary aggregates. It is too soon to tell whether a stable relationship has been restored between nominal GDP and M2 growth.

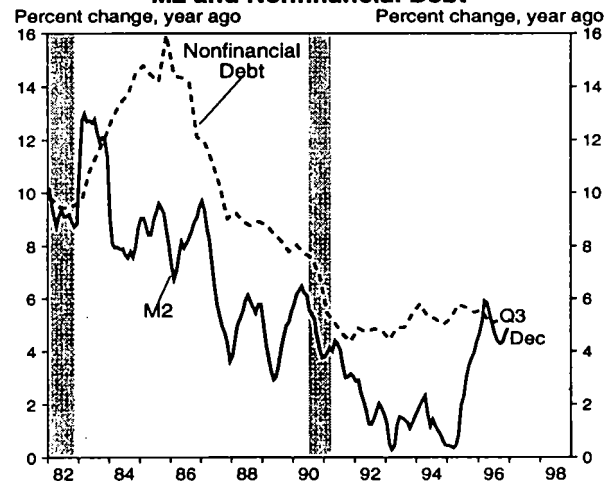
### M1 and Monetary Base



### Real Interest Rates



### M2 and Nonfinancial Debt



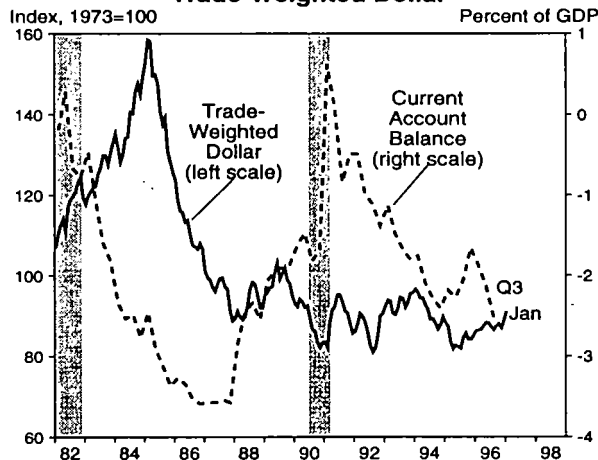
### Domestic Nonfinancial Debt and Its Components

|        | Domestic Nonfinancial Debt |       |                         |       |              |       | Household Debt |       |          |             |       |               | Business Debt |  |
|--------|----------------------------|-------|-------------------------|-------|--------------|-------|----------------|-------|----------|-------------|-------|---------------|---------------|--|
|        | Domestic Nonfinancial Debt |       | Federal Government Debt |       | Private Debt |       | Total          |       | Mortgage | Installment | Other | Business Debt |               |  |
|        | bn \$                      | % chg | bn \$                   | % chg | bn \$        | % chg | bn \$          | % chg | % chg    | % chg       | % chg | bn \$         | % chg         |  |
| 1995   | 13,618                     | 5.5   | 3,595                   | 4.9   | 10,023       | 5.8   | 4,865          | 8.5   | 6.6      | 15.0        | 9.0   | 4,074         | 5.6           |  |
| 1996   | 14,332                     | 5.2   | 3,726                   | 3.6   | 10,607       | 5.8   | 5,250          | 7.9   | 7.3      | 10.1        | 7.4   | 4,297         | 5.5           |  |
| 1997   | 15,065                     | 5.1   | 3,869                   | 3.9   | 11,195       | 5.6   | 5,615          | 7.0   | 7.0      | 6.7         | 7.1   | 4,568         | 6.3           |  |
| 1998   | 15,742                     | 4.5   | 4,021                   | 3.9   | 11,720       | 4.7   | 5,940          | 5.8   | 6.1      | 4.4         | 6.9   | 4,904         | 7.4           |  |
| 1996Q1 | 14,080                     | 5.8   | 3,717                   | 9.1   | 10,363       | 4.6   | 5,095          | 4.8   | 7.8      | -2.1        | 1.8   | 4,204         | 5.7           |  |
| Q2     | 14,229                     | 4.3   | 3,694                   | -2.5  | 10,535       | 6.8   | 5,203          | 8.8   | 8.2      | 9.2         | 11.4  | 4,263         | 5.8           |  |
| Q3     | 14,407                     | 5.1   | 3,733                   | 4.3   | 10,673       | 5.4   | 5,307          | 8.2   | 7.9      | 10.4        | 5.5   | 4,314         | 4.9           |  |
| Q4     | 14,613                     | 5.9   | 3,758                   | 2.7   | 10,855       | 7.0   | 5,397          | 7.0   | 6.6      | 7.8         | 7.7   | 4,405         | 8.7           |  |
| 1997Q1 | 14,806                     | 5.4   | 3,849                   | 10.0  | 10,957       | 3.8   | 5,482          | 6.5   | 7.1      | 4.7         | 6.4   | 4,451         | 4.2           |  |
| Q2     | 14,963                     | 4.3   | 3,832                   | -1.7  | 11,131       | 6.5   | 5,574          | 6.9   | 6.9      | 6.5         | 7.6   | 4,522         | 6.5           |  |
| Q3     | 15,157                     | 5.3   | 3,883                   | 5.4   | 11,274       | 5.2   | 5,661          | 6.4   | 6.5      | 5.9         | 6.7   | 4,595         | 6.6           |  |
| Q4     | 15,333                     | 4.7   | 3,913                   | 3.1   | 11,420       | 5.3   | 5,743          | 5.9   | 6.1      | 4.8         | 7.0   | 4,703         | 9.7           |  |
| 1998Q1 | 15,528                     | 5.2   | 3,999                   | 9.1   | 11,530       | 3.9   | 5,823          | 5.6   | 6.0      | 4.1         | 6.9   | 4,760         | 4.9           |  |
| Q2     | 15,639                     | 2.9   | 3,984                   | -1.5  | 11,655       | 4.4   | 5,901          | 5.5   | 5.8      | 3.9         | 7.0   | 4,845         | 7.4           |  |
| Q3     | 15,811                     | 4.5   | 4,036                   | 5.4   | 11,775       | 4.2   | 5,980          | 5.4   | 5.9      | 3.3         | 6.8   | 4,951         | 9.0           |  |
| Q4     | 15,988                     | 4.6   | 4,067                   | 3.0   | 11,922       | 5.1   | 6,058          | 5.3   | 5.9      | 2.7         | 6.9   | 5,062         | 9.3           |  |

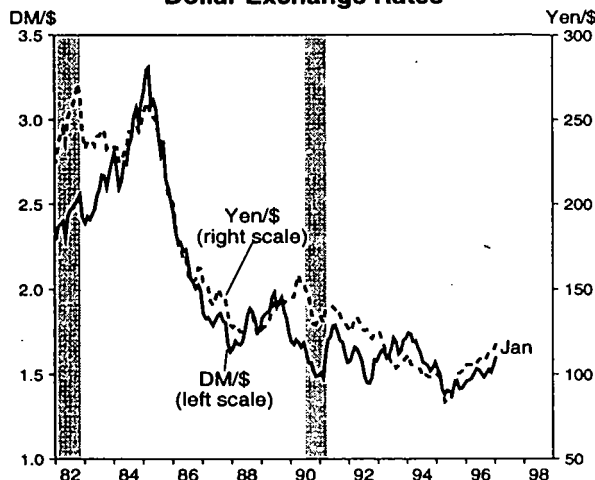
# The Dollar

- Despite the G7 finance ministers' shift to an attitude that the dollar has risen sufficiently, over the near-term further dollar strength would not be surprising. The factors driving the dollar—wide interest rate differentials in favor of the U.S. and EMU uncertainty—remain in place, and it is unclear that the G7 will act aggressively to push down the dollar.
- Over the longer-term, the dollar appears poised to weaken substantially, especially against the yen. This weakness should occur when investors begin to pay more attention to the U.S. trade gap and to anticipate a shift in relative interest rates.

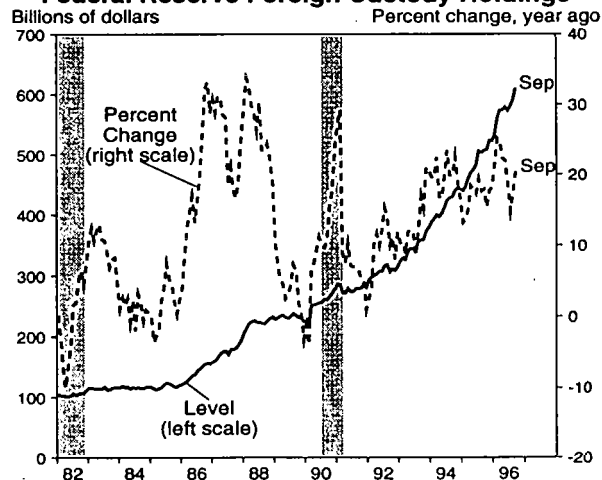
Trade-Weighted Dollar



Dollar Exchange Rates



Federal Reserve Foreign Custody Holdings



The Dollar

|        | Yen/\$ |        | DM/\$  |        | CS/\$  |        | FRB Trade-<br>Wtd. Dollar<br>Index | U.S. Foreign<br>Exchange Reserves |            | Foreign Custody<br>Holdings at the Fed |            |
|--------|--------|--------|--------|--------|--------|--------|------------------------------------|-----------------------------------|------------|----------------------------------------|------------|
|        | Actual | GSDEER | Actual | GSDEER | Actual | GSDEER |                                    | bn \$                             | yr/yr % ch | bn \$                                  | yr/yr % ch |
| 1995   | 94.06  | 109.12 | 1.43   | 1.43   | 1.37   | 1.23   | 84.30                              | 50.0                              | 16.7       | 486.6                                  | 16.8       |
| 1996   | 109.55 | 109.12 | 1.52   | 1.43   | 1.37   | 1.23   | 87.73                              | 46.5                              | -7.0       | 581.6                                  | 19.5       |
| 1997   | 106.50 | 111.4  | 1.49   | 1.46   | 1.31   | 1.28   | 84.60                              | 43.8                              | -5.8       | 648.2                                  | 11.4       |
| 1998   | 105.00 | 108.2  | 1.45   | 1.44   | 1.28   | 1.27   | 82.89                              | 41.6                              | -5.0       | 722.6                                  | 11.5       |
| 1996Q1 | 105.82 |        | 1.48   |        | 1.37   |        | 86.57                              | 46.9                              | 0.7        | 555.3                                  | 23.8       |
| Q2     | 108.86 |        | 1.53   |        | 1.37   |        | 88.16                              | 46.3                              | -12.1      | 575.1                                  | 21.0       |
| Q3     | 109.75 |        | 1.51   |        | 1.37   |        | 87.46                              | 47.4                              | -8.0       | 595.9                                  | 18.0       |
| Q4     | 113.76 | 112.9  | 1.55   | 1.48   | 1.36   | 1.30   | 88.71                              | 45.3                              | -8.0       | 600.2                                  | 16.0       |
| 1997Q1 | 110.00 |        | 1.55   |        | 1.36   |        | 87.79                              | 43.6                              | -7.0       | 633.1                                  | 14.0       |
| Q2     | 106.00 |        | 1.50   |        | 1.30   |        | 84.26                              | 43.5                              | -6.0       | 644.1                                  | 12.0       |
| Q3     | 105.00 |        | 1.48   |        | 1.29   |        | 83.46                              | 45.0                              | -5.0       | 655.5                                  | 10.0       |
| Q4     | 105.00 | 111.4  | 1.45   | 1.46   | 1.28   | 1.28   | 82.89                              | 43.0                              | -5.0       | 660.2                                  | 10.0       |
| 1998Q1 | 105.00 |        | 1.45   |        | 1.28   |        | 82.89                              | 41.4                              | -5.0       | 721.7                                  | 14.0       |
| Q2     | 105.00 |        | 1.45   |        | 1.28   |        | 82.89                              | 41.3                              | -5.0       | 721.4                                  | 12.0       |
| Q3     | 105.00 |        | 1.45   |        | 1.28   |        | 82.89                              | 42.8                              | -5.0       | 721.0                                  | 10.0       |
| Q4     | 105.00 | 108.2  | 1.45   | 1.44   | 1.28   | 1.27   | 82.89                              | 40.9                              | -5.0       | 726.2                                  | 10.0       |

# Medium Term Outlook

|             | Gross Domestic Product |       |          |       |          | Real Demand Components |                   |                  |                        |                 |         |
|-------------|------------------------|-------|----------|-------|----------|------------------------|-------------------|------------------|------------------------|-----------------|---------|
|             | Nominal GDP            |       | Deflator |       | Real GDP |                        | Personal Consump. | Resident Invest. | Business Fixed Invest. | Gov't. Spending | Exports |
|             | bn \$                  | % chg | % chg    | % chg | bn '92\$ | % chg                  | % chg             | % chg            | % chg                  | % chg           | % chg   |
| 1961-80 avg | 1301.6                 | 8.7   | 4.9      |       | 3504.6   | 3.6                    | 3.8               | 2.1              | 5.6                    | 0.7             | 6.9     |
| 1981-90 avg | 4330.2                 | 7.5   | 4.5      |       | 5382.7   | 2.9                    | 3.2               | 1.7              | 2.4                    | 3.1             | 5.5     |
| 1992-01 avg | 7959.9                 | 4.9   | 2.6      |       | 7046.3   | 2.3                    | 2.3               | 2.2              | 5.9                    | 0.8             | 7.3     |
| 1986        | 4422.2                 | 5.8   | 2.6      |       | 5489.9   | 3.0                    | 4.0               | 12.0             | -3.5                   | 4.6             | 7.4     |
| 1987        | 4692.3                 | 6.1   | 3.1      |       | 5648.4   | 2.9                    | 3.1               | 0.2              | -1.1                   | 3.1             | 11.0    |
| 1988        | 5049.6                 | 7.6   | 3.7      |       | 5862.9   | 3.8                    | 3.9               | -2.0             | 4.4                    | -1.8            | 15.9    |
| 1989        | 5438.7                 | 7.7   | 4.2      |       | 6060.3   | 3.4                    | 2.3               | -3.7             | 4.0                    | 1.3             | 11.7    |
| 1990        | 5743.8                 | 5.6   | 4.4      |       | 6138.7   | 1.3                    | 1.7               | -9.3             | -0.6                   | 2.0             | 8.5     |
| 1991        | 5916.7                 | 3.0   | 4.0      |       | 6078.9   | -1.0                   | -0.8              | -12.3            | -6.4                   | 0.6             | 6.3     |
| 1992        | 6553.0                 | 5.5   | 2.7      |       | 6386.4   | 2.7                    | 2.8               | 16.6             | 1.9                    | 0.4             | 6.6     |
| 1993        | 6935.7                 | 4.9   | 2.6      |       | 6608.7   | 2.3                    | 2.8               | 7.6              | 6.4                    | -0.2            | 2.9     |
| 1994        | 7253.8                 | 5.8   | 2.3      |       | 6742.9   | 3.5                    | 3.1               | 10.8             | 9.8                    | -0.1            | 8.2     |
| 1995        | 7253.8                 | 4.6   | 2.5      |       | 6742.9   | 2.0                    | 2.3               | -2.3             | 9.5                    | 0.0             | 8.9     |
| 1996        | 7574.6                 | 4.5   | 2.0      |       | 6905.0   | 2.5                    | 2.5               | 5.4              | 7.3                    | 0.9             | 6.5     |
| 1997        | 7957.6                 | 5.0   | 2.0      |       | 7113.7   | 2.9                    | 2.5               | -1.6             | 7.4                    | 1.8             | 8.1     |
| 1998        | 8315.0                 | 4.5   | 2.6      |       | 7244.2   | 1.8                    | 1.8               | -7.2             | 4.7                    | 1.1             | 8.9     |
| 1999        | 8797.5                 | 5.8   | 3.1      |       | 7431.9   | 2.6                    | 2.4               | 4.2              | 4.5                    | 1.1             | 8.5     |
| 2000        | 9381.5                 | 6.6   | 3.4      |       | 7661.6   | 3.1                    | 3.0               | 1.7              | 7.4                    | 1.6             | 7.6     |
| 2001        | 9576.3                 | 2.1   | 2.6      |       | 7625.6   | -0.5                   | 0.5               | -7.7             | -1.5                   | 0.7             | 6.6     |

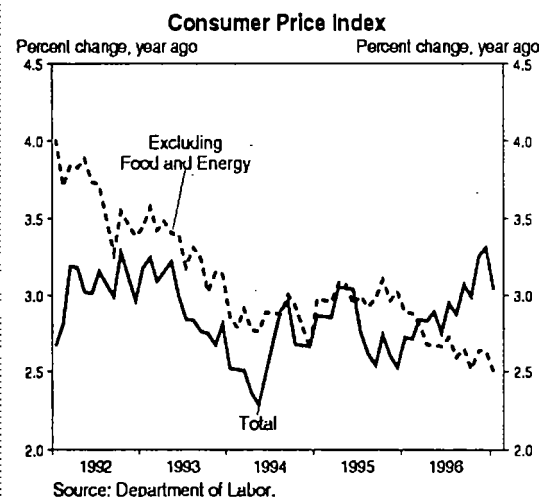
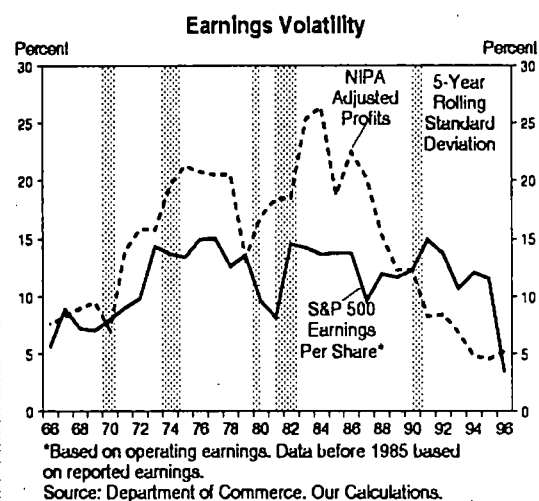
|             | Industrial Production |       | Employment | Unempl. Rate | Compens. | Productivity | Unit Labor Costs | Inflation |       | Consumer Price |       |
|-------------|-----------------------|-------|------------|--------------|----------|--------------|------------------|-----------|-------|----------------|-------|
|             | Index                 | % chg | % chg      | %            | % chg    | % chg        | % chg            | Index     | % chg | Index          | % chg |
|             |                       |       |            |              |          |              |                  |           |       |                |       |
| 1961-80 avg | 63.4                  | 4.0   | 2.1        | 5.6          | 7.0      | 2.3          | 4.6              | 47.6      | 5.0   | 44.9           | 5.3   |
| 1981-90 avg | 95.2                  | 2.4   | 1.8        | 7.1          | 5.1      | 1.1          | 4.0              | 105.5     | 3.1   | 109.5          | 4.7   |
| 1992-01 avg | 116.5                 | 2.0   | 1.4        | 5.3          | 3.9      | 0.3          | 3.1              | 134.7     | 2.1   | 161.2          | 3.1   |
| 1986        | 95.3                  | 0.9   | 2.3        | 7.0          | 5.1      | 2.7          | 2.5              | 103.2     | -1.3  | 109.7          | 1.9   |
| 1987        | 100.0                 | 5.0   | 2.6        | 6.2          | 3.8      | -0.3         | 4.0              | 105.4     | 2.1   | 113.7          | 3.7   |
| 1988        | 104.5                 | 4.4   | 2.3        | 5.5          | 4.3      | 0.6          | 3.7              | 108.0     | 2.5   | 118.3          | 4.1   |
| 1989        | 106.1                 | 1.5   | 2.0        | 5.3          | 2.6      | 0.6          | 2.1              | 113.5     | 5.1   | 124.0          | 4.8   |
| 1990        | 106.1                 | 0.0   | 1.3        | 5.6          | 5.5      | 0.4          | 5.0              | 119.1     | 4.9   | 130.8          | 5.4   |
| 1991        | 104.2                 | -1.8  | -0.9       | 6.9          | 5.0      | 0.8          | 4.2              | 121.7     | 2.2   | 136.3          | 4.2   |
| 1992        | 100.0                 | 3.2   | 0.7        | 7.5          | 5.1      | 3.1          | 1.9              | 123.2     | 1.2   | 140.4          | 3.0   |
| 1993        | 103.4                 | 3.4   | 1.5        | 6.9          | 2.2      | 0.2          | 2.1              | 124.7     | 1.2   | 144.6          | 3.0   |
| 1994        | 108.6                 | 5.0   | 2.3        | 6.1          | 2.2      | 0.6          | 1.5              | 125.6     | 0.7   | 148.3          | 2.6   |
| 1995        | 112.1                 | 3.3   | 1.5        | 5.6          | 3.1      | 0.2          | 2.9              | 127.9     | 1.9   | 152.5          | 2.8   |
| 1996        | 115.2                 | 2.7   | 1.4        | 5.4          | 3.8      | 0.8          | 2.9              | 131.3     | 2.6   | 157.0          | 2.9   |
| 1997        | 119.7                 | 3.9   | 1.9        | 5.1          | 4.4      | 0.9          | 3.5              | 134.3     | 2.3   | 162.0          | 3.2   |
| 1998        | 123.2                 | 2.9   | 0.9        | 5.3          | 4.7      | 0.6          | 4.1              | 139.0     | 3.5   | 167.6          | 3.4   |
| 1999        | 126.2                 | 2.4   | 1.4        | 5.1          | 4.9      | 0.8          | 4.1              | 143.1     | 2.9   | 173.5          | 3.5   |
| 2000        | 130.3                 | 3.3   | 1.6        | 4.7          | 5.1      | 1.4          | 3.7              | 147.6     | 3.2   | 180.1          | 3.8   |
| 2001        | 126.5                 | -3.0  | 0.4        | 5.5          | 4.0      | -0.5         | 4.5              | 150.5     | 1.9   | 185.9          | 3.2   |

|             | Balance of Payments |        |                 |        |       | Financial Forecasts |       |          |              |                |                |                |
|-------------|---------------------|--------|-----------------|--------|-------|---------------------|-------|----------|--------------|----------------|----------------|----------------|
|             | Trade Balance       |        | Current Account |        | % GDP | Budget Deficit      |       | Domestic |              | 10-Year        |                | 30-Year        |
|             | Total               | Merch. | Services        |        |       | (FY)                | % chg | M2       | Nonfin. Debt | Federal Funds* | Treasury Bond* | Treasury Bond* |
|             | bn \$               | bn \$  | bn \$           | bn \$  |       | bn \$               | % GDP | % chg    | % chg        | %              | %              | %              |
| 1961-80 avg | N/A                 | -4.7   | N/A             | 1.5    | 0.2   | -25.4               | 1.4   | 8.5      | 8.9          | 6.2            | 6.5            | 6.5            |
| 1981-90 avg | -90.8               | -102.2 | 11.4            | -91.4  | -2.0  | -165.1              | -3.9  | 7.8      | 10.6         | 9.4            | 10.3           | 10.3           |
| 1992-01 avg | -110.7              | -172.6 | 71.7            | -161.5 | -2.6  | -158.5              | -2.9  | 3.8      | 5.3          | 5.1            | 6.6            | 7.0            |
| 1986        | -139.6              | -145.1 | 5.5             | -150.9 | -3.4  | -221.1              | -5.1  | 8.3      | 12.1         | 6.8            | 7.7            | 7.8            |
| 1987        | -152.7              | -159.6 | 6.9             | -166.3 | -3.5  | -149.6              | -3.2  | 6.6      | 9.0          | 6.7            | 8.4            | 8.6            |
| 1988        | -115.3              | -127.0 | 11.6            | -127.1 | -2.5  | -155.1              | -3.1  | 5.2      | 8.8          | 7.6            | 8.8            | 9.0            |
| 1989        | -91.4               | -115.2 | 23.9            | -103.8 | -1.9  | -153.3              | -2.9  | 4.0      | 7.8          | 9.2            | 8.5            | 8.4            |
| 1990        | -80.0               | -109.0 | 29.0            | -92.7  | -1.6  | -220.5              | -3.9  | 5.3      | 6.9          | 8.1            | 8.6            | 8.6            |
| 1991        | -29.4               | -74.1  | 44.2            | -9.5   | -0.2  | -268.7              | -4.6  | 3.7      | 4.9          | 5.7            | 7.9            | 8.1            |
| 1992        | -38.3               | -96.1  | 57.8            | -62.6  | -1.0  | -290.2              | -4.7  | 1.9      | 4.8          | 3.5            | 7.0            | 7.7            |
| 1993        | -72.0               | -132.6 | 60.6            | -99.9  | -1.6  | -254.9              | -3.9  | 1.1      | 4.9          | 3.0            | 5.9            | 6.6            |
| 1994        | -104.4              | -166.1 | 61.7            | -148.4 | -2.4  | -203.4              | -3.0  | 1.4      | 5.3          | 4.2            | 7.1            | 7.4            |
| 1995        | -105.1              | -173.4 | 68.4            | -148.2 | -2.4  | -163.8              | -2.3  | 2.1      | 5.5          | 5.8            | 6.6            | 6.9            |
| 1996        | -114.4              | -188.0 | 73.6            | -165.3 | -2.6  | -107.3              | -1.4  | 4.9      | 5.2          | 5.3            | 6.6            | 6.8            |
| 1997        | -125.4              | -200.7 | 75.4            | -184.5 | -3.0  | -135.0              | -1.7  | 4.7      | 5.1          | 6.1            | 7.1            | 7.3            |
| 1998        | -125.2              | -206.7 | 81.5            | -186.3 | -3.0  | -140.0              | -1.7  | 4.2      | 4.5          | 6.4            | 6.8            | 7.0            |
| 1999        | -149.2              | -209.1 | 88.7            | -187.9 | -3.0  | -120.0              | -1.4  | 5.7      | 5.2          | 6.8            | 7.3            | 7.5            |
| 2000        | -176.6              | -231.6 | 91.7            | -215.3 | -3.4  | -80.0               | -0.9  | 6.6      | 5.5          | 5.3            | 6.3            | 6.8            |
| 2001        | -177.9              | -219.7 | 85.5            | -216.7 | -3.5  | -90.0               | -0.9  | 2.0      | 2.2          | 4.5            | 6.0            | 6.5            |

\* period average

## The Equity Risk Premium and the Brave New Business Cycle

- Structural changes in the economy such as just-in-time inventory management and financial market deregulation have generated a brave new business cycle—one characterized by longer economic expansions and less frequent recessions.
- This development, in turn, has led to lower earnings volatility and improved earnings visibility, which has reduced the relative volatility of equity prices versus bonds.
- Thus, the narrowing of the equity risk premium that has helped to generate the sharp advance in equity prices over the past few years has a more solid foundation than commonly perceived. Support for a narrower equity risk premium also calls into question the conventional wisdom that the U.S. equity market is overvalued.
- The economic news continues to have a relatively firm tone, with initial claims indicating a tight labor market and retail chain store surveys revealing a rebound in consumer spending.
- At the same time, the inflation news remains remarkably good. The modest 0.1% uptick in consumer prices in January, both overall and excluding food and energy, means that Fed policymakers still lack the "smoking gun" to justify a tightening of monetary policy.
- In this regard, Chairman Greenspan's Humphrey-Hawkins testimony on Wednesday, Feb 26, will be scrutinized for clues about his inclinations towards the timing and magnitude of any potential future monetary policy tightening.



### Trade Recommendations

- Stay long the June '97/June '98 Eurodollar future calendar spread, with a stop on a close below 35 basis points and a target of 90 basis points.
- Stay short December 1997 Euro futures, moving stop down to a close above 94.15 from 94.25.

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**Issue No: 97/8  
February 21, 1997**

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# I. Weekly Wrapup

## Economic and Market Overview

Despite surprisingly slim retail price gains in January, U.S. bond and share prices have sagged over recent days amid concerns that Chairman Greenspan will shortly send another cautionary message about the monetary policy outlook. By themselves, the latest inflation statistics suggest no pressure for an early credit tightening, as the consumer price index edged up only 0.1% last month both overall and excluding the food and energy components. At 2.5%, the year-to-year change in the core CPI marks another new low for this business expansion, reinforcing impressions of a benign pricing environment.

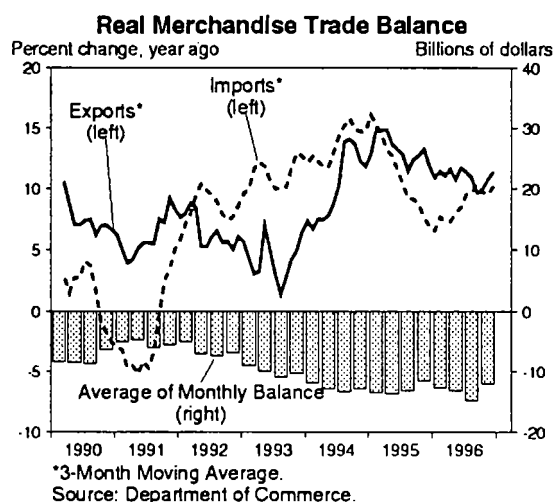
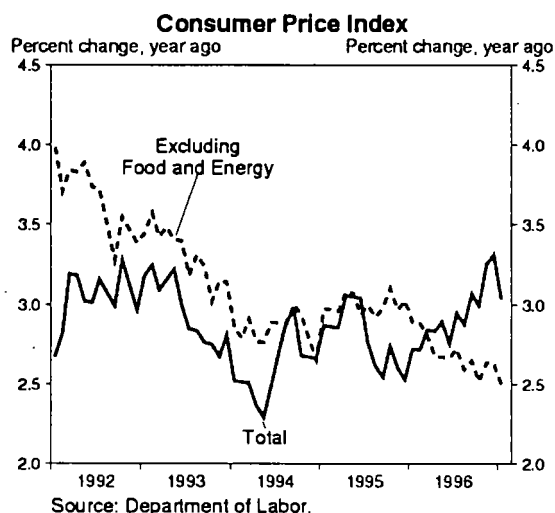
Economic activity, however, appears to have retained significant positive momentum in the first weeks of the new year. While housing starts rose only 2.0% in January after an 11.0% plunge the prior month, new construction likely has been suppressed temporarily by unseasonably cold temperatures in much of the country. A lean stock of unsold new dwellings, favorable mortgage financing terms, and a recent rise in traffic at housing developments all bode well for a rebound in starts before long. A widening of the trade gap in December, to \$10.3 billion, was not surprising given the very low deficits recorded in October and November, as well as a previously-reported surge in petroleum imports. Meanwhile, there are numerous indications that strong hiring patterns have persisted this quarter. Weekly initial jobless claims hovered below 310,000 during the first half of February, exceptionally low readings for a period without holidays or other obvious distorting influences. Consistent with this sign of a reduced

layoff rate, manufacturers in the Philadelphia and Kansas City Fed bank surveys reported a sharp rise in expectations for employment growth over the next six months. The firmness in the labor markets also appears to be lending support to consumer spending. Both the Johnson Redbook and the Mitsubishi chain store sales surveys showed sizable advances in the latest week.

## Federal Reserve Policy

Low and stable current inflation trends make it doubtful that Chairman Greenspan will signal an imminent interest rate hike when he testifies before the Senate and House Banking Committees on February 26 and 27, respectively. It is likely, though, that he will once again warn against an assumption that wage and price gains will stay subdued indefinitely in an environment where labor supplies are stretched very thin and economic growth is proceeding at a relatively rapid pace. Any remarks by Greenspan that underscore concerns about a relaxation of nontraditional restraints on wage awards would be a sign that he and other top Fed officials are creeping closer to a decision to apply the monetary brakes.

The FOMC's forecasts of real GDP growth in 1997 probably will be a bit firmer than those published on a tentative basis last July, which centered around 2.0%, while the central tendency expectation for the CPI is unlikely to be any lower than the preliminary 2.75%-3.0% forecast published last summer. The stronger-than-expected outturn for the economy last year and the well-balanced character of recent output



gains seem to have undermined the earlier widespread belief at the central bank that growth would swiftly revert to historical averages.

### Fiscal and Political Developments

U.S. Treasury borrowing in the first half of 1997 should be very light, about \$30 billion on a net basis. That would be far below the amounts actually raised from the market in the same periods of 1995 (\$99.8 billion) and 1996 (\$51.5 billion). With funding needs so sharply reduced, and a new auction cycle underway for inflation-indexed securities, Treasury debt managers are likely to continue reducing their offerings of more traditional notes and bonds. Supplies of Treasury bills, moreover, can be expected to continue to shrink until the middle of next quarter.

When Congress returns to session, more critical scrutiny of the Clinton budget plan appears likely. Republicans in Congress may take a less friendly tone in their comments. But this will mainly reflect tactics to drive a good bargain rather than a fracturing of the consensus to strike a balanced budget deal in 1997. Support for a balanced budget amendment continues to slide, with Senator Tim Johnson, a Democrat from South Dakota, who had voted for the amendment when he was a member of the House, announcing his unwillingness to back the Republican proposal.

### 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 monetary policy tightening in 1997 is much more likely than what is priced into the market. However, given the good CPI report for January, the prospects for a tightening at the March FOMC meeting are fading. To reflect our more bearish than consensus view, we would remain long our June '97/June '98 Euro future calendar spread with a target of 90 basis points and a stop on a close below 35 basis points. We also would remain short the Dec '97 Euro future with a target of 93.50. We would move our stop down to a close above 94.15, from 94.25 to reflect a somewhat more cautious stance given the risks that Fed tightening may be pushed off at least until the May FOMC meeting.

On the long end of the curve, we remain neutral for the time being. If there were a substantial relief rally following Chairman Greenspan's testimony, we would consider establishing a short position.

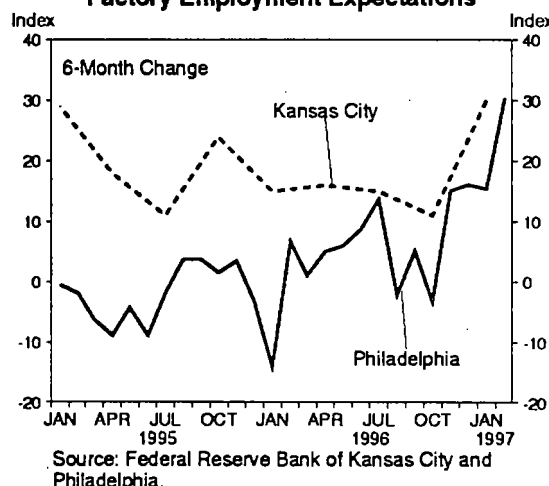
### FOMC "Central Tendency" Projections (Issued July 18, 1996)

|                                         | 1996<br>(Estimated) | 1996<br>(Actual) | 1997<br>(Tentative Est.) |
|-----------------------------------------|---------------------|------------------|--------------------------|
| Nominal GDP <sup>1</sup>                | 5.0%-5.5%           | 5.2%             | 4.25%-5.0%               |
| Real GDP <sup>1</sup>                   | 2.5%-2.75%          | 3.4%             | 1.75%-2.25%              |
| Consumer Price Index <sup>1</sup>       | 3.0%-3.25%          | 3.2%             | 2.75%-3.0%               |
| Civilian Unemployment Rate <sup>2</sup> | About 5.5%          | 5.3%             | 5.5%-5.75%               |

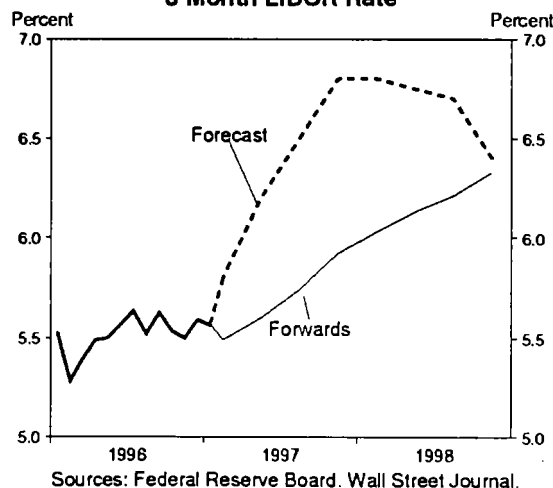
<sup>1</sup> Change on fourth-quarter to fourth-quarter comparison.

<sup>2</sup> Average level in the fourth quarter.

### Factory Employment Expectations



### 3-Month LIBOR Rate



## II. The Equity Risk Premium and the Brave New Business Cycle<sup>1</sup>

The business cycle has changed in ways that have extended the length of economic expansions and reduced the frequency of recession.<sup>2</sup> As a result, corporate earnings and equity prices have become less volatile. These developments have made equity investing less risky and are consistent with a shrinking equity risk premium—the excess expected return demanded by investors to invest in U.S. equities versus Treasury bonds. This suggests that the sharp and sustained appreciation of equity prices in recent years has a more solid foundation than generally realized. As shown below, a shrinking risk premium implies higher equity prices.

### The Equity Risk Premium and Equity Prices

Following convention, we define the equity risk premium as the difference in expected total return from investing in equities versus government bonds. It represents the excess return that investors expect from holding equities versus bonds ex ante (but may not realize ex post).

Equity prices are very sensitive to the level of the equity risk premium demanded by investors. Thus, seemingly small changes in the equity risk premium can lead to large changes in equity prices over time. This can best be illustrated by a simple example. Suppose that 10-year Treasury notes yield 6% and that the equity risk premium is 3%. This implies an expected equity return of 9%. Assuming a 2% dividend yield and no change in the price/earnings ratio, this implies expected earnings growth and capital appreciation of 7% per year. Now suppose that the equity risk premium shrinks to 2.5% and all else remains equal. In this case, the dividend yield must fall to 1.5% to reduce the total expected return to 8.5% per year (6% 10-year note yield plus 2.5% equity risk premium). Equity prices must rise by 33% to push the dividend yield down to 1.5%.<sup>3</sup>

This example illustrates that equity prices are very sensitive to changes in the size of the equity risk premium. Thus, secular changes in the nature of the business cycle do not have to shrink the equity risk premium much to push equity prices sharply higher.

Although the equity risk premium is easy to define, it is difficult to measure. Actual returns on equities versus bonds are not necessarily a good guide because the ex post results can differ sharply from ex ante expectations. This could occur for several reasons. First, the world could simply evolve differently than expected, with earnings and economic performance either stronger or weaker than anticipated, with a resultant impact on equity prices and ex post returns. Second, if the size of the equity risk premium is changing, that shift itself will affect the level of equity prices and influence the relative returns on equities versus bonds.

One might assume that errors in expectations would tend to cancel out over time, causing convergence between expected and actual returns. Unfortunately, even if this were the case, the measurement problem would remain. At best, the resulting estimate would only measure the average risk premium over time. It would not provide an accurate estimate of the current risk premium if the risk premium were not stable.

These measurement problems are currently very much in evidence. To see this, consider that over the past ten years, the average annual return on large-cap U.S. equities has exceeded the average annual return on long-term government bonds by about 6% per year. If the equity risk premium were really that high, that would imply nearly a 13% expected annual return from equities, more than double the expected growth rate of nominal GDP. Because that rate of return would imply a rapid and continuous rise in the ratio of equity market capitalization to GDP, such a result is implausible. More likely, the current equity risk premium is not 6%, but instead is much lower.

While we cannot measure the equity risk premium well, most evidence indicates that it has been

<sup>1</sup> Many thanks to Abby Cohen, Steve Einhorn, and Patty Shangkuan for their assistance and useful suggestions and comments in preparation of this article.

<sup>2</sup> See *The Brave New Business Cycle: No Recession In Sight*, January 1997 for details.

<sup>3</sup> All else will probably not be equal, and the differences will tend to dampen the rise in equities prices. For example, as equity prices rise, companies will issue more equity and less debt, and this will push the equity risk premium back up a bit as additional investors will have to be induced to buy equities. Similarly, the rise

in equities prices will tend to reduce the cost of capital, stimulating investment, and potentially reducing the profitability of new investment. However, the basic point that equity prices are very sensitive to modest changes in the risk premium still remains valid.

shrinking. For example, (see chart below) the price/earnings ratio (calculated using operating earnings) for the S&P 500 index has been trending upward for more than a decade. If the risk premium were stable, it should have been trendless across business cycles and shrinking within each business cycle as the amount of excess slack in the economy were exhausted. Similarly, the ratio of the S&P 500 dividend yield to T-bill rates has been trending unevenly downward for decades, which also is consistent with shrinkage of the equity risk premium over time.

The performance of other assets relative to Treasury bonds also is consistent with a shrinking equity risk premium. For example, the spread between B-rated corporate bonds and Treasury bonds shrank sharply last year. As high-yield bonds are generally considered to have equity-like characteristics to some

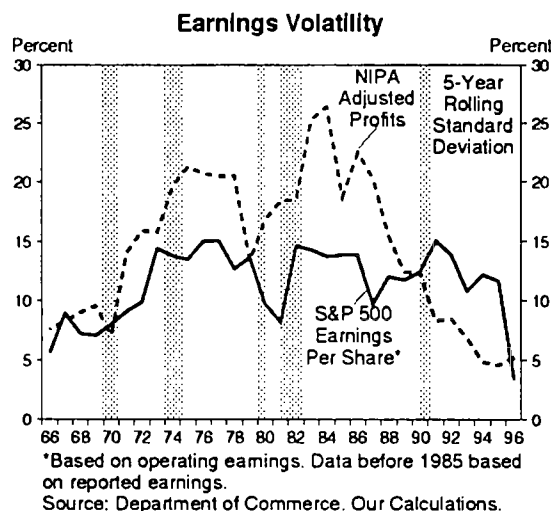
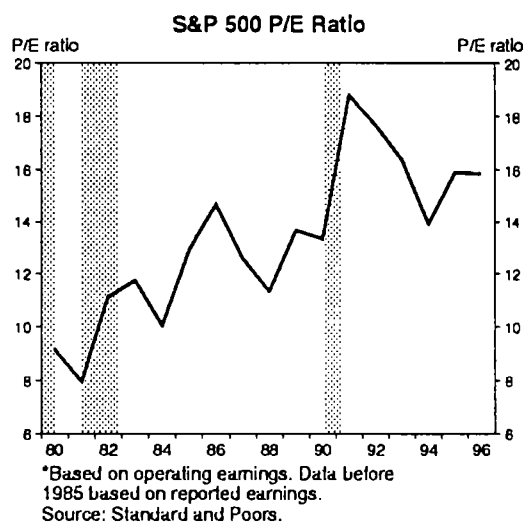
degree (e.g., prices rise when earnings strengthen because the interest payments become more certain), the narrowing of this credit spread is strong evidence that the equity risk premium has been shrinking.

### Is the Shrinkage Justified?

While it appears clear that the equity risk premium has narrowed, this does not answer the more critical question: Is the shrinkage justified or not? If the shrinkage is not sustainable, then equity prices will fall as the equity risk premium rises back to a "normal" level. However, if the shrinkage is justified by long-lasting changes in the nature of the business cycle then the shrinkage may prove persistent. As we shall show below, the reduced volatility of the business cycle has reduced earnings volatility and increased earnings visibility (i.e., the predictability of earnings). Equity prices have been less volatile as a consequence, justifying a narrower equity risk premium and higher equity prices.

Just-in-time inventory management, trade liberalization, more flexible labor and capital markets, and financial market deregulation have all reduced the incidence of recession. The current business expansion is already nearly six years old, with no recession in sight, and, since 1982, the economy has been in recession for only 8 months. Over the past ten years, the economy has been in recession less than 10% of the time, down from more than 20% of the time over the prior forty years.

This development, in turn, has dampened earnings volatility and improved earnings visibility. Investors are more willing to pay for next year's earnings because they have more confidence that such earnings will, in fact, materialize. As shown, earnings



TO: Gene Sperling  
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FROM: Gaia Federiconi  
Goldman, Sachs & Co.

TEL:

RE:



**Investment  
Research**

DATE: Feb 14, 1997

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| BAS  | Bearer A Shares              | EC      | Euro Convertibles             | NVS     | Nonvoting Shares           |
| BS   | Bearer Shares                | ED      | Equity Derivatives            | OS      | Ordinary Shares            |
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| CLA  | Class A Shares               | G       | Genucccochein                 | RS      | Registered Shares          |
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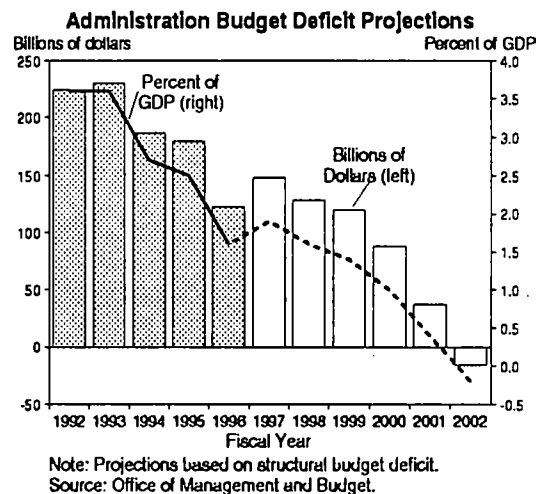
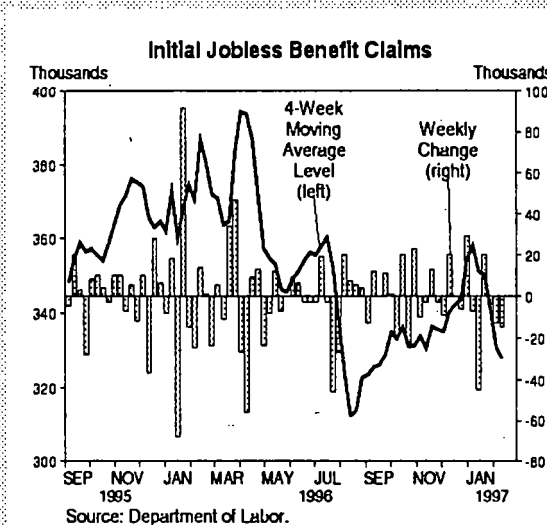
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# U.S. Economics Analyst

## No Meaningful Fiscal Restraint Before the Millennium

- Although the retail sales report was a bit softer than expected, especially when the downward revision to non-auto retail sales was taken into consideration, other indicators suggest that the prospects for further solid gains in consumer spending remain intact.
- Both the Johnson Redbook and Mitsubishi chain store indices firmed this week, initial unemployment claims registered another drop, pushing the 4-week moving average to its lowest level since September, and the uptrend in consumer confidence is continuing.
- The prospects for a balanced budget agreement remain excellent. Republicans apparently plan to use the Clinton plan as a starting point in constructing their own proposal.
- The bad news is that it appears increasingly likely that a deal will not result in any meaningful fiscal restraint until the next millennium. In the Clinton budget plan, the fiscal restraint is extremely backloaded. This suggests that a budget deal will not have near-term implications for the conduct of monetary policy.
- The budget plan also avoids hard choices by adopting more favorable economic assumptions than those used under Congressional Budget Office scoring. This enables balance to be achieved with much less real deficit restraint. Differences in economic forecasts might be finessed through means of a "trigger" mechanism that would cut spending and suspend tax cuts in 2001-2002 if necessary, allowing Republicans to squeeze in bigger tax reductions.



## Trade Recommendations

- Long March T-bond target was reached; we are neutral on bonds at the current price level.
- Stay long the June '97/June '98 Eurodollar future calendar spread, with a stop on a close below 35 basis points and a target of 90 basis points.
- Short position in December 1997 Euro futures was triggered this week. Stay short with a target of 93.50, and a stop on a close above 94.25.

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**Issue No: 97/7  
February 14, 1997**

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## I. Weekly Wrapup

### Economic and Market Overview

U.S. financial markets this week were buoyant. The stock market surged as the Federal Reserve's decision to keep policy on hold at the February 4-5 FOMC meeting enabled investors to stop worrying about interest rates and instead focus on positive earnings surprises. Later in the week the bond market joined in, rallying after the Treasury's quarterly refunding was completed. Meanwhile, the dollar continued to advance, ignoring the G-7 finance ministers' statement that its appreciation had gone far enough.

On the economic front, the news was mixed. For example, in terms of consumer spending, both the Mitsubishi and Johnson Redbook chain store indices showed strength in the latest week. In contrast, retail sales in January were a touch weaker than expected, rising 0.6% overall and 0.4% excluding autos, and the rise in non-auto retail sales originally reported last month for December (+0.6%) was revised away.

Despite the ambiguity concerning household spending, most signs suggest that the economy continues to advance. For the household sector, the favorable confluence of a surging stock market, strong payroll employment gains, and rising confidence remains intact. This can be seen in the 15,000 further decline in initial unemployment claims during the February 8 week, which was sufficient to push the four-week moving average down to 328,000, the lowest since September 1996. Similarly, the weekly ABC/Money Magazine consumer sentiment survey showed an uptick into positive territory (+1) for the first time in more than a decade.

Producer prices for finished goods declined 0.3% in January. Despite this, inflation pressures have probably not subsided, judging by steady 0.1% monthly gains in core intermediate goods prices. The 0.2% decline in manufacturing output in January is unlikely to be meaningful given the vagaries of the weather and the mid-week timing of New Year's Day.

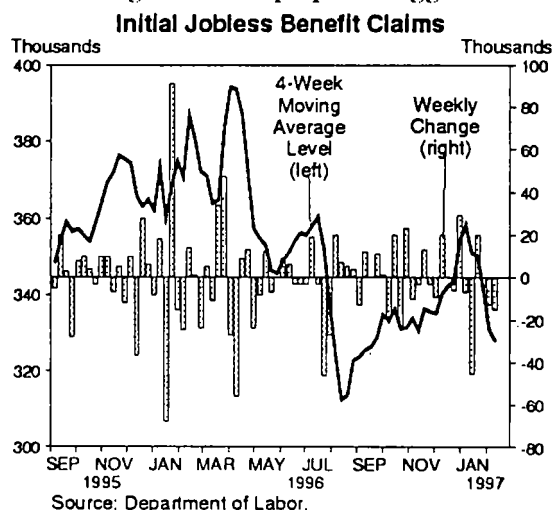
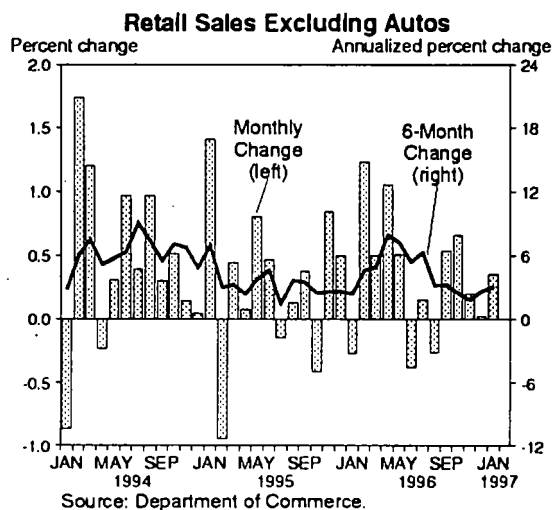
### Federal Reserve Policy

Two press reports during the week suggested that Federal Reserve officials are paying closer attention to the growth rate of the broad monetary aggregates, M2 and M3. Our own view is that Fed officials are unlikely to put much weight on the monetary aggregates one way or the other, because it is still too early to tell if a stable linkage between money growth and nominal GDP growth has been reestablished.

Chairman Greenspan's semiannual Humphrey-Hawkins testimony before the House Banking Committee on February 27 will be the next important crossroads for judgments about his intentions concerning the course of monetary policy. With the consumer sector remaining healthy and the stock market continuing to surge, it appears likely that his testimony will be at least as cautionary as last month's musings when he stressed the need for the Federal Reserve to act preemptively in order to keep inflation in check.

### Fiscal and Political Developments

The apparent willingness of Republican officials to use the Clinton administration budget as a starting point in crafting their own proposal suggests that any





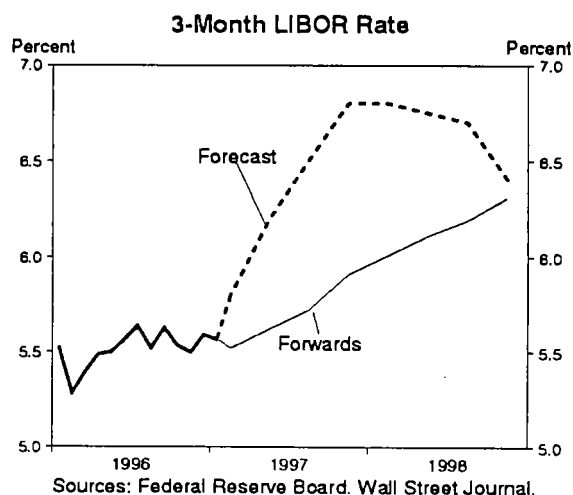
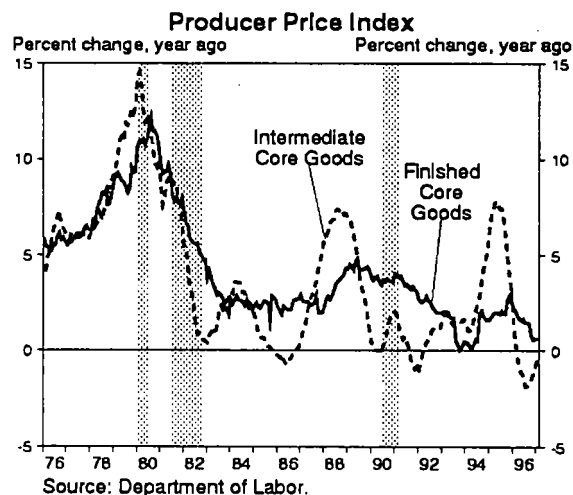
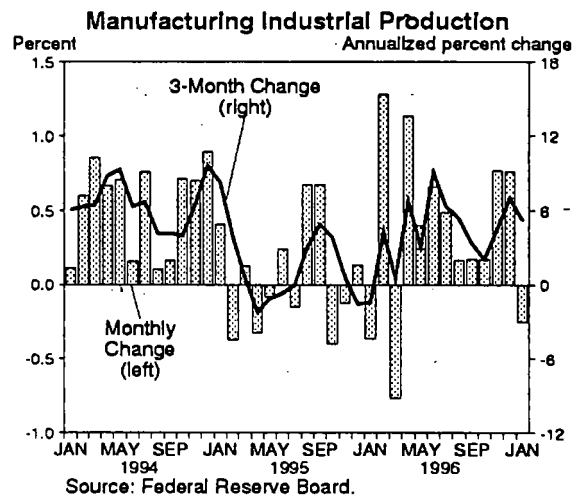
balanced budget agreement will not generate significant fiscal restraint for several years (see center section for a more detailed discussion of the budget outlook). One of the attractions of the Clinton budget plan to legislators is his use of more optimistic economic assumptions than the Congressional Budget Office. This significantly reduces the magnitude of spending cuts needed to achieve balance in 2002. Clinton then squares the circle and gets his budget scored as balancing under the CBO's assumptions by implementing a "trigger" that would cut spending and sunset most tax cut proposals after 2000 if such changes were needed to reach balance. This mechanism may prove attractive to Republicans, who want to squeeze more tax cuts into their plan—especially a reduction in the capital gains rate—without slashing outlays in the next few years.

Momentum for a broad-based capital gains tax cut is growing. For example, this past week the second-ranking Senate Democrat, Wendell Ford of Kentucky, endorsed a sliding-scale capital gains levy, with the rate falling as the holding period lengthened. We expect that President Clinton will accept a broad-based capital gains tax cut as part of a balanced budget deal as long as his own initiatives, such as increased spending on education, are accommodated.

### Market Outlook and Comments on Value

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

Our target of 114.00 for the March T-bond futures was reached. We would adopt a neutral posture for the time being. It is difficult to envision the rally extending to levels reached last Fall, given that the economy remains firm and that rules out any prospect for an easing of monetary policy. Anxieties about what Chairman Greenspan might say in his Humphrey-Hawkins testimony on February 27 should gradually increase, capping any further bond price advance. The January CPI report is also a potential risk for the market. We would remain long the June '97/June '98 Eurodollar calendar spread, with a stop on a close below 35 basis points and a target of 90 basis points to reflect our bearish posture on the outlook for short-term rates. We also would retain the short Dec '97 Eurodollar futures position triggered by this week's rally, with a target of 93.50 and a stop on a close above 94.25.



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## II. No Meaningful Fiscal Restraint Before the Millennium

Prospects for an agreement between President Clinton and Congress this year on a medium-term plan for federal fiscal balance remain very favorable. On February 6th, the White House released budget proposals that project a \$17 billion surplus in fiscal 2002, which would be the first surplus in 33 years. While House and Senate leaders expressed disappointment with a number of specific items or omissions in the president's plan, they appear prepared to use his submission as a starting point for developing a Congressional budget resolution that also provides for balance within five years. Elected officials from both major parties are giving their highest priority to reaching such a deal, and are displaying much greater flexibility on substantive policy issues than was the case in 1995 or 1996.

Despite these hopeful signs for a bipartisan accord, however, this year's budget-writing process is unlikely to alter the currently neutral fiscal impulse on the economy for the next few years, nor should it materially alleviate concerns about the long-term outlook for federal finances. Most of the deficit restraint in the president's budget is delayed until 2000 or later, and the vast majority of those savings would derive from asset sales, projected interest rate declines, or non-guaranteed cuts in areas subject to annual appropriations, rather than from long-term structural changes. Congress is displaying no inclination to press for reforms of entitlement spending programs that go beyond those outlined by the Administration, but instead is pushing for broader tax relief, and might accede to accounting devices for the out-years as a means of reaching that goal. With fiscal policy already shifting from a negative to an essentially neutral influence on domestic business activity, this year's budget debate should not be expected to inhibit the Federal Reserve from using monetary tightening to brake the persistent above-trend pace of real GDP growth.

### President Clinton's Budget: No Further Restraint Before 2000

The president's budget outline for fiscal years 1998-2002 illustrates the degree to which the national politicians' taste for fiscal restraint has faded since early last year. To be sure, the latest Clinton budget does promise balance by fiscal 2002, meeting the target established by the Republican majority in Congress. It does so, however, by employing a number of time-worn accounting tricks, such as

lumping asset sales and other unusual revenues into the final year of the period, and planning the expiration of certain spending programs just prior to the deadline for budget balance. If these highly dubious elements are excluded, and the more conservative set of economic assumptions preferred by the Congressional Budget Office is employed, the White House forecast of a \$17 billion surplus in 2002 turns into a deficit of about \$76 billion, or 0.8% of GDP. That would be little changed from the fiscal 1996 shortfall (1.4% of GDP).

#### A Balanced Budget Mirage in 2002?

|                                    | \$Billions |
|------------------------------------|------------|
| Fiscal 2002 Budget Balance (OMB)   | +\$17.0    |
| Less:                              |            |
| Difference Between OMB and CBO     |            |
| Budget Assumptions                 | 68.0       |
| Audio Spectrum Auction             | 22.1       |
| Strategic Petroleum Reserve Sales  | 1.1        |
| Acceleration of State Unemployment |            |
| Insurance Taxes                    | 1.3        |
| Other Asset Sales                  | 0.7        |
|                                    | -93.3      |
| Adjusted Fiscal 2002 Balance       | -\$76.3    |

Even on its own terms, the Administration's fiscal plan would require essentially no further belt-tightening through the end of this decade. Compared to its estimate of the baseline (or "current services") budget, the Administration would trim the deficit by only \$21.6 billion during fiscal years 1998 and 1999, or 0.1% of GDP. This pales in comparison to the actual 0.7% average annual cut in the structural deficit as a percent of GDP between fiscal years 1993 and 1996.

The composition of proposed budget savings for fiscal years 1997-2002 also reveals a limited willingness to promptly tackle either discretionary outlay excesses or—more importantly—the rapid growth of mandatory spending programs, which is the main source of expected future budget difficulties. Out of \$252.1 billion in estimated aggregate six-year savings versus the baseline deficit, only one-third reflects structural changes to entitlements such as Medicare and Medicaid or swift cuts in discretionary programs (primarily in the defense budget). The balance is comprised of major asset sales, spectrum auction proceeds, estimated debt service reductions, and savings in discretionary outlays that cannot be legislated by this Congress.

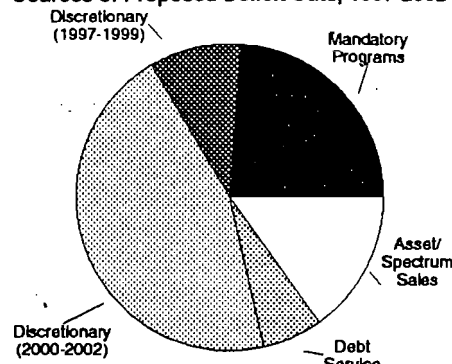


## Congressional Pressure For Cuts Shifts From Entitlements to Taxes

In a stark contrast to the last two years, there is no sign that the Congressional leadership plans to push for a more aggressive attack than the Administration on growth in federal entitlement outlays. After a bruising election campaign in 1996, out of which their House majority was slimmed, Republican lawmakers are showing little support for another strong effort to squeeze these popular but expensive items. Rather than press for reforms that would offer more dramatic savings beyond the millennium, the leadership now seems inclined to largely accept the president's recommendations on Medicare and Medicaid with some relatively minor modifications.

Similarly, the potential for an early, large downward adjustment to annual cost-of-living changes in Social Security benefits and income tax brackets has receded. Studies by the Boskin Commission and the Federal Reserve, which both found that the official consumer price index greatly overstates the actual pace of price increases, have handed politicians a stronger analytical basis for modifying indexation procedures to a degree that would enormously reduce prospective deficits, particularly in the crucial period beyond 2010. Neither the Administration nor

Sources of Proposed Deficit Cuts, 1997-2002



Source: Office of Management and Budget. Our Calculations.

Congress, however, appears willing to make the first move in this direction, for fear of drawing harsh attacks from affected parties and political opponents. Thus, any index rule changes this year will likely be technical in character and minor in size.

Rather than renew pressure for mandatory program reforms, GOP lawmakers this year appear to be emphasizing broad-based tax reductions as an essential component of any budget agreement. This means that, to the extent they can be found, outlay savings beyond those endorsed by President Clinton will likely be used to fund an expansion of tax relief

Proposed Budget Deficit Reduction, By Category  
(Fiscal Years, \$ Billions)

|                               | 1997          | 1998          | 1999           | 2000           | 2001           | 2002            | 1997-2002       |
|-------------------------------|---------------|---------------|----------------|----------------|----------------|-----------------|-----------------|
| Baseline Deficit*             | -\$127.7      | -\$119.5      | -\$140.1       | -\$127.6       | -\$108.5       | -\$100.8        |                 |
| Clinton Budget*               | -125.6        | -120.6        | -117.4         | -87.1          | -36.1          | +17.0           |                 |
| Change in Deficit             | <u>-\$2.1</u> | <u>+\$1.1</u> | <u>-\$22.7</u> | <u>-\$40.5</u> | <u>-\$72.3</u> | <u>-\$117.7</u> | <u>-\$252.1</u> |
| Sources of Deficit Reduction: |               |               |                |                |                |                 |                 |
| Spending Cuts:                |               |               |                |                |                |                 |                 |
| Discretionary:                |               |               |                |                |                |                 |                 |
| Defense                       | -0.7          | -5.3          | -14.6          | -14.4          | -21.9          | -23.2           | -79.5           |
| Non Defense                   | 0.0           | -0.6          | -3.3           | -8.3           | -18.8          | -27.0           | -58.0           |
| Mandatory:                    |               |               |                |                |                |                 |                 |
| Medicare                      | 0.0           | -4.3          | -11.4          | -22.2          | -27.8          | -34.6           | -100.2          |
| Medicaid                      | 0.0           | 1.4           | 0.4            | -1.4           | -3.9           | -5.8            | -9.3            |
| Other Mandatory               | 0.2           | 5.1           | 7.2            | 8.0            | 5.4            | 0.5             | 26.2            |
| Tax Changes                   | -1.6          | 7.0           | 1.4            | 3.7            | 5.5            | 4.9             | 22.4            |
| Asset Sales                   | 0.0           | 0.0           | 0.0            | 0.0            | 0.0            | -1.9            | -1.9            |
| Spectrum Sales                | 0.0           | -2.1          | -1.8           | -3.8           | -6.3           | -22.1           | -36.1           |
| Debt Service                  | -0.1          | -0.1          | -0.7           | -2.1           | -4.5           | -8.5            | -15.9           |
|                               | <u>-\$2.1</u> | <u>+\$1.1</u> | <u>-\$22.7</u> | <u>-\$40.5</u> | <u>-\$72.3</u> | <u>-\$117.7</u> | <u>-\$252.1</u> |

\* Based on Clinton administration economic forecasts.

Source: Office of Management and Budget.



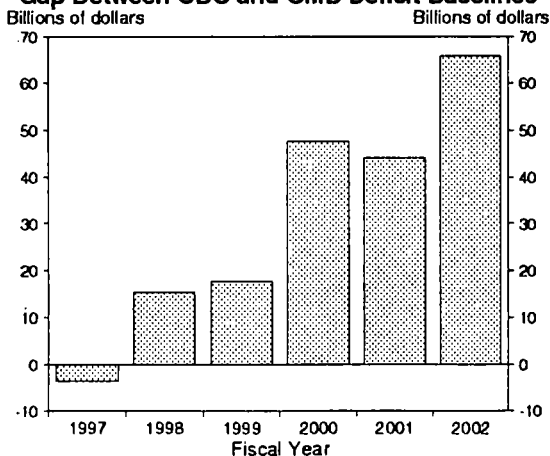
well beyond the \$22.4 billion, five-year net amount backed by the Administration. Taxation differences probably represent the biggest remaining hurdle to a budget accord, although in the end it should not prove insurmountable given strong desires on both sides for a deal.

In fact, to achieve a budget compromise that includes the bigger tax cuts they seek, the Republicans might accept a modified version of the president's proposal for a "trigger" mechanism that would cancel tax abatements and make across-the-board spending reductions in fiscal years 2001-2002 in the event that proves necessary to produce actual budgetary balance in the final year. A device of this kind would enable lawmakers to use the Administration's economic assumptions, which suppress the baseline deficit forecasts for 2001-2002 by a combined \$108 billion. Thus, it would permit the budget to be balanced on paper without much tough fiscal medicine.

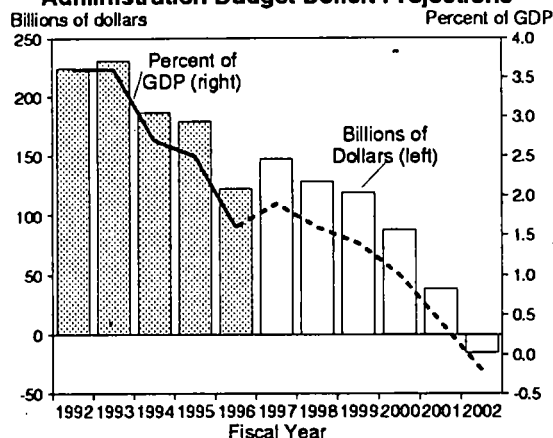
### Budget Should Carry Little Weight in Fed Policy Decisions

From 1993 through early 1996, senior U.S. central bankers needed to pay close attention to the federal budget-writing process as they evaluated the appropriateness of monetary policy changes in response to domestic economic and financial developments. Arguably, the Fed's decision to leave interest rates steady at strikingly low levels throughout 1993 despite signs of growing strains on resource supplies owed much to the large-scale deficit reduction effort undertaken by President Clinton in his first budget. Steps to ease credit in 1995 and early 1996, similarly, no doubt were encouraged by the drive for fresh spending cuts that dominated the last Congress.

#### Gap Between CBO and OMB Deficit Baselines



#### Administration Budget Deficit Projections



Note: Projections based on structural budget deficit.  
Source: Office of Management and Budget.

Those conditions no longer appear to be present. The deficit as a percent of GDP, both in actual and structural terms, has leveled off or edged up slightly, and it likely will not move down again to any notable degree until at least fiscal 2000. In the near run, there is a very high probability that any budget agreement will include tax abatements weighted toward middle-income households, which could lend support to personal consumption at a time when inventories are at historic lows and labor supplies are exceptionally tight.

For these reasons, we would expect the Fed to give the budget little or no weight this year in their monetary policy deliberations. Financial market participants, consequently, should not expect that the outcome of the budget process will have a perceptible impact on the trajectory of short-term rates in 1997.

John Youngdahl



## Key U.S. Economic Data

|                                            | Latest Monthly Data |         |         |         | 6 Mo  | 12 Mo | Next    |
|--------------------------------------------|---------------------|---------|---------|---------|-------|-------|---------|
|                                            | '97 Jan             | '96 Dec | '96 Nov | '96 Oct | Trend | Trend | Release |
| Nonfarm Payrolls (ch. Thousands)           | 271                 | 261     | 181     | 261     | 209   | 246   | Mar 7   |
| Unemployment Rate (%)                      | 5.4                 | 5.3     | 5.3     | 5.2     | 5.3   | 5.4   |         |
| Index of Hours Worked (% ch)               | -1.7                | 0.8     | 0.8     | -0.7    | 1.3   | 4.0   |         |
| Average Hourly Earnings (% ch)             | 0.1                 | 0.5     | 0.8     | -0.1    | 4.3   | 3.8   |         |
| Producer price finished goods index (% ch) | -0.3                | 0.6     | 0.2     | 0.2     | 2.8   | 2.5   | Mar 14  |
| Excluding food and energy                  | 0.0                 | 0.1     | 0.1     | -0.2    | 0.4   | 0.6   |         |
| Consumer price index (% ch)                | --                  | 0.3     | 0.3     | 0.3     | 3.0   | 3.2   | Feb 19  |
| Excluding food and energy (% ch)           | --                  | 0.2     | 0.2     | 0.2     | 2.6   | 2.7   |         |
| Retail sales (% ch)                        | 0.6                 | 0.3     | -0.1    | 0.7     | 4.3   | 4.9   | Mar 13  |
| Excluding motor vehicles (% ch)            | 0.4                 | 0.0     | 0.2     | 0.7     | 3.0   | 4.6   |         |
| Industrial Production (% ch)               | 0.0                 | 0.5     | 0.8     | 0.2     | 3.9   | 4.8   | Mar 14  |
| Manufacturing                              | -0.3                | 0.8     | 0.8     | 0.2     | 3.6   | 5.1   |         |
| Capacity utilization (%)                   | 83.3                | 83.5    | 83.4    | 83.0    | 83.3  | 83.2  | Mar 14  |
| Manufacturing                              | 82.2                | 82.7    | 82.4    | 82.0    | 82.3  | 82.2  |         |
| Housing Starts (annual rate, thousands)    | --                  | 1329    | 1514    | 1385    | 1449  | 1465  | Feb 20  |
| Single-family                              | --                  | 1024    | 1161    | 1088    | 1133  | 1155  |         |
| Trade balance (billions, monthly)          | --                  | --      | -8.4    | -8.0    | -9.7  | -9.1  | Feb 19  |
| Merchandise                                | --                  | --      | -14.7   | -14.1   | -15.8 | -15.2 |         |
| Factory Orders (% ch)                      | --                  | -1.3    | -0.5    | 1.1     | 2.4   | 13.2  | Mar 6   |
| Durable Goods                              | --                  | -1.9    | -1.7    | 0.6     | -1.6  | 0.6   | Feb 27  |
| Personal Income (% ch)                     | --                  | 0.8     | 0.6     | 0.1     | 5.6   | 5.9   | Mar 3   |
| Wages and Salaries                         | --                  | 1.2     | 0.8     | -0.1    | 6.3   | 6.9   |         |
| Purchasing Managers' Index (%)             | 52.0                | 53.8    | 52.4    | 50.4    | 52.0  | 50.7  | Mar 3   |
| Consumer Sentiment U Mich (Feb 66=100)     | 97.4                | 96.9    | 99.2    | 96.5    | 96.7  | 94.3  | Feb 28  |
| Conference Board (1985=100)                | 116.8               | 114.2   | 109.5   | 107.3   | 111.9 | 107.0 | Feb 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 consumer price index for January is likely to be a bit firmer than in recent months. Not only might higher energy prices push up the overall index, but also there have been some chronic seasonal adjustment problems with the CPI that increase the chances for a bad reading early in the year (Feb. 19).
- The trade deficit for December is apt to widen sharply, due to a combination of strong imports (particularly in the petroleum group) and flat exports (Feb. 19).
- A rebound in housing starts in January from the depressed December reading is likely, but should be dampened by weakness in the West, where severe flooding presumably constrained building activities (Feb. 20).

### Economic Releases and Other Events

| Date       | Time  | Indicator                     | Estimate    |             | Last Report |
|------------|-------|-------------------------------|-------------|-------------|-------------|
|            |       |                               | GS          | Consensus   |             |
| Wed Feb 19 | 8:30  | Consumer Price Index (Jan)    | +0.3%       | +0.3%       | +0.3%       |
|            |       | Excluding Food & Energy       | +0.3%       | +0.1%       | +0.1%       |
|            | 8:30  | Trade Balance (Dec)           | -\$10.7 bil | -\$10.0 bil | -\$8.4 bil  |
| Thu Feb 20 | 8:30  | Housing Starts (Jan)          | +3.5%       | +6.8%       | -12.2%      |
|            | 10:00 | Philadelphia Fed Survey (Feb) | +9.0%       | n.a.        | +11.3%      |

- Homebuilders' Survey (Tue, Feb 18)
- Kansas City Fed Survey (Wed, Feb 19 - 11:00)

- Treasury Announces 2- and 5-Year Notes (Wed, Feb 19 - 2:30)
- Treasury Announces 1-Year Bill (Fri, Feb 21 - 2:30)

### Interest Rates: Forecast vs. Forward Yields:

|              | 3 mo | 6 mo | 12 mo |
|--------------|------|------|-------|
| LIBOR 3 mo   | 5.8% | 6.2% | 6.8%  |
| Forward      | 5.6  | 5.7  | 6.0   |
| 2 Yr T-Note  | 6.2  | 6.5  | 7.0   |
| Forward      | 5.9  | 6.1  | 6.2   |
| 10 Yr T-Note | 6.7  | 7.0  | 7.2   |
| Forward      | 6.4  | 6.4  | 6.5   |

### Key Numbers in the Business Outlook

|                     | 1996  |      |      | 1997  |       |
|---------------------|-------|------|------|-------|-------|
|                     | Q4    | Q1E  | Q2E  | 1996  | 1997E |
| Real GDP            | 4.7%  | 1.8% | 3.4% | 2.5%  | 2.9%  |
| Ind. Prod., Mfg.    | 3.7   | 3.6  | 4.4  | 2.7   | 4.2   |
| CPI                 | 3.2   | 3.5  | 2.8  | 2.9   | 3.2   |
| After-Tax Profits** | 10.9E | 6.7  | 7.3  | 15.1E | 4.9   |
| Unemployment        | 5.3   | 5.3  | 5.1  | 5.4   | 5.1   |

\*\* Excluding inventory profits; adjusted for depreciation distortions.

TO: Gene Sperling  
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DATE: Feb 7, 1997

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| BAS  | Bearer A Shares              | EC      | Euro Convertibles             | NVS     | Nonvoting Shares           |
| BS   | Bearer Shares                | ED      | Equity Derivatives            | OS      | Ordinary Shares            |
| CD   | Convertible Debentures       | ES      | Equity Securities             | PC      | Participating Certificates |
| CPF  | Convertible Preferreds       | FR RS   | Foreign Registered Shares     | RBS     | Registered Bearer Shares   |
| CLA  | Class A Shares               | G       | Genucochein                   | RS      | Registered Shares          |
| CLB  | Class B Shares               | Gds     | Global Depositary Recpts/Shrs | ZC      | Zero Coupon Convertibles   |
| CS   | Common Stock                 | New CLA | New Class A Special Shares    |         |                            |

CPF(RTRSY) Newco Corp. convertible preferred convertible into Reuters ordinary shares

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EC(ENT) Elf Aquitaine Euro convertibles convertible into Enterprise Corp. ordinary shares

EC(MMM) D&K Euro convertibles convertible into Minnesota Mining & Mfg common stock

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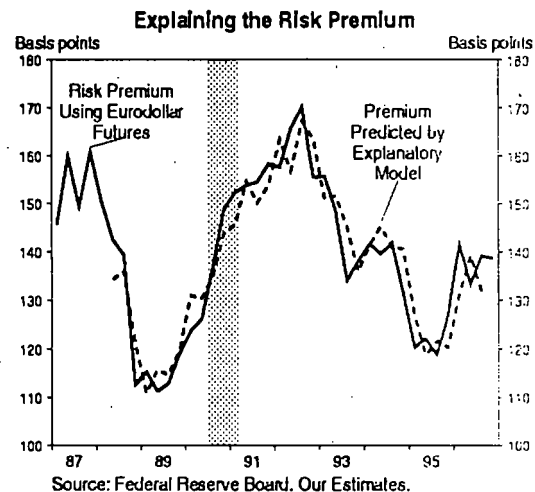
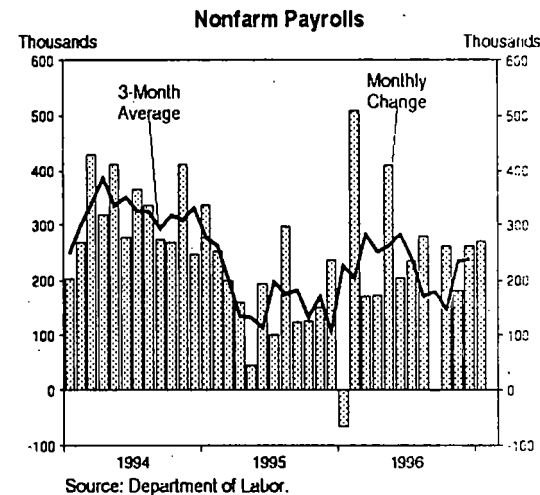
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# U.S. Economics Analyst

## The Bond Risk Premium and the Brave New Business Cycle

- First-quarter real GDP growth is likely to slow sharply to around 1.8% annualized (down from our earlier estimate of 2.4%) due to a sharp reversal in trade. This slowdown is wholly statistical noise rather than real, unlike the slowdown last summer. Underlying demand trends remain firm, as confidence, income, and employment trends continue to support spending.
- The decline in aggregate hours worked of 1.7% in January and the 0.1% rise in average hourly earnings do not foreshadow economic weakness. The drop in hours reflects a temporary collapse in the workweek, and the softness in earnings follows big gains in the prior two months.
- Although the current yield spread between 10-year Treasury notes and 3-month T-bills is slightly higher than its long-run average over the past forty years, it does not currently appear to be too high. The risk premium embodied in that spread can vary over time, due to changes in inflation volatility, interest rate volatility, the budget deficit, and the spread between U.S. and foreign interest rates. In light of these factors and expectations about the probability of tightening, the current reading is about right.
- In the future, the bond risk premium is likely to come down a bit, due to lower inflation volatility and a falling government deficit—both consequences of the brave new business cycle. It is unlikely, however, that the bond risk premium or the yield curve spread will return to the low readings of the 1950s and 1960s, since changes in the nature of the business cycle imply higher real interest rate volatility.



### Trade Recommendations

- Stay long March '97 T-bond futures, maintaining target of 114.00 and setting a stop on a close below 111.24.
- Go long June '97/June '98 Eurodollar calendar spread at 50 basis points or lower, with target of 90 basis points and a stop on a close below 35 basis points.
- Go short Dec '97 Euro future at or above 94.15, with target of 93.50, and a stop on a close above 94.25.

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**Issue No: 97/6**  
**February 7, 1997**

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## I. Weekly Wrapup

### Economic and Market Overview

U.S. bond prices rallied as most components of the payroll and household employment reports were softer than anticipated. To market participants, this confirmed the wisdom of the FOMC's decision to keep monetary policy unchanged.

Although the payroll gain in January of 271,000 was firmer than the consensus view, the guts of the report were weak, with the workweek collapsing to its lowest level in a year and that pulling down the index of aggregate hours worked by 1.7%. In addition, average hourly earnings managed only a 0.1% advance, and the civilian unemployment rate ticked up to 5.4%. The weakness in hours worked and earnings, however, is suspect. Hours worked are likely to rebound in February, along with the workweek (assuming normal weather), and average hourly earnings were no surprise given big rises in the prior two months. Thus, the employment reports do not change the picture of an economy that is still marching forward with considerable momentum.

The latest indicators of household income and spending have been surprisingly strong. Total personal income climbed 0.8% in December, largely fueled by a 1.2% jump in wage and salary earnings. Total real income is rising at roughly 3½% annualized, somewhat faster than a year ago. Personal consumption, meanwhile, moved up 0.3% in real terms, showing no slowdown from the fourth-quarter average pace. Personal demands for big-ticket items were especially buoyant around the turn of the year. New single-family home sales edged

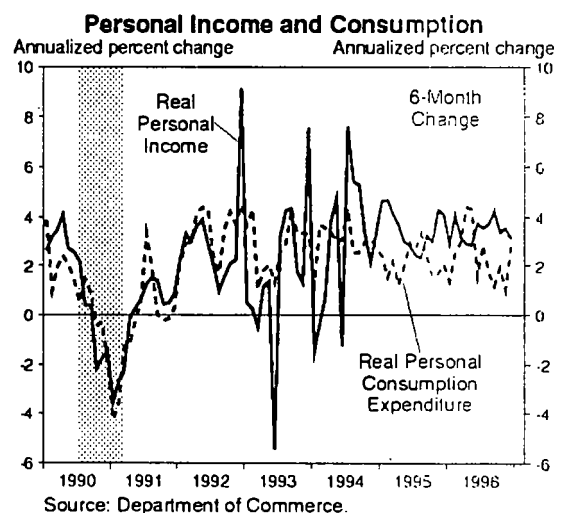
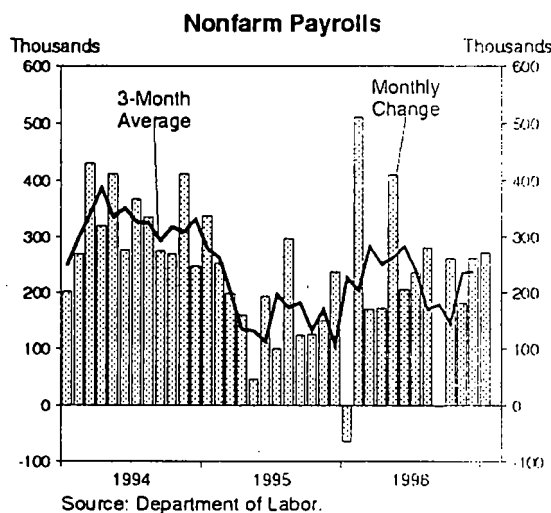
down only 1.0% in December to 783,000 annual units, further shrinking the supply of unsold new dwellings, which is now about 15% below normal relative to sales. In the motor vehicle industry, domestic producers had sales in January totaling 13.6 million annualized, matching their best performance since last February.

In contrast to the solid trends in domestic spending, U.S. factory statistics lately have softened. Purchasing managers reported a decline in their composite index to 52.0% in January, and factory orders fell 1.3%, including a 0.7% decline for nondurable products. It is doubtful, however, that this signals an incipient retrenchment in manufacturing production. Low factory inventories (-0.3% in December) and a renewed decline in weekly unemployment claims (four-week average down to 331,000, the lowest since November) suggest that the goods-producing sector will rebound.

### Federal Reserve Policy

The FOMC's decision to keep monetary policy unchanged extends to over a year the period of stability in the federal funds rate. In the past quarter century, only once—during the period between late 1992 and early 1994—have U.S. central bankers gone longer without changing their stance.

Judging from the tone of the December 17 FOMC meeting minutes, the potential for a tightening within the next few months remains high. At that time, officials were inclined to think that prices were more likely to accelerate than slow down. In addition,





policy makers clearly expressed concerns for the first time about the potential for strength in equity markets to generate unexpectedly brisk consumer outlays, given the sharp and sustained rise in household wealth since late 1994. While Fed leaders concluded seven weeks ago that "anticipatory tightening was not yet called for," it seems clear that their patience with above-trend economic expansion and progressive reductions in the free labor supply was beginning to wear thin.

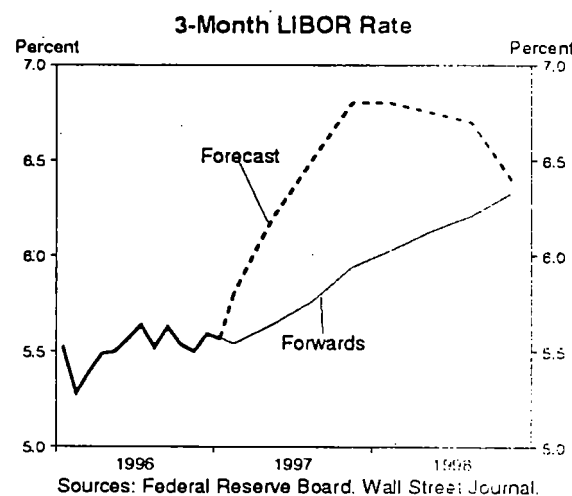
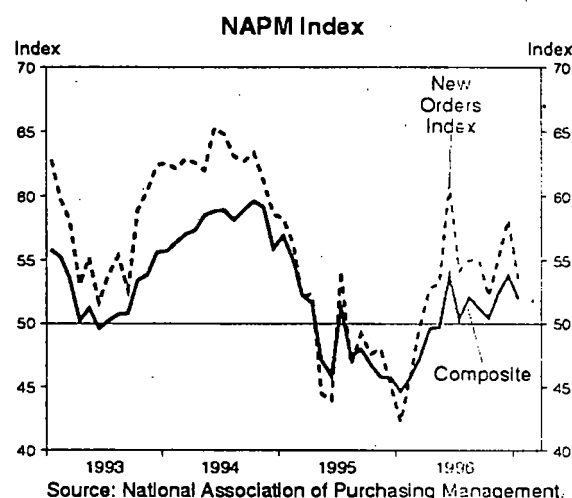
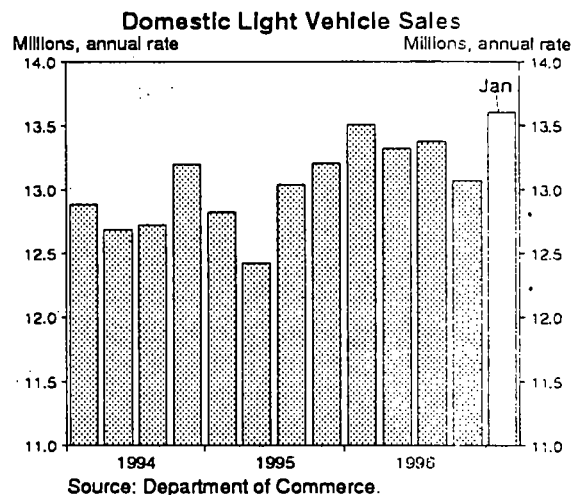
### Fiscal and Political Developments

Official Clinton administration budget proposals confirmed suspicions that the taste for aggressive budget restraint has faded. Fully 84% of the total projected deficit reduction falls in fiscal years 2001-2002, while in the next two years the shortfall would grow a bit as taxes were cut and education spending padded. Just as predictable was the response of Republican leaders, who criticized these elements of the plan as well as the administration's adoption of more optimistic economic assumptions than those put forward by congressional budget estimators last month. House and Senate committees with jurisdiction over budgetary issues will now hold hearings on the Clinton blueprint, which could last for several weeks. This will give top lawmakers an opportunity to highlight their areas of disagreement with the president, and it will delay until spring any concrete legislative steps toward bridging those gaps.

### Market Outlook and Comments on Value

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

We would stay long March '97 T-bond futures for another week, maintaining our target of 114.00 and establishing a stop on a close below 111.24. However, given the sharp flattening of the yield curve in the short end of the market—a washing out of expectations concerning future Fed tightening, we would look to establish long June '97/June '98 Eurodollar calendar spread trades at or below 50 basis points (currently 48 basis points), with a stop on a close below 35 basis points and a target of 90 basis points. Given the sharp rally in Dec '97 Eurodollar futures, we would also begin to look for opportunities to get short, suggesting establishing shorts at prices at or above 94.15 (currently 94.08), with a target of 93.50 and a stop on a close above 94.25. The FOMC minutes indicate that Fed tightening remains likely, but that outcome is no longer priced into the Eurodollar futures market.





## II. The Bond Risk Premium and the Brave New Business Cycle

The business cycle has changed in significant ways in recent years—dampening inflation pressures and extending the duration of expansions.<sup>1</sup> This leads to an important question: Do these changes also have long-term implications for bond and stock market valuation? Specifically, should the brave new business cycle result in higher or lower risk premiums on U.S. Treasury bonds and U.S. equities?

In this weekly, we analyze the implications for the bond market.<sup>2</sup> We conclude that there are some reasons for the brave new business cycle to cause bond risk premiums to shrink somewhat over time—helped by lower inflation volatility and the fiscal dividend generated by an extended business expansion. We also find that the risk premium embodied in the current yield curve appears to be about the right size.

### Measuring the Bond Risk Premium

The bond risk premium measures the expected incremental return from holding a Treasury bond until maturity compared to the return obtained from rolling a series of Treasury bills over the same time frame. It is the compensation to bond holders for: 1) the higher price volatility of longer-dated instruments stemming from changes in real interest rates and inflation expectations, and 2) the potential opportunity costs versus investing in short-term instruments should real interest rates and/or inflation expectations trend secularly higher over time.

Unfortunately, the bond risk premium is not directly observable. That is because the risk premium on bonds is relative to the expected return on a series of future short-term obligations, not the current level of short-term rates. If current short-term interest rates are lower or higher than what investors expect in the future, then the yield curve will also tend to be steeper or flatter than the bond risk premium embodied in it.

Over the long-run, a good proxy for this premium is the average yield curve spread between Treasury bonds and Treasury bills. That is because errors between anticipated and actual short-term rates presumably cancel out over time. To assume

otherwise would imply that investors make chronic errors in their expectations of future short-term rates over time. Thus, the average shape of the yield curve probably provides a reasonable approximation of the long-term risk premium.

On this basis, the average yield curve spread between 10-year T-notes and 3-month T-bills (bond equivalent basis) has averaged 121 basis points over the 1957-1996 period. This is not much different from the average yield spread of 134 basis points in 1996.

However, the yield curve spread over the long run, which generates an estimate of the historical bond risk premium, tells us little about the appropriateness of the current yield curve spread. After all, factors that affect the risk premium may have changed as the economy has evolved, potentially lowering or raising the bond risk premium over time. To see if this is the case, we must undertake two steps. First, we need to estimate the size of the current bond risk premium. Second, we need to compare that figure to the risk premium that we estimate should result given changes in those factors that have influenced its size over time. These include changes in the size of the budget deficit, interest rate differentials between the U.S. and abroad, and the volatility of real interest rates and inflation.

To measure the bond risk premium, we first need to estimate how the yield curve shape depends upon expectations about future short-term rates. That portion of the yield curve slope unexplained by such expectations gives us an estimate of the bond risk premium.

We try two different methods in making this adjustment. First, we assume that expectations about future short-term rates are formed in an adaptive way. Investors look at the recent level of short-term rates to determine their expectations about the future. Under

10-Year Notes versus 3-Month Bills\*

| Period    | Average Spread<br>(basis points) |
|-----------|----------------------------------|
| 1957-1982 | 77                               |
| 1983-1996 | 204                              |
| 1957-1996 | 121                              |
| 1996      | 134                              |

\* T-bill yields on a bond equivalent basis.

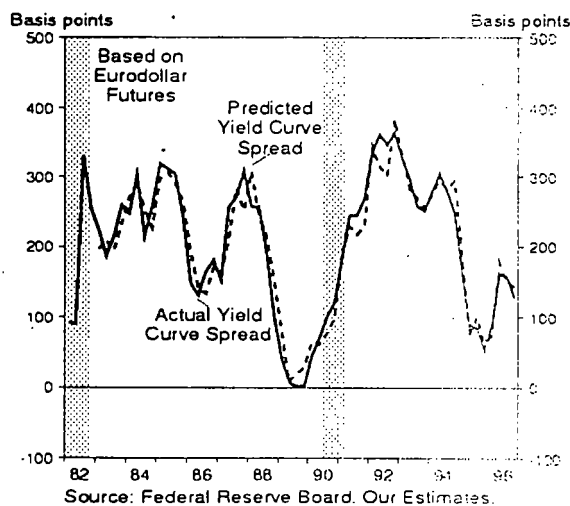
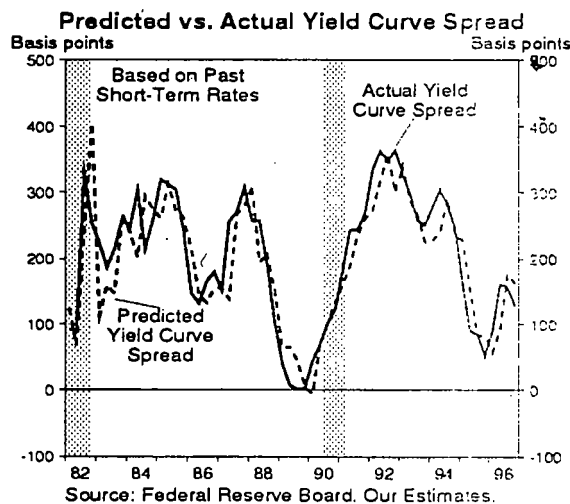
<sup>1</sup> See *The Brave New Business Cycle: No Recession in Sight*, January 1997 for details.

<sup>2</sup> Our evaluation of the implications of changes in the business cycle on the equity risk premium will follow in two weeks.



this method, we find that the most recent three years of short-term interest rates explain most of the fluctuations in the yield curve shape, suggesting that expectations are formed in that way. Second, we assume that expectations about future short-term rates are embodied directly in Eurodollar futures prices. We find that this method actually has a somewhat greater power in explaining the shape of the yield curve. Its chief disadvantage is that the time series of Eurodollar futures data does not go back nearly as far in time as the historical short-term rate data.

As shown below, both methods appear to do a good job in predicting the shape of the yield curve. Under the first method, the predicted yield curve spread between 10-year Treasury notes and 3-month T-bill yields (bond equivalent basis) is currently about 162 basis points, under the second method about 143 basis points. Both are not much different than the current 117 basis point yield curve spread.



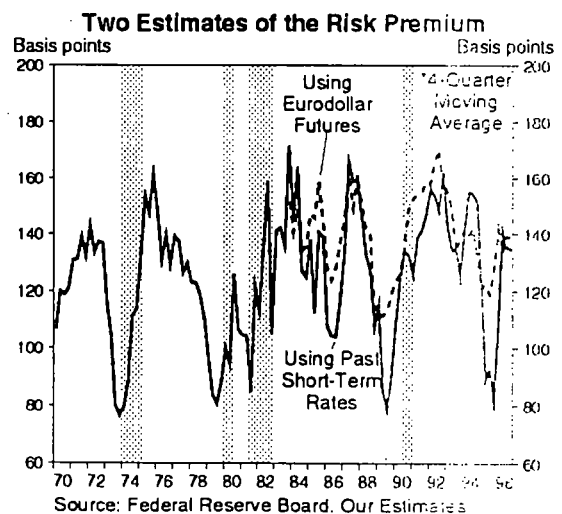
After adjusting for expectations about short-term rates, we obtain estimates for the bond risk premium. As can be seen below, although our estimates of the bond risk premium fluctuate over time—sometimes sharply—there is no clear trend suggesting that the bond risk premium has fallen or increased on a secular basis. Instead, there is an obvious cyclical component, which suggests that there are factors that influence the size of the risk premium at any point in time.

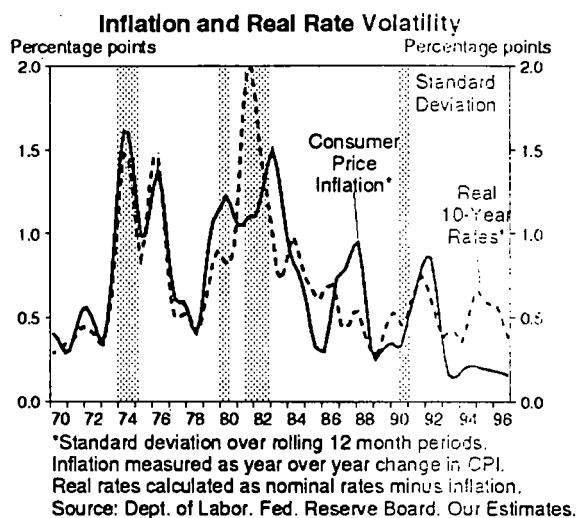
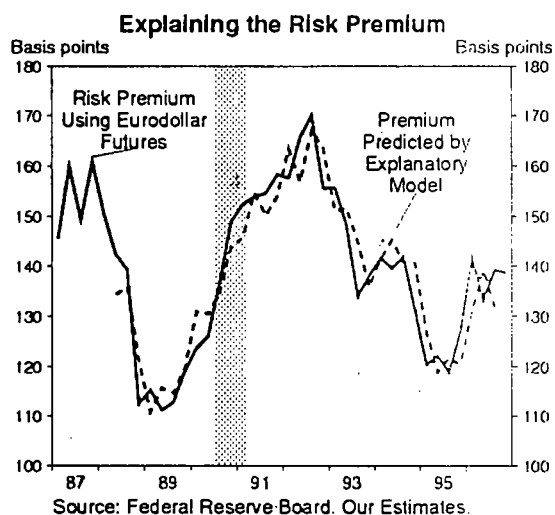
### What Influences the Bond Risk Premium

Given these two estimates of the bond risk premium, the next step is to identify those factors that influence its size. Once we have these factors in hand, we can assess whether the current bond risk premium is too high, too low, or about right. We can also then evaluate whether the brave new business cycle—by changing these critical factors—implies changes in the size of the bond risk premium over time.

We find that four factors explain much of the variation in the risk premium: changes in the budget deficit, the size of the 10-year note interest rate differential between the U.S. and Japan, the level of implied price volatility on the rolling 10-year Treasury note future, and the absolute level of short-term interest rates. These factors work distinctly better in explaining the risk premium estimates developed from Eurodollar futures prices than from historical short-term interest rates.

The rationale for why these factors matter is generally straightforward: A narrowing budget deficit reduces the supply of Treasuries and causes investors to become less nervous that debt pressures will force the central bank to reflate; the size of the interest rate





differential between the U.S. and abroad influences the appetite of foreign investors for Treasury notes; higher implied volatility implies greater uncertainty about the path of real interest rates and inflation, which together determine the level of nominal interest rates over time.<sup>1</sup>

Taking these factors into consideration, the current shape of the bond yield curve appears about right. The current risk premium embodied in the bond yield curve is slightly lower than the 1983-1996 average because the budget deficit has been declining, interest rate differentials between the U.S. and Japan are unusually wide, and the implied price volatility on the 10-year Treasury note future is slightly lower than its average level over the period.

Looking forward, there are some reasons to expect that the bond risk premium could decline modestly over time. In particular, the deficit is likely to shrink further given our expectation that the Clinton administration and Congress will reach a balanced budget agreement this year. In addition, changes in the nature of the business cycle suggest that inflation volatility—a major component that affects implied price volatility—is likely to remain low and could even fall further over time. Aspects of the brave new business cycle, such as global competition and more flexible labor and capital markets, should keep inflation in check over time.

At the same time, it appears unlikely that the risk premium will get back to the very low levels reached during the 1950s and 1960s, when the average yield curve spread between 10-year Treasury notes and 3-month Treasury bills was less than 80 basis points. Most importantly, there are limits to how far implied price volatility can decline when one component of such volatility—the volatility of real interest rates—is likely to remain relatively high. Real interest rate volatility should be held up by the fact that the economy has become less interest rate sensitive due to the elimination of interest rate ceilings on deposits and the development of mortgage securitization. In addition, the fact that Federal Reserve officials now appear to be more willing to tighten monetary policy before inflation pressures manifest themselves also implies greater fluctuations in real interest rates.

On balance, the dampening of inflation pressures is likely to be a more significant factor on the bond risk premium than any increase in real rate volatility. Splitting the sources of price volatility into real interest rate and inflation components shows that inflation volatility is the more powerful influence. This presumably occurs because inflation, unlike real interest rates, can move to a permanently higher or lower level generating long-term losses and gains for bond investors. In contrast, the losses and gains from movements in real rates will not generally be long-lasting because real interest rates tend to be strongly mean-reverting. For example, if real rates are high, the economy slows, leading to lower real rates. Thus, changes in the nature of the business cycle should tend to shrink the bond risk premium a bit further over time.

<sup>1</sup> Why the level of short-term interest rates matters in explaining the risk premium is more difficult to explain. Perhaps it captures an idea of the degree of deviation from a "normal" level of short-term rates, above and beyond that captured by expectations embodied in Eurodollar futures.

Bill Dudley, Jill Jacobs



## Key U.S. Economic Data

|                                            | Latest Monthly Data |         |         |         | 6 Mo  | 12 Mo | Next    |
|--------------------------------------------|---------------------|---------|---------|---------|-------|-------|---------|
|                                            | '97 Jan             | '96 Dec | '96 Nov | '96 Oct | Trend | Trend | Release |
| Nonfarm Payrolls (ch. Thousands)           | 271                 | 261     | 181     | 261     | 209   | 245   | Mar 7   |
| Unemployment Rate (%)                      | 5.4                 | 5.3     | 5.3     | 5.2     | 5.3   | 5.4   |         |
| Index of Hours Worked (% ch)               | -1.7                | 0.8     | 0.8     | -0.7    | 1.3   | 4.0   |         |
| Average Hourly Earnings (% ch)             | 0.1                 | 0.5     | 0.8     | -0.1    | 4.3   | 3.8   |         |
| Producer price finished goods index (% ch) | --                  | 0.5     | 0.4     | 0.4     | 3.5   | 2.9   | Feb 14  |
| Excluding food and energy                  | --                  | 0.1     | 0.1     | -0.3    | 0.6   | 0.6   |         |
| Consumer price index (% ch)                | --                  | 0.3     | 0.3     | 0.3     | 3.0   | 3.2   | Feb 19  |
| Excluding food and energy (% ch)           | --                  | 0.1     | 0.2     | 0.2     | 2.4   | 2.6   |         |
| Retail sales (% ch)                        | --                  | 0.6     | -0.2    | 0.7     | 3.8   | 4.5   | Feb 13  |
| Excluding motor vehicles (% ch)            | --                  | 0.6     | 0.0     | 0.7     | 3.3   | 4.4   |         |
| Industrial Production (% ch)               | --                  | 0.7     | 0.8     | 0.0     | 3.8   | 4.3   | Feb 14  |
| Manufacturing                              | --                  | 1.0     | 0.6     | 0.0     | 5.0   | 4.9   |         |
| Capacity utilization (%)                   | --                  | 83.5    | 83.2    | 82.8    | 83.2  | 83.1  | Feb 14  |
| Manufacturing                              | --                  | 82.6    | 82.1    | 81.8    | 82.2  | 82.1  |         |
| Housing Starts (annual rate, thousands)    | --                  | 1329    | 1514    | 1385    | 1449  | 1465  | Feb 20  |
| Single-family                              | --                  | 1024    | 1161    | 1088    | 1133  | 1155  |         |
| Trade balance (billions, monthly)          | --                  | --      | -8.4    | -8.0    | -9.7  | -9.1  | Feb 19  |
| Merchandise                                | --                  | --      | -14.7   | -14.1   | -15.8 | -15.2 |         |
| Factory Orders (% ch)                      | --                  | -1.3    | -0.5    | 1.1     | 2.4   | 13.2  | Mar 6   |
| Durable Goods                              | --                  | -1.9    | -1.7    | 0.6     | -1.6  | 0.6   | Feb 27  |
| Personal Income (% ch)                     | --                  | 0.8     | 0.6     | 0.1     | 5.6   | 5.9   | Mar 3   |
| Wages and Salaries                         | --                  | 1.2     | 0.8     | -0.1    | 6.3   | 6.9   |         |
| Purchasing Managers' Index (%)             | 52.0                | 53.8    | 52.4    | 50.4    | 52.0  | 50.7  | Mar 3   |
| Consumer Sentiment U Mich (Feb 66=100)     | 97.3                | 96.9    | 99.2    | 96.5    | 96.7  | 94.2  | Feb 28  |
| Conference Board (1985=100)                | 116.8               | 114.2   | 109.5   | 107.3   | 111.9 | 107.0 | Feb 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

- Retail sales for January are apt to be firm, given the relatively strong comparable store sales results reported for major retail chains and the likelihood that at least some of the jump in unit vehicle sales will be reflected in the auto sales component (February 13).
- Overall producer prices were likely boosted again in January by the continued pass-through of higher oil prices. Increases in the core PPI will be more muted, in line with the somewhat benign gains reported in recent months (February 14).
- Overall production and manufacturing output should edge up in January, despite the drop in factory hours worked. Utility production appears to have risen substantially and a sharp increase in temporary workers (classified as service workers in payroll figures) should also boost goods production (February 14).

### Economic Releases and Other Events

| Date       | Time  | Indicator                           | Estimate |           | Last Report |
|------------|-------|-------------------------------------|----------|-----------|-------------|
|            |       |                                     | GS       | Consensus |             |
| Tue Feb 11 | 10:00 | Nonfarm Productivity (Q4 '96—Prel.) | +2.3%    | n.a.      | +0.3%       |
| Thu Feb 13 | 8:30  | Retail Sales (Jan)                  | +1.0%    | +0.5%     | +0.6%       |
|            |       | Excluding Autos                     | +0.5%    | +0.4%     | +0.6%       |
| Fri Feb 14 | 8:30  | Producer Price Index (Jan)          | +0.3%    | +0.3%     | +0.5%       |
|            |       | Excluding Food & Energy             | +0.1%    | +0.1%     | +0.1%       |
|            | 9:15  | Industrial Production (Jan)         | +0.2%    | +0.2%     | +0.7%       |
|            | 9:15  | Capacity Utilization (Jan)          | 83.4%    | 83.5%     | 83.5%       |
|            | 10:00 | Business Inventories (Dec)          | -0.3%    | +0.2%     | +0.1%       |

- G7 Meeting (Sat, Feb 8)
- Treasury Quarterly Refunding (Feb 11-13)
- Richmond Fed Survey (Tue, Feb 11 - 10:00)
- Atlanta Fed Survey (Wed, Feb 12 - 10:00)
- Consumer Sentiment—Prel. (Fri, Feb 14 - 10:00)

### Interest Rates: Forecast vs. Forward Yields:

|              | 3 mo | 6 mo | 12 mo |
|--------------|------|------|-------|
| LIBOR 3 mo   | 5.8% | 6.2% | 6.8%  |
| Forward      | 5.6  | 5.6  | 6.1   |
| 2 Yr T-Note  | 6.2  | 6.5  | 7.0   |
| Forward      | 6.2  | 6.2  | 6.3   |
| 10 Yr T-Note | 6.7  | 7.0  | 7.2   |
| Forward      | 6.5  | 6.6  | 6.6   |

### Key Numbers in the Business Outlook

|                     | 1996  | 1997 |      | 1995  | 1997E |
|---------------------|-------|------|------|-------|-------|
|                     | Q4    | Q1E  | Q2E  |       |       |
| Real GDP            | 4.7%  | 1.8% | 3.4% | 2.6%  | 2.9%  |
| Ind. Prod., Mfg.    | 3.7   | 3.6  | 4.4  | 2.7   | 4.2   |
| CPI                 | 3.2   | 3.5  | 2.8  | 2.9   | 3.2   |
| After-Tax Profits** | 10.9E | 6.7  | 7.3  | 15.1E | 4.9   |
| Unemployment        | 5.3   | 5.5  | 5.1  | 5.4   | 5.1   |

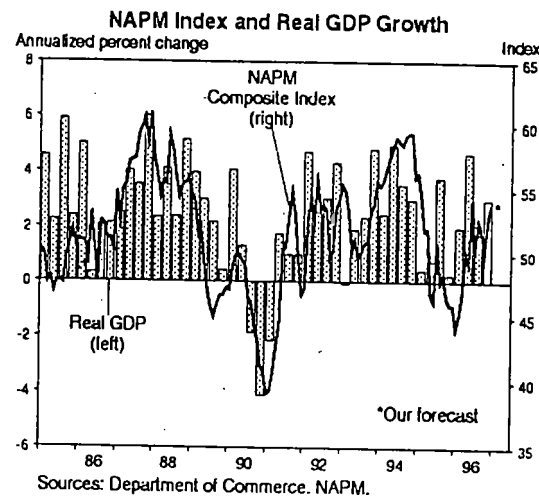
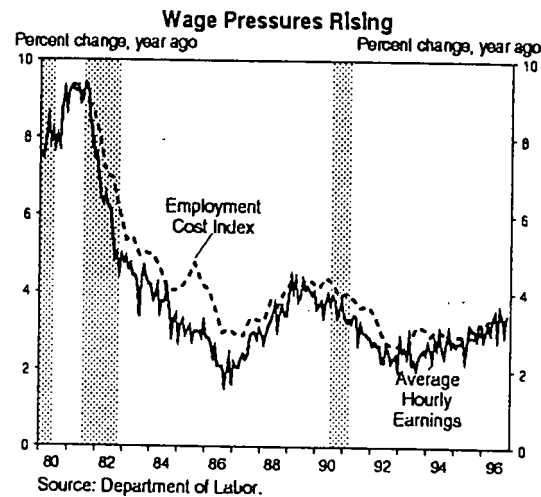
\*\* Excluding inventory profits; adjusted for depreciation distortions.



# U.S. Economics Analyst

## Four Issues for 1997

- Four issues are paramount in 1997: consumer spending, trade, inflation, and the budget outlook. Consumer spending and trade will be the major determinants of the economy's growth trajectory. If the economy grows at an above-trend pace, then inflation pressures are likely to intensify, forcing Fed officials to tighten monetary policy.
- Developments on the inflation front will be particularly important in influencing the interest rate environment. Not only would a pickup in inflation cause Fed officials to tighten monetary policy, but also a rise in inflationary pressures would damage the Fed's credibility, causing investors to demand a higher risk premium to hold longer-duration fixed-income assets.
- Yield-curve risk premia will also be influenced by the outcome of the budget negotiations. Although the likelihood of a budget deal is high, the road to an agreement will probably be long and winding and the resulting amount of fiscal restraint very modest over the next few years.
- Data on new home sales, consumer confidence, the National Purchasing Managers' index, and construction spending were all very firm, reinforcing earlier signs that the economy is growing at an above-trend pace.
- This has increased the likelihood that Federal Reserve officials will need to tighten monetary policy in 1997. However, unless the forthcoming price reports indicate a meaningful uptick in inflationary pressures, Fed officials will probably be patient and wait until the March FOMC meeting or later before beginning to tighten.



## Trade Recommendations

- Get short December '97 Eurodollars (currently 93.88) on a break below 93.78, with a target of 93.40.
- Reinstitute short position in March '97 bond future (currently 111.30) with a target of 109.00 and a stop on a close above 113.00.

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**Issue No: 97/1  
January 3, 1997**

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## I. Weekly Wrapup

### Economic and Market Overview

U.S. securities prices fell steeply over recent days in response to news suggesting relatively buoyant business activity toward the end of 1996, which has regenerated concerns about possible Federal Reserve monetary tightening in the new year. For example, the National Association of Purchasing Management index for December rose to 54.0%, mostly due to a strengthening of new orders. Meanwhile, the housing and construction sectors are displaying sturdiness, with sales of new and existing homes up 14.2% and 1.8% in November, respectively, and real construction outlays rising by 1.7% in November. High housing stock turnover is an indication that monetary policy remains unrestrictive, and it may augur for further solid gains in personal spending on household durables. Prospects for at least respectable growth in consumption are also supported by confidence surveys, which remained in unusually high territory through yearend. In fact, the December poll by the Conference Board showed confidence at a seven-year peak, reflecting unusually upbeat assessments of job availability.

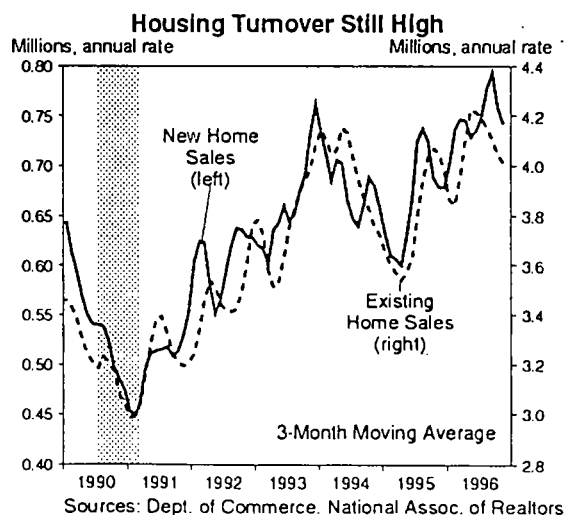
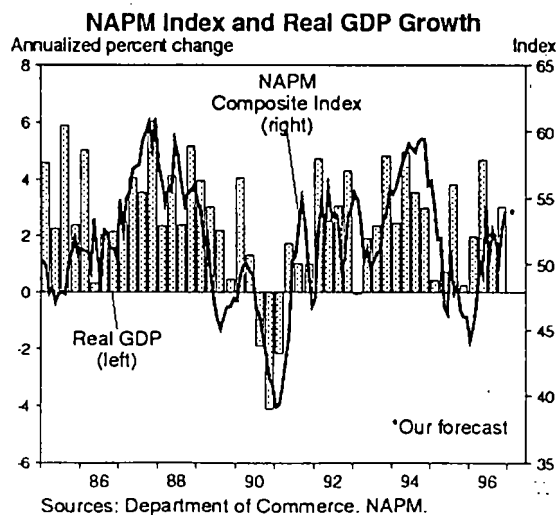
As yet, broad inflationary pressures have not yet appeared. The NAPM survey showed prices paid and vendor performance in relatively neutral territory, each between 51% and 52%. Given tight supplies of unemployed labor, however, as well as the gradual pickup in wage awards over the past two years, the risks remain tilted toward a creeping inflation in employment costs and retail prices so long as economic growth outpaces the long-term average.

### Federal Reserve Policy

It would not be surprising if senior central bankers are growing more concerned that they may have underestimated the U.S. economy's forward momentum. We continue to believe, however, that no initial tightening is likely to occur before late March. Available fourth-quarter statistics on goods production, services consumption, and construction spending suggest that our 3.0% annualized growth outturn for that period is too low, and the firmness of indicators from late in the period raises a question as to whether the expansion might remain similarly solid in the first half of 1997. While there is little to suggest a developing inflation problem outside the energy arena, a steady escalation in wages and the virtually uninterrupted six-month upswing in crude oil prices could soon undermine the benign pricing environment that has existed since mid-1995. This suggests that the risk of Fed tightening within a few months is higher than generally believed.

### Fiscal and Political Developments

Major elements in the forthcoming Clinton administration budget package will probably be leaked to the press over the next several weeks, before its official submission to Congress on February 3. During this period, it should become clear that movement toward a bipartisan deficit-cutting budget agreement will occur more slowly than many in the markets have hoped and anticipated. At this point, it appears doubtful that the President's budget proposals will depart materially from the last plan he endorsed, which offered virtually no fiscal





restraint in the near term in favor of steep and unspecified discretionary outlay cuts in the 2000-2002 interval. In addition, barring a last-minute change of heart, the new Clinton budget blueprint is unlikely to include a proposal to shave cost-of-living increases for federal benefits and income tax brackets, which is the option that would promise the greatest degree of long-range federal deficit restraint.

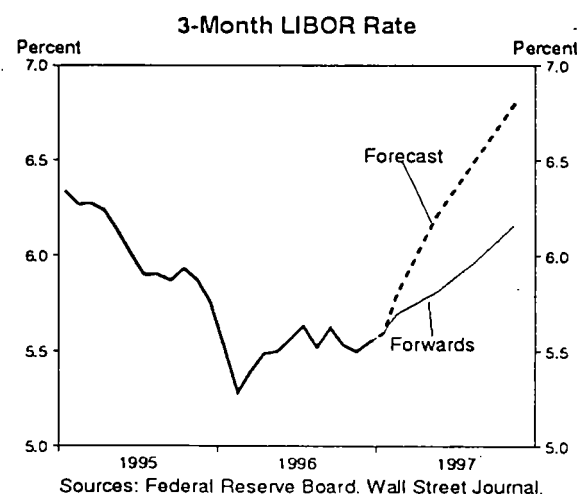
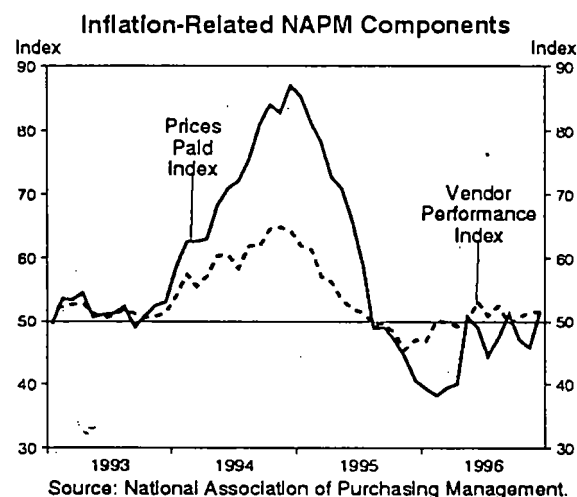
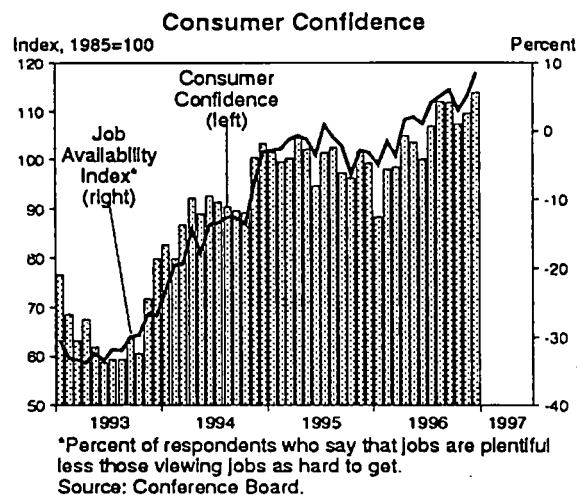
Republican Congressional leaders can be expected to express disappointment with the Clinton budget, especially its modest tax cut elements (which will probably exclude a broad capital gains reduction) and sleight-of-hand in medical entitlement program areas (moving some Medicare expenses out of the trust fund and into general budget accounts, without providing new revenues or material controls on program costs). Despite their protests, however, GOP lawmakers will be reluctant to engage in high-profile confrontation with the White House over federal finances, in view of their politically painful 1995-1996 experience. Hashing out the details of the next U.S. budget therefore will likely be a slow, deliberate process, possibly lasting many months as the normal legislative schedule is permitted to proceed.

### Market Outlook and Comments on Value

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

Although bond yields are presently near the middle of the range we consider appropriate until it becomes clearer that Fed officials will need to tighten monetary policy, the decline in bond futures below the lowest prices witnessed in the prior selloff suggests that market participants are being forced to adjust their strategies from optimism toward neutrality or bearishness, a process that could take awhile longer and more price damage to complete. For this reason, we would advise a small short, with a tight stop (on a close above 113.00) in the March T-bond futures contract (currently 111.30) and a price target of 109.00.

The downward price trend has resumed in Eurodollar futures as well, and this should persist as expectations of future Fed tightening are revived, perhaps with the aid of cautionary commentary by top policy makers. Fed Chairman Greenspan's report on the economy to the Senate Budget Committee on January 21 could be a particular highlight in this regard. Shorts should be set in December 1997 Euros (currently 93.88) on a break of 93.78, with a target of 93.40.





## II. Four Issues for 1997

### Four Issues to Focus on in 1997

Over the past year, cyclical forces represented by above-trend growth and rising wages have vied with secular issues such as prospects for budget restraint and a rise in the nation's pool of savings for the market's attention. Over the next year, this tug-of-war is likely to continue, with the cyclical side gradually gaining the upper hand, pushing interest rates higher.

As we see it, in 1997, the risks of monetary policy tightening significantly outweigh the prospects for monetary easing. This reflects three developments: 1) an economy that continues to operate at a high level of resource utilization, especially in terms of the labor market; 2) the prospects for continuation of above-trend growth that would tighten labor and manufacturing capacity further; and 3) increasing signs that tight labor markets are leading to a rise in wage pressures, which should gradually result in higher prices over time.

On the opposite side of the ledger, the prospects for a recession or a sustained growth slowdown appear to be very low: 1) Inventories are lean, with the significant overhang of inventories that developed in 1995 having been worked off by mid-1996; 2) Consumers have the wherewithal to sustain spending as favorable income and confidence trends remain intact; 3) Economic activity in the rest of the world (with the exception of Japan) appears likely to strengthen next year, diminishing the drag from trade that was felt throughout most of 1996; and 4) Fiscal

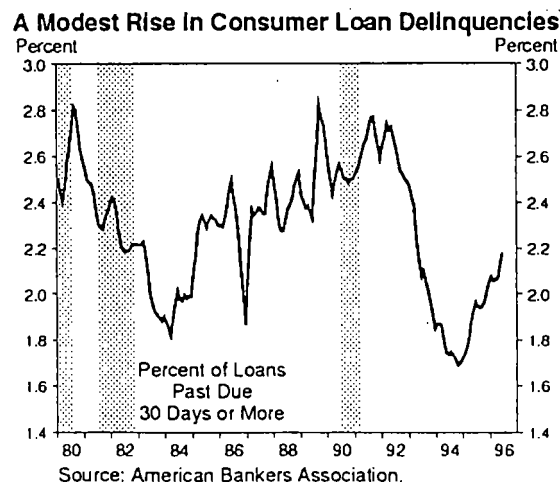
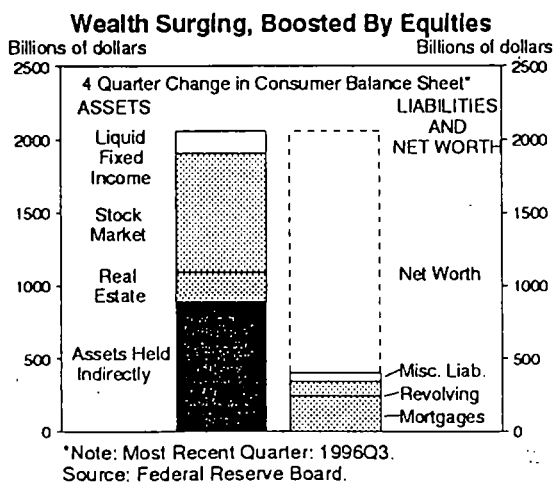
policy is unlikely to be restrictive in 1997, for the first time in several years.

Whether our view turns out to be correct depends mainly on how four issues evolve in 1997: 1) the strength of consumer demand; 2) the performance of the trade sector; 3) the behavior of wage inflation and its impact on prices; and 4) the budget outlook.

### 1. Consumer Spending

The willingness of consumers to spend continues to be the biggest source of disagreement among economists. The case for spending strength rests on the strength of income and employment trends, the high level of confidence, and the fact that the surging stock market has bolstered the household balance sheet. The case for weakness rests on the buildup of debt, the rise in loan delinquencies and bankruptcies, and the absence of significant pent-up demand for consumer durables and housing. To determine which side is right, two issues are paramount: Does the Q4 pickup in spending mean that the strong stock market gains are beginning to leak into the spending stream? Or will spending weaken anew and erode the favorable trends in income and confidence?

One surprise of 1996 was the fact that the strong stock market was accompanied by a rise in the household savings rate. If equity market gains start to cause households to increase their spending, the consequence will be greater growth in outlays than expected. A second surprise has been the persistent strength of payroll and income growth. For example,





over the past six months, monthly payroll employment gains have averaged 190,000 per month and real disposable income has risen at a 3.3% annual rate. If spending were to weaken, employment and income trends would suffer, further exacerbating the slowdown in spending.

The final tally on holiday spending may help settle this issue. After all, as such spending is largely discretionary, it will provide some evidence whether the run-up in equity prices or the climb in household debt is the predominant influence on household outlays.

## 2. U.S. Trade Performance

A second surprise in 1996 was the deterioration in the U.S. trade accounts. Although some of the widening in the U.S. trade balance can be explained on the basis of the large gap between domestic demand growth in the United States versus abroad, the persistence of trade deterioration in the third quarter at a time that domestic demand growth was slowing sharply suggests that this is not the only explanation. If the trade gap were to continue to widen, this could undermine U.S. income growth trends, because the income would flow to foreign producers and workers, rather than remain within the United States.

On balance, the outlook for trade in 1997 should be mainly determined by whether domestic demand growth abroad revives. The dollar's behavior is not likely to be particularly important for two reasons. First, U.S. trade performance is not very sensitive to modest changes in the dollar's valuation. Second, in 1996 the dollar appreciated only marginally on a trade-weighted basis, despite a hefty advance against the yen.

Domestic Demand Growth Correlations

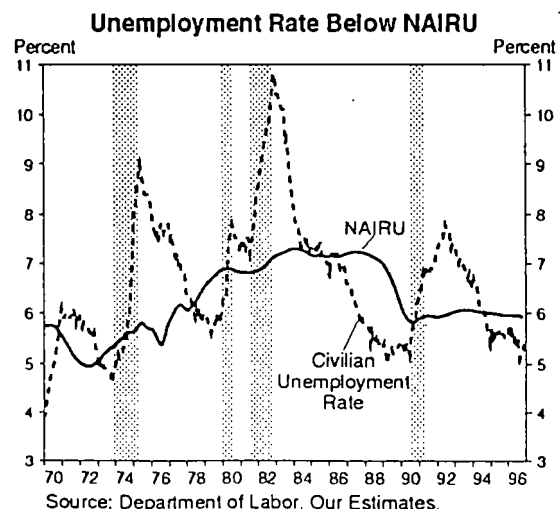
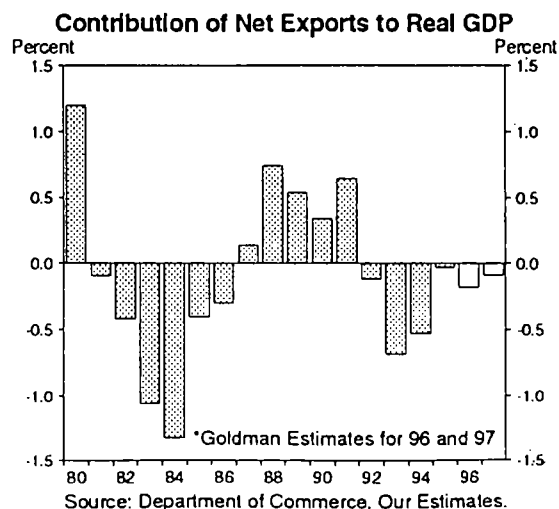
|                  | 1996 Share of U.S. Exports (E) | Foreign Domestic Demand Growth |       |       |
|------------------|--------------------------------|--------------------------------|-------|-------|
|                  |                                | 1995                           | 1996E | 1997E |
| Canada           | 22%                            | 0.6%                           | 2.0%  | 3.0%  |
| Mexico           | 9                              | -6.9                           | 2.5   | 3.0   |
| Japan            | 11                             | 2.2                            | 4.6   | 1.1   |
| European Union   | 20                             | 2.2                            | 1.1   | 2.1   |
| Weighted by:     |                                |                                |       |       |
| '96 Export Share | —                              | 0.3%                           | 2.1%  | 2.4%  |

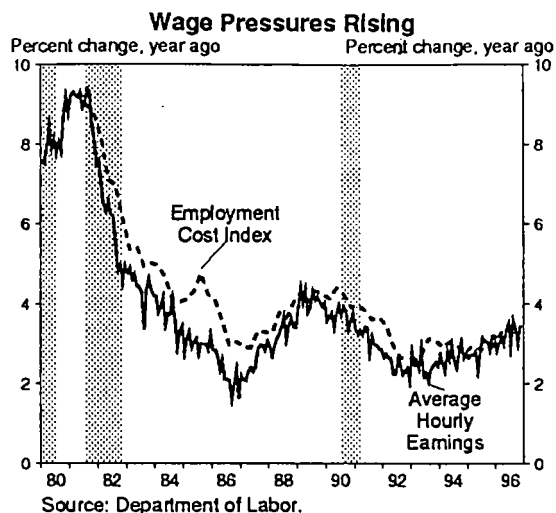
Source: Dept. of Commerce. Our estimates.

In terms of domestic demand growth abroad, we expect some improvement in 1997. Although Japanese demand is likely to slow sharply as fiscal policy is tightened, this should be more than offset by faster demand growth in Canada, Mexico and Europe. Interest rates fell sharply throughout much of the world in 1996, and this should contribute to more buoyant economic activity in 1997.

## 3. Wage Inflation and the Impact on Prices

The general perception is that the relationship between tight labor markets and wage inflation has completely broken down. We remain very skeptical of that viewpoint. As we see it, wage inflation is behaving almost precisely as one might expect given the modest gap between our estimate of NAIRU (the non-accelerating inflation rate of unemployment) and the actual unemployment rate. What has clouded the picture are three special factors: 1) NAIRU is lower today than in the 1980s, which has reduced the size of the gap and the degree of upward pressure on wages; 2) Compensation cost inflation has been more muted because benefit cost inflation has slowed dramatically in line with the (forced) migration of workers from fee-for-service healthcare to managed care; and 3) The need for businesses to pass through wage





increases has been muted by productivity growth, and their ability to raise prices has been constrained by foreign competition and the fact that capacity utilization rates are not unusually high.

Further gains in wage inflation appear assured, given the tightness of labor markets. More uncertain is whether businesses will be able to pass through such price increases. If economic activity picks up abroad as we expect, then this should help lessen international competitive pressures. On balance, we expect that businesses will be at least partially successful in this regard, leading to a modest uptick in inflationary pressures.

#### 4. Outlook for the Budget

The budget outlook is an important aspect of the 1997 outlook as it will affect the risk premia that investors demand on longer-dated fixed income assets and, thus, will be an important determinant of bond yields. Meaningful fiscal restraint would allow monetary policy to be more accommodative over the long-term. Investors would anticipate this result, which would lead, all else equal, to lower long-term rates and a flattening of the yield curve.

Although the prospects for a budget agreement between the Clinton Administration and the Republican-controlled Congress appear quite bright, it is unlikely that progress toward a deal will be rapid or that a deal will result in significant fiscal restraint anytime soon. The Congressional Budget Office appears poised to project a significant lower baseline deficit (around \$150 billion) compared to May 1996, when the projected deficit was \$210 billion. This

means that the amount of fiscal restraint required to get to balance on paper will be significantly less than the amount of fiscal restraint over the past few years. This suggests that the Clinton administration will be able to balance the budget without resorting to the types of changes (e.g., adjustments to CPI-linked entitlement payments) that would have a big impact on the longer-term deficit outlook.

In evaluating any budget agreement, we would focus on four issues: 1) Is there an adjustment to the CPI for entitlements and tax bracket indexation; 2) Are the deficit cuts backloaded and/or temporary; 3) How much savings is generated by assuming that a balanced budget would result in lower interest rates and debt service costs; and 4) Are tax reductions large and potentially stimulative?

We also would be cautious about assuming that a balanced budget amendment will be enacted. Although the prospects for passage in the Senate have improved as the Republicans have increased their margin, they have diminished in the House, where the Republican majority has narrowed. Also, with the ability to wield a line-item veto, President Clinton has gained more leverage in convincing members of Congress to vote no. Finally, to be enacted, any amendment would have to be ratified by 38 state legislatures. That is likely to be a tall order, especially if state lawmakers begin to worry that balance might be achieved primarily at their expense via a reduction in federal block grants.

#### Other Issues

We view other issues such as the outlook for capital spending and the appetite of foreign investors for U.S. Treasury debt as less significant. That is because those outcomes will be determined mainly by how the general economic environment evolves. For example, if consumer spending is strong, pushing the economy to an above-trend growth pace, then capital spending is also likely to remain firm. In terms of foreign investors' appetite for Treasuries, we believe that it will be determined mainly by interest rate differentials and the credibility of fiscal and monetary policy. Although inflows at the 1996 rate seem unlikely, a big fall-off also seems improbable as interest rate differentials are likely to continue to favor the United States in 1997 and could even widen somewhat further.

Bill Dudley



## Key U.S. Economic Data

|                                            | Latest Monthly Data |         |         |         | 6 Mo<br>Trend | 12 Mo<br>Trend | Next<br>Release |
|--------------------------------------------|---------------------|---------|---------|---------|---------------|----------------|-----------------|
|                                            | '96 Dec             | '96 Nov | '96 Oct | '96 Sep |               |                |                 |
| Nonfarm Payrolls (ch. Thousands)           | --                  | 118     | 224     | -2      | 177           | 208            | Jan 10          |
| Unemployment Rate (%)                      | --                  | 5.4     | 5.2     | 5.2     | 5.3           | 5.4            |                 |
| Index of Hours Worked (% ch)               | --                  | 0.4     | -0.7    | 0.8     | 3.4           | 2.5            |                 |
| Average Hourly Earnings (% ch)             | --                  | 0.8     | -0.1    | 0.3     | 4.3           | 3.5            |                 |
| Producer price finished goods index (% ch) | --                  | 0.4     | 0.4     | 0.2     | 2.8           | 3.0            | Jan 9           |
| Excluding food and energy                  | --                  | 0.1     | -0.3    | 0.3     | 0.6           | 0.6            |                 |
| Consumer price index (% ch)                | --                  | 0.3     | 0.3     | 0.3     | 2.6           | 3.2            | Jan 14          |
| Excluding food and energy (% ch)           | --                  | 0.2     | 0.2     | 0.3     | 2.6           | 2.6            |                 |
| Retail sales (% ch)                        | --                  | -0.4    | 0.3     | 0.7     | 0.4           | 4.0            | Jan 14          |
| Excluding motor vehicles (% ch)            | --                  | 0.3     | 0.4     | 0.5     | 1.6           | 4.4            |                 |
| Industrial Production (% ch)               | --                  | 0.9     | -0.2    | 0.1     | 4.2           | 4.4            | Jan 17          |
| Manufacturing                              | --                  | 0.8     | -0.2    | 0.3     | 4.8           | 4.7            |                 |
| Capacity utilization (%)                   | --                  | 83.3    | 82.9    | 83.3    | 83.3          | 83.1           | Jan 17          |
| Manufacturing                              | --                  | 82.2    | 81.9    | 82.3    | 82.3          | 82.1           |                 |
| Housing Starts (annual rate, thousands)    | --                  | 1514    | 1386    | 1461    | 1476          | 1473           | Jan 22          |
| Single-family                              | --                  | 1164    | 1082    | 1138    | 1164          | 1165           |                 |
| Trade balance (billions, monthly)          | --                  | --      | -8.0    | -11.4   | -10.1         | -8.9           | Jan 17          |
| Merchandise                                | --                  | --      | -14.1   | -17.5   | -16.2         | -15.0          |                 |
| Factory Orders (% ch)                      | --                  | --      | 0.9     | 2.6     | 9.5           | 6.6            | Jan 7           |
| Durable Goods                              | --                  | -1.6    | 0.5     | 4.5     | 1.7           | 5.7            | Jan 29          |
| Personal Income (% ch)                     | --                  | 0.5     | 0.0     | 0.6     | 5.3           | 5.5            | Feb 3           |
| Wages and Salaries                         | --                  | 0.6     | -0.1    | 0.7     | 6.0           | 6.0            |                 |
| Purchasing Managers' Index (%)             | 54.0                | 52.7    | 50.2    | 51.7    | 51.9          | 50.1           | Feb 3           |
| Consumer Sentiment U Mich (Feb 66=100)     | 96.9                | 99.2    | 96.5    | 94.7    | 96.2          | 93.6           | Jan 31          |
| Conference Board (1985=100)                | 113.8               | 109.5   | 107.3   | 111.8   | 110.2         | 104.6          | Jan 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 non-durable goods component of the factory orders report for November should increase significantly, bolstered by higher petroleum prices. This should offset most, but not all, of the weakness in durable goods orders reported earlier (Jan 7).
- Producer prices for finished goods in December should rise significantly, boosted by sharply higher gasoline and heating oil prices. Excluding food and energy, however, the prices for finished goods should show a much more modest increase (Jan 8).
- Payroll gains in December should be sizable, boosted by strength in retail, government, and other service personnel. Other elements of the report such as the index of aggregate hours worked should also be on the firmer side. The unemployment rate should dip to 5.3% (Jan 10).

### Economic Releases and Other Events

| Date       | Time  | Indicator                        | Estimate   |            | Last Report |
|------------|-------|----------------------------------|------------|------------|-------------|
|            |       |                                  | GS         | Consensus  |             |
| Tue Jan 7  | 10:00 | Factory Orders (Nov)             | +0.7%      | -1.0%      | +0.9%       |
| Wed Jan 8  | 3:00  | Consumer Credit (Nov)            | +\$2.0 bil | +\$3.5 bil | +\$2.2 bil  |
| Thu Jan 9  | 8:30  | Producer Price Index (Dec)       | +0.5%      | +0.3%      | +0.3%       |
|            |       | Excluding Food & Energy          | +0.2%      | +0.2%      | +0.2%       |
| Fri Jan 10 | 8:30  | Civilian Unemployment Rate (Dec) | 5.3%       | 5.4%       | 5.4%        |
|            | 8:30  | Nonfarm Payroll Employment (Dec) | +200,000   | +173,000   | +118,000    |

■ Chain-Store Sales Results (Thu, Jan 9)

■ Wholesale Trade (Thu, Jan 9 - 10:00)

### Interest Rates: Forecast vs. Forward Yields:

|              | 3 mo | 6 mo | 12 mo |
|--------------|------|------|-------|
| LIBOR 3 mo   | 5.8  | 6.2  | 6.8   |
| Forward      | 5.7  | 5.8  | 6.2   |
| 2 Yr T-Note  | 6.2  | 6.5  | 7.0   |
| Forward      | 6.1  | 6.2  | 6.4   |
| 10 Yr T-Note | 6.7  | 7.0  | 7.2   |
| Forward      | 6.6  | 6.6  | 6.7   |

### Key Nos. in the Business Outlook

|                    | 1996 |      | 1997 |       |
|--------------------|------|------|------|-------|
|                    | Q3   | Q4E  | Q1E  | 1996E |
| Real GDP           | 2.1% | 3.0% | 3.4% | 2.4%  |
| Ind. Prod., Mfg.   | 5.7  | 3.0  | 4.8  | 3.3   |
| CPI                | 2.4  | 3.4  | 3.6  | 2.9   |
| After-Tax Profits* | 10.2 | 9.4  | 8.1  | 14.7  |
| Unemployment       | 5.2  | 5.3  | 5.2  | 5.4   |

\* Excluding inventory profits; adjusted for depreciation distortions.

## INCOMING TO GS

DOC #

DATE

1/28/97

STATUS

Information

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Goldman Sachs

BRIEF DESCRIPTION

Foreign Demand for U.S. Treasuries: No drop likely soon

DETAILED DESCRIPTION

**GS COMMENTS**

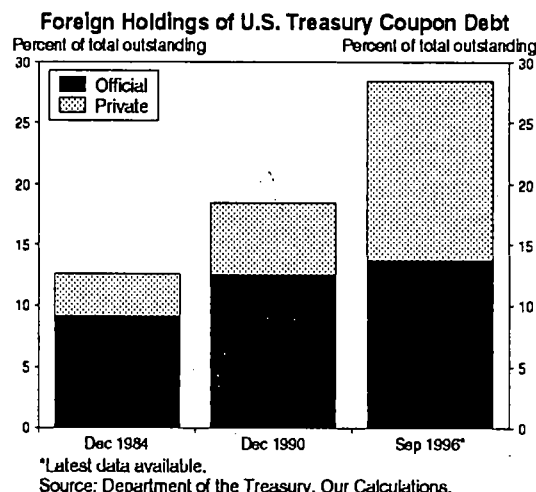
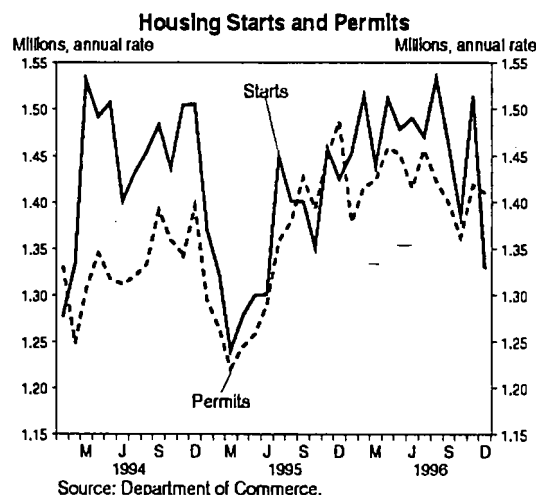
FILE 1

FILE 2

FILE 3

## Foreign Demand for U.S. Treasuries: No Drop Likely Soon

- Chairman Greenspan's latest testimony implies that the next change in U.S. monetary policy will be a tightening. Such a move is unlikely to occur as early as the Feb. 4-5 FOMC meeting, however, barring a sharp, unexpected acceleration in the fourth-quarter employment cost index.
- Bad weather was partly responsible for the latest softer-than-expected readings on housing starts and jobless benefit claims. Meanwhile, the Fed's "beige book" summary of regional conditions did not show as clear a pick-up in growth as have the national economic data.
- Prospects for a budget-balancing accord remain good, although a large downward revision to the Congressional Budget Office's baseline deficit projection make it much easier to achieve such a deal without materially changing the trends in entitlements that cause longer-term imbalances.
- Foreign purchases of U.S. Treasury debt since early 1995 have been massive, with private investors absorbing the bulk of note and bond offerings. The regional distribution of Treasury coupon sales abroad has not changed, with Europeans accounting for about half.
- Our analysis indicates that past market returns are the primary determinant of private foreign demand for Treasuries, with changes in official behavior recently dominated by fluctuations in the dollar's value. The relative attractiveness of U.S. yields augurs for continued solid external purchases, barring a sharp acceleration in European economic growth.



### Trade Recommendations

- Stay short the Dec '97 Euro, with a target of 93.40 and a stop on a close above 93.90.
- Stay short March '97 T-bond futures, with a target of 109.00 and a stop on a close above 111.16.

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**Issue No: 97/4  
January 24, 1997**

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# I. Weekly Wrapup

## Economic and Market Overview

With hardly any new data to digest, financial market participants dissected Federal Reserve Chairman Alan Greenspan's Senate Budget testimony for clues about the near-term direction of U.S. monetary policy. What they found was initially to their liking, although most of the post-testimony gains had dissipated toward the end of the week—except in the case of the dollar, which reached a 4-year high against the yen.

The two figures that were released fell to the soft side of general expectations, although both followed sharp improvements and were clouded by bad weather. For example, starts of new housing units dropped 12.2% in December after rising 9.3% in November. Last month's losses were concentrated in the West, where heavy rains caused builders to put off breaking ground on many new projects. Permits for new home building, which are less prone to such disruptions, fell only 0.6%, to a level 6.1% above the starts rate. In the past, inversions between permits and starts have usually signaled a near-term rebound in starts. Likewise, initial claims for jobless insurance jumped 34,000 in the week ended January 18 after dropping 45,000 in the prior week; shifts in the weather were also partly behind these large swings.

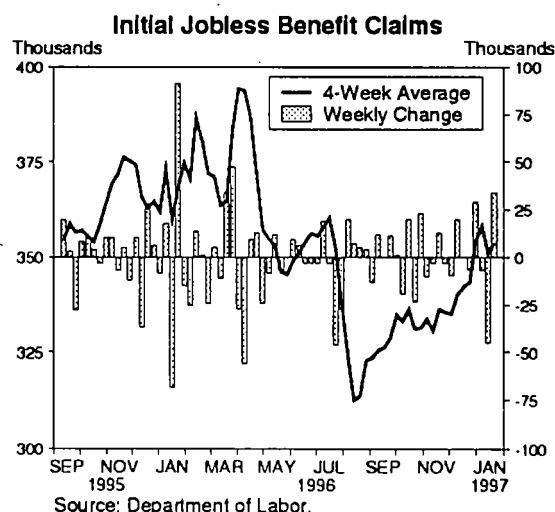
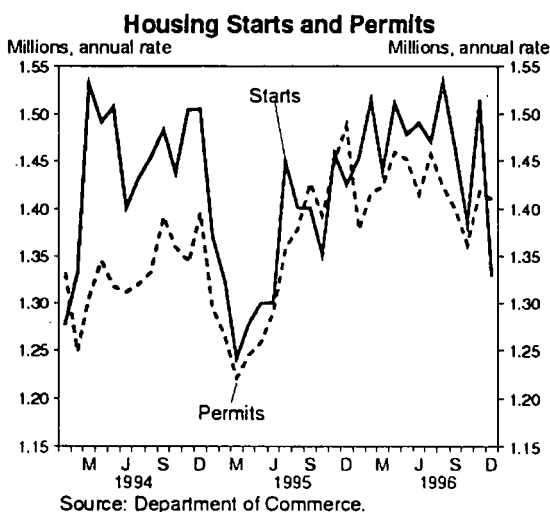
Unlike most recent economic indicators, the Federal Reserve's latest "beige book" found little evidence of a shift in the "moderate" pace of economic growth. Although most districts characterized local labor markets as tight, they reported only scattered signs of rising wage inflation—also in contrast to national indexes—and no increased price inflation outside the

energy sector. Over the past year, the Conference Board's survey of regional conditions has picked up a noticeable shift in the locus of economic strength from the nation's midsection to its coastal regions; while reduced export growth is probably the main reason, labor-market constraints may also be a factor.

## Federal Reserve Policy

Chairman Greenspan's characteristically even-handed testimony on the economy's outlook and prospects did not indicate an imminent change in policy. In several respects, however, his remarks clearly imply that the next move—whenever it comes—will be a tightening. First, he was struck by the strength of recent growth and noted that it was occurring at a time when resource utilization was quite high. Second, he did not enumerate a list of reasons why this growth should slow, as he had in last July's Humphrey-Hawkins testimony. Together, these two points suggest that Mr. Greenspan now sees the risks as evenly balanced around an unsustainable growth trend. Third, he reiterated the importance of basing policy on forecasts rather than current trends. Finally, he devoted the bulk of his prepared remarks to an analysis of inflation and noted that the period of subdued wage and price pressures might be ending. Together, these last two points suggest that an uptick in inflation is not a prerequisite for monetary tightening and that labor market indicators will be critical in the Fed's policy deliberations.

In this context, the fourth-quarter employment cost index—due for release January 28—will be a key focus of attention. Fed officials regard this index as



the best gauge of labor costs, and they will be looking to see whether there has been much acceleration in total hourly compensation. If so, Mr. Greenspan's next trip to Capitol Hill, just two days later, might contain more warnings of an increase in interest rates.

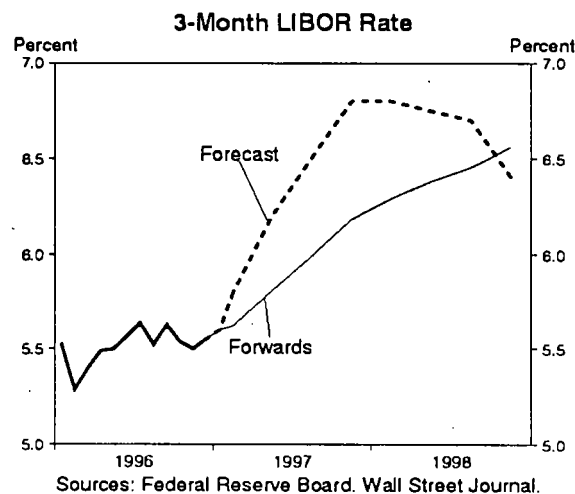
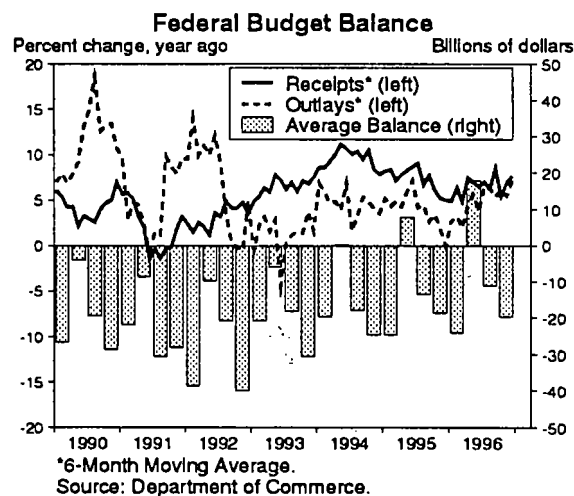
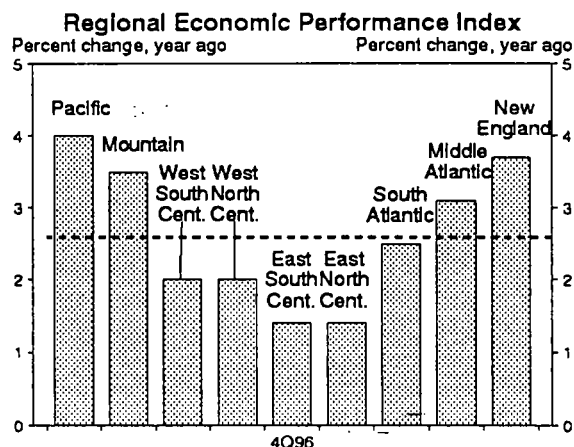
### Fiscal and Political Developments

Prospects for an accord leading to a balanced federal budget in 2002 remain good, but several events in recent days underscore the likelihood that any such deal will skirt the fundamental issues leading to longer-term imbalance. First, a senior Congressional Budget Office official noted that the CBO would announce a large reduction to its baseline deficit forecast, shaving the estimated 2002 shortfall by about one-third. This makes it much easier to reach a balance in five years without seriously cutting entitlement outlays. Second, President Clinton closed part of the gap between his Medicare proposals and those of the Republican congressional majority, offering to cut \$138 billion in six years; however, this latest proposal would not make material headway either in resolving Medicare's longer-term solvency or in reducing overall public and private outlays on healthcare. Finally, in a move that could prolong the negotiations, several Senate Republicans, led by Finance Committee Chairman William Roth (R., DE), have increased the size of the tax cuts they will be seeking to \$194 billion, about double the cut most recently proposed by the administration; to the extent the final agreement embodies a large tax cut, meaningful long-term deficit reduction will be that much harder to achieve.

### Market Outlook and Comments on Value

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

Although our enthusiasm for short positions is fading in light of the bearish sentiment in the bond market and our expectation that Fed officials will keep monetary policy unchanged at the Feb. 4-5 FOMC meeting, we would remain short for one more week. Our expectations of high-side surprises on the employment cost index report and real GDP growth in the fourth quarter could cause market participants to become more fearful of a tightening at the Feb. 4-5 FOMC meeting, pushing yields up. We would remain short both the Dec '97 Eurodollar future, with a stop on a close above 93.90 and a target of 93.40, and the March '97 T-bond future, with a stop on a close above 111.16 and a target of 109.00, closing out the bond short if our target were reached.



## II. Foreign Demand for U.S. Treasuries: No Drop Likely Soon

There has been a notable shift in the composition of U.S. Treasury debt ownership over the past few years, with enormous foreign net purchases taking place amid reduced new issuance. While robust demands from overseas central banks have been widely recognized, data on foreign net Treasury purchases reveal that private buying has been even larger. In fact, private foreign holdings of coupon Treasuries have surpassed those of central banks, a radical change from earlier periods.<sup>1</sup> It is also noteworthy that, despite a marked step-up in the aggregate pace of buying, the regional distribution of overseas Treasury ownership has not changed much, with Europe remaining by far the largest source of demand.

Our analysis indicates that lagged Treasury market returns have been a key historical determinant of foreign purchases, with private investors tending to pursue mean-reversion strategies. Whereas the dollar's exchange value has not been a consistently significant influence, in the past two years foreign central banks have clearly changed their behavior, accumulating Treasuries in an effort to hold down their currencies in relation to the greenback and thereby stimulating domestic business activity.

Looking ahead, unusually attractive yields on U.S. debt relative to those in other major bond markets should help keep private foreign purchases on a firm path, but central bank demands are likely to wane now that the dollar has risen materially against most European currencies and the yen. The main risk to a continuation of these flows would be a significant acceleration in European economic growth, which would probably cause local bond yields to rise.

### Historical Evidence on Foreign Treasury Purchases

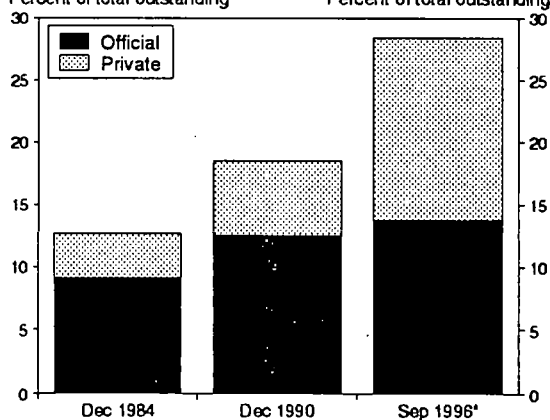
We have reviewed statistics on international capital movements since the early 1970s to evaluate patterns of foreign demand in the U.S. government securities market. The major findings are as follows:

1. Total foreign acquisitions of U.S. debt have exploded since 1993. In the latest eleven quarters (ending September 1996), net overseas purchases of Treasury notes and bonds totaled

\$361.2 billion, nearly matching the total amount acquired over all previous periods (\$388.2 billion). The 27% annual foreign accumulation rate over that interval was more than four-and-a-half times the growth in the total stock of such debt (5.8%). External demands for Treasury bills, meanwhile, have also been exceptionally strong; based on custody account figures from the Federal Reserve, we estimate roughly \$200 billion in cumulative foreign central bank T-bill purchases over the past five years, exceeding the increase in total marketable bill supplies.

This marks the second major updraft in foreign demands for Treasuries during the past 15 years. The first such episode—beginning in 1984—coincided with the lifting of federal withholding taxes on interest paid to foreign entities.

**Foreign Holdings of U.S. Treasury Coupon Debt**  
Percent of total outstanding



\*Latest data available.

Source: Department of the Treasury. Our Calculations.

2. Among foreigners, private ownership of Treasury coupon issues has surpassed that of central banks and other official entities. Much has been written lately about the extraordinary rate of U.S. debt accumulation by foreign central banks. The surprising fact, however, is that the absolute volume of buying outside the bill sector has been far greater among private accounts. Private foreigners have expanded their Treasury coupon debt holdings by a cumulative 291% since 1990, compared to 78% among official institutions. Between December 1994 and September 1996, the annual growth rates for the two groups were 42.9% and 20.9%, respectively. These trends have driven private foreign

<sup>1</sup> Our analysis focuses on foreign ownership of coupon securities as data on Treasury bills are not available.



ownership of Treasury coupons above the combined volume held by central banks and international organizations for the first time, as of the third quarter of 1995. Only six years ago, foreign official organizations held more than twice as many U.S. government notes and bonds as non-U.S. private investors.

3. Excluding off-shore investment funds, the regional distribution of foreign demands for Treasury coupon securities recently has mirrored earlier patterns. Unlike the prior large acceleration in foreign purchases of Treasury issues during 1984-1986, when there was an appreciable shift in the regional composition of demand toward the Far East, the distribution of net purchases has not been materially altered of late. Since December 1994, close to 52% of foreign accumulation of U.S. notes and bonds has been in Europe, marginally greater than the 48% share attributable to that region between 1974 and 1994. Japanese purchases account for another 17%, slightly less than earlier averages, while non-Japan Asian nations continue to comprise 18%-19%.

**Net Foreign Purchases of Treasury Coupons, By Region\***  
(% of total)

|                  | 1974-1994 | Jan. 1995 - Sep. 1996 |
|------------------|-----------|-----------------------|
| Europe           | 48.1%     | 51.7%                 |
| Japan            | 21.6      | 17.3                  |
| Asia (ex. Japan) | 18.3      | 18.7                  |
| All Other        | 12.0      | 12.3                  |

\* Excluding Caribbean countries, where flows are dominated by large investment funds.

## Estimating Key Factors In Overseas Demand For Treasuries

In an effort to understand the main forces that normally determine non-U.S. demands for Treasury coupon issues, we have constructed an econometric model and analyzed quarterly data on purchases since 1984. In addition to total foreign net purchases, we have subdivided these transactions by type of buyer (private or official), and also by major regions of domicile (Europe, Japan, and non-Japan Asia).

**Modeling Net Foreign Treasury Purchases**

| Dependent Variable | Treasury Return Terms | U.S. Return Terms | 1995-1996 Dummy    | Adjusted R-squared |
|--------------------|-----------------------|-------------------|--------------------|--------------------|
| Total              | -1856.5*<br>(399.3)   | 155.7<br>(605.1)  | 1063.0*<br>(425.3) | 0.57               |
| Private            | -819.4*<br>(327.0)    | 276.5<br>(370.2)  | -390.0<br>(403.9)  | 0.50               |
| Official           | -932.4*<br>(310.1)    | -241.4<br>(386.1) | 976.1*<br>(366.7)  | 0.29               |
| Europe             | -736.6*<br>(324.5)    | 55.5<br>(379.3)   | 181.0*<br>(59.4)   | 0.37               |
| Japan              | -566.2*<br>(183.2)    | 229.8*<br>(139.0) | 78.1*<br>(36.3)    | 0.36               |
| Non-Japan Asia     | -159.5<br>(137.9)     | 45.0<br>(96.7)    | 7.7<br>(25.3)      | 0.26               |

Notes: Constant, trend, trend-square, and error-correction terms are not shown. In almost all cases, they are significant and have the expected sign. Robust standard errors are in parentheses. \* indicates that the coefficient is statistically significant at the 5% level. The dependent variable is the foreign net purchases of marketable Treasury Notes and Bonds in total and for each indicated subgroup. Reported coefficients on Treasury and U.S. dollar returns are the sum of four quarterly lags of the series. The sample period is 1984Q1 to 1996Q3.

Our model employs an error-correcting specification including two independent economic factors: (1) lagged Treasury bond returns, on the theory that foreign investment behavior is adaptive to recent yield movements, and (2) changes in the dollar exchange rate, since overseas investors care deeply about how returns on dollar-denominated investments translate into home-currency terms. In addition, because foreign central banks have lately endeavored to influence the dollar's market value to suit domestic economic objectives, we have added a dummy variable for 1995-1996, multiplied by the dollar exchange rate.<sup>2</sup>

This model is fairly successful in describing past patterns of foreign purchases of U.S. debt, accounting for 57% of the quarterly variations. Consistent with our expectations, past Treasury returns appear to be an important determinant of future foreign demands. We find that foreign investors tend to employ an adaptive mean-reversion strategy in their investments in notes and bonds, buying more when prices have

<sup>2</sup> Our model also includes trend, trend-squared, and error-correction terms to control for the quadratic growth in foreign Treasury holdings.

fallen and less when prices have risen. This result is observed for both private and official purchases, as well as for demands from both Europe and Japan.

Surprisingly, our analysis suggests that foreign investors have generally not altered their Treasury investment behavior based on changes in the dollar's value over the past twelve years. Coefficients on exchange rate terms were statistically insignificant in explaining total, private, official, European, and non-Japanese Asian purchases. Only in the case of Japan has the dollar exchange rate been a consistent determinant of the appetite for Treasury coupon debt.

We do find that the dollar has been an important factor in foreign demand for Treasury coupons in the official community over the past two years. Since the start of 1995, each 1% increase in the greenback's value has been associated with a roughly \$1 billion net purchase of U.S. government notes and bonds by overseas central banks. Regionally, such purchases have come primarily from Europe, but also to a lesser extent from Japan and non-Japan Asia. These results are broadly consistent with our earlier research on the unprecedented increase in Federal Reserve custody holdings of Treasury securities for central banks in the past several years (see *The Weekly Analyst*, October 22, 1996). Foreign monetary authorities clearly have been using purchases of Treasuries to lift the dollar's exchange market value, with the goal of stimulating their domestic economies via exports.

### External Private Purchases of Treasuries Should Remain Sturdy For Awhile

The foreign impulse to purchase Treasuries will likely persist, though probably at a somewhat diminished pace. From the perspective of private foreign parties, the United States remains a relatively bright spot in the global bond universe. Yields on Treasury 10-year debt presently are only 34 basis points below the 1991-1995 average, whereas yields in most other major bond markets are dramatically lower on the same comparison. Based on our Global Economics Group's forecasts, which anticipate a persistence of this general condition, foreign private cash flows to the Treasury market should be well supported in the coming months.

At the same time, it would not be surprising if official purchases of Treasuries were somewhat more muted than in the recent period, because the "orderly adjustment" upward in the U.S. dollar's value sought by central banks has been largely accomplished. To be sure, the moderate dollar downturn that we project

### U.S. Yields Look Relatively Attractive

| Country           | 10-Year Bond Yields |         |        |
|-------------------|---------------------|---------|--------|
|                   | 1991-1995           | 1/23/97 | Change |
| Japan             | 4.72%               | 2.60%   | -2.12% |
| France            | 8.13                | 5.59    | -2.54  |
| Germany           | 7.35                | 5.72    | -1.63  |
| Spain             | 11.06               | 6.62    | -4.44  |
| Canada            | 8.68                | 6.63    | -2.05  |
| Sweden            | 9.80                | 6.71    | -3.09  |
| Italy             | 11.00               | 7.20    | -3.80  |
| United Kingdom    | 8.64                | 7.35    | -1.29  |
| 8 Country Average | 8.67                | 6.05    | -2.62  |
| United States     | 6.88                | 6.54    | -0.34  |

over the next 12 months would probably attract foreign official investment in an effort to mitigate the descent. The degree of this demand should not be as great as in the past two years, however, since the economies of most other major industrial countries seem poised to gradually improve and, hence, the rationale for aggressive dollar support efforts is no longer as strong.

### Major Risk: Possible Pickup In European Growth

Probably the greatest threat to a continuation of solid overseas demands in the Treasury securities market this year is the possibility that European economic activity will finally gain speed. With business conditions already buoyant in the United Kingdom, short-term interest rates on the European continent at modern historical lows, and the dollar relatively firm against the German deutschemark, a number of fundamental factors conducive to a regional growth upturn are now in place. Should such a pick-up occur, bond markets in those countries would likely deteriorate as expectations for indefinitely accommodative monetary policies diminished. A rise in European interest rates would tend to squeeze yield differentials with the United States, and also would make a further appreciation of the dollar versus core European currencies more problematic. Under these circumstances, European appetite for U.S. government securities would probably shrink.

John Youngdahl

John Simpson

# Key U.S. Economic Data

|                                            | Latest Monthly Data |         |         |         | 6 Mo<br>Trend | 12 Mo<br>Trend | Next<br>Release |
|--------------------------------------------|---------------------|---------|---------|---------|---------------|----------------|-----------------|
|                                            | '96 Dec             | '96 Nov | '96 Oct | '96 Sep |               |                |                 |
| Nonfarm Payrolls (ch. Thousands)           | 262                 | 127     | 261     | -2      | 194           | 214            | Feb 7           |
| Unemployment Rate (%)                      | 5.3                 | 5.3     | 5.2     | 5.2     | 5.3           | 5.4            |                 |
| Index of Hours Worked (% ch)               | 0.9                 | 0.7     | -0.7    | 0.8     | 2.2           | 3.6            |                 |
| Average Hourly Earnings (% ch)             | 0.5                 | 0.8     | -0.1    | 0.3     | 3.8           | 3.8            |                 |
| Producer price finished goods index (% ch) | 0.5                 | 0.4     | 0.4     | 0.2     | 3.5           | 2.9            | Feb 14          |
| Excluding food and energy                  | 0.1                 | 0.1     | -0.3    | 0.2     | 0.6           | 0.6            |                 |
| Consumer price index (% ch)                | 0.3                 | 0.3     | 0.3     | 0.3     | 3.0           | 3.2            | Feb 19          |
| Excluding food and energy (% ch)           | 0.1                 | 0.2     | 0.2     | 0.3     | 2.4           | 2.6            |                 |
| Retail sales (% ch)                        | 0.6                 | -0.2    | 0.7     | 0.7     | 3.8           | 4.5            | Feb 13          |
| Excluding motor vehicles (% ch)            | 0.6                 | 0.0     | 0.7     | 0.5     | 3.3           | 4.4            |                 |
| Industrial Production (% ch)               | 0.8                 | 0.8     | -0.1    | 0.2     | 4.3           | 5.1            | Feb 14          |
| Manufacturing                              | 1.1                 | 0.7     | -0.1    | 0.3     | 5.1           | 5.6            |                 |
| Capacity utilization (%)                   | 83.8                | 83.4    | 83.0    | 83.4    | 83.4          | 83.2           | Feb 14          |
| Manufacturing                              | 82.8                | 82.2    | 81.9    | 82.3    | 82.2          | 82.1           |                 |
| Housing Starts (annual rate, thousands)    | 1329                | 1514    | 1385    | 1461    | 1449          | 1465           | Feb 20          |
| Single-family                              | 1024                | 1161    | 1088    | 1138    | 1133          | 1155           |                 |
| Trade balance (billions, monthly)          | --                  | -8.4    | -8.0    | -11.4   | -9.7          | -9.1           | Feb 19          |
| Merchandise                                | --                  | -14.7   | -14.1   | -17.5   | -15.8         | -15.2          |                 |
| Factory Orders (% ch)                      | --                  | -0.4    | 1.1     | 2.6     | 4.0           | 6.1            | Feb 5           |
| Durable Goods                              | --                  | -1.6    | 0.5     | 4.5     | 1.7           | 5.7            | Jan 29          |
| Personal Income (% ch)                     | --                  | 0.5     | 0.0     | 0.6     | 5.3           | 5.5            | Feb 3           |
| Wages and Salaries                         | --                  | 0.6     | -0.1    | 0.7     | 6.0           | 6.0            |                 |
| Purchasing Managers' Index (%)             | 54.0                | 52.4    | 50.4    | 51.7    | 51.7          | 50.1           | Feb 3           |
| Consumer Sentiment U Mich (Feb 66=100)     | 96.9                | 99.2    | 96.5    | 94.7    | 96.2          | 93.6           | Jan 31          |
| Conference Board (1985=100)                | 113.8               | 109.5   | 107.3   | 111.8   | 110.2         | 104.6          | Jan 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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| CD   | Convertible Debentures       | ES      | Equity Securities               | PC      | Participating Certificates |
| CFF  | Convertible Preferreds       | For RS  | Foreign Registered Shares       | RB3     | Registered Bearer Shares   |
| CLA  | Class A Shares               | G       | Genusschein                     | RS      | Registered Shares          |
| CLB  | Class B Shares               | Gds     | Global Depositary Receipts/Shrs | ZC      | Zero Coupon Convertibles   |
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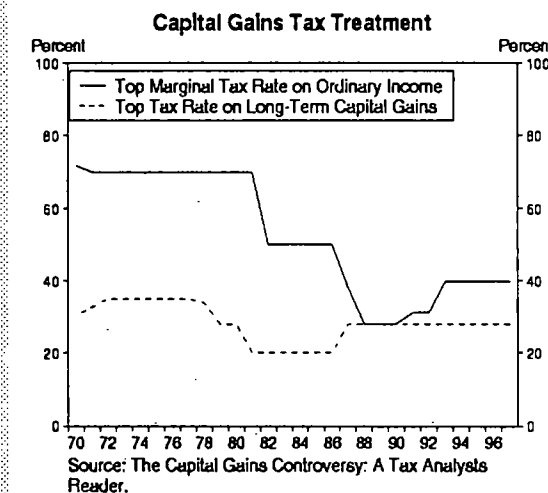
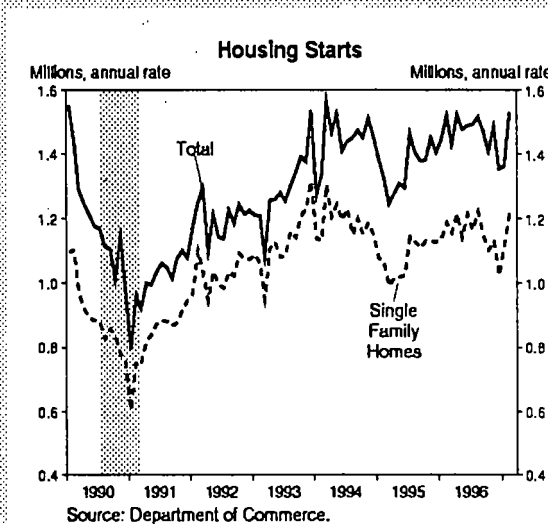
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# U.S. Economics Analyst

## Capital Gains Tax Reduction: Hostage to the Budget

- Chairman Greenspan's testimony before the Joint Economic Committee reinforces our belief that the Federal Open Market Committee will implement a 25-basis-point tightening at the March 25 FOMC meeting. (As a result of our confidence that Fed officials will tighten monetary policy and the passage of time, we have rolled forward our interest rate forecast, which bumps up the 3-month and 6-month rate forecasts, shown on page 8, slightly.)
- If Fed officials do tighten monetary policy, the communique that accompanies the tightening is likely to imply that the Fed perceives the tightening move as preemptive and, hence, that the magnitude of subsequent tightening is likely to be small. It is unlikely, however, that the FOMC statement will imply any limits on the scope for future monetary policy adjustments.
- A 50-basis point tightening appears highly unlikely. Such an action would not fit with Chairman Greenspan's style, nor would it be consistent with an inflation environment that is still quiescent.
- The prospects for broad-based capital gains tax reduction have fallen to no more than 50%. This reflects the difficulties that the Clinton Administration and the Republican-controlled Congress are having in finding common ground in reaching a balanced budget agreement.
- Any agreement on capital gains that does occur is likely to be limited to enactment of a 50% exclusion that would have the effect of cutting the top marginal rate to 19.8% from 28%. Revenue constraints suggest that the cut may not be applied retroactively to the start of 1997.



## Trade Recommendations

- Stay short June '97 Eurodollar futures, maintaining target of 93.75 and moving stops to 94.18, down from 94.30.

*The next issue of the U.S. Economics Analyst will be published Thursday, March 27.*

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**Issue No: 97/12  
March 21, 1997**

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## I. Weekly Wrapup

### Economic and Market Overview

Yields on U.S. debt instruments have continued to drift higher and equity prices have declined as speculation has intensified about a possible prompt Federal Reserve interest rate increase. Financial market developments were not greatly influenced by the most recent economic data reports, which conformed to earlier signs of strong business conditions but also showed a sharply widening trade deficit.

Housing starts rebounded in February, rising 12.2% overall to 1.53 million annual units, a three-year high. Starts in the single-family sector posted a second consecutive steep monthly rise, to match the highest volumes experienced in the past 30 months. While this surge partially reflects a recovery from poor weather, it also illustrates an absence of credit restraint in the economy. Positive conditions for manufacturers were indicated by another rise in the Philadelphia Fed's business outlook index, to +21.1%. The area's factories are experiencing good times and their attitudes about future activity are decidedly upbeat, which bodes favorably for their capital investment outlays. Fast domestic growth, meanwhile, is driving up the trade deficit, which is helping to brake the expansion somewhat. The overall trade gap swelled to \$12.7 billion in January, primarily due to a 2.2% jump in imports.

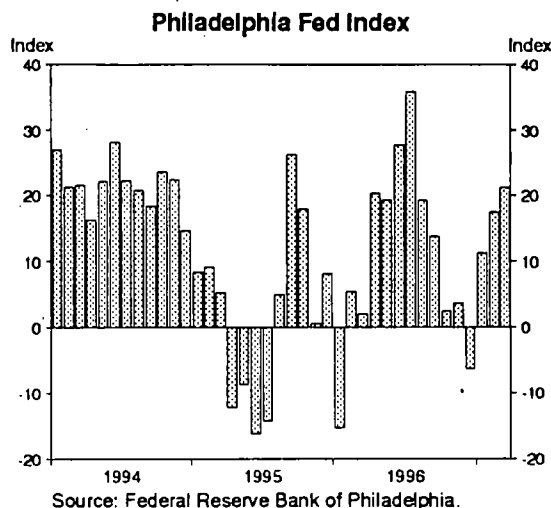
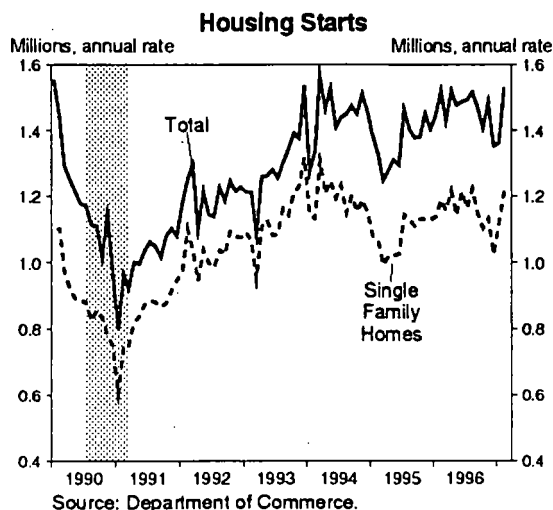
Consumer prices during February climbed 0.3% overall and 0.2% excluding food and energy, keeping the year-to-year changes in the two measures at 3.0% and 2.5%, respectively. After adjusting for changes

made to the CPI methodology by the Bureau of Labor Statistics over the past two years, however, the trend in core retail inflation looks to have been essentially flat rather than modestly down.

### Federal Reserve Policy

Fed Chairman Greenspan's remarks before the Joint Economic Committee have reinforced our already-strong belief that the FOMC will decide to tighten monetary policy by 25 basis points at the March 25 meeting. Whereas in his late-February testimony the Chairman said that he could not "rule out a situation in which a preemptive policy tightening may become appropriate," his latest comments stressed the potential for such action to occur next week. Greenspan noted the vigorous pace of early 1997 economic growth, referring specifically to rapid payroll gains, unusually low jobless claims, and buoyant retail sales as signals that demands for labor and goods remain strong. These are the very trends he identified at the Humphrey-Hawkins hearings as posing the greatest risks to a sustained, noninflationary expansion.

In our view, the Fed's decision next week will have important repercussions for the policy outlook over a longer horizon, as it will establish the current framework for monetary strategy. A tightening on the 25th would enhance the probability of another rise relatively soon, because it would establish that Greenspan and Co. are more focused on the rapid pace of demand and output growth (which should persist awhile) than on current mild inflation patterns. In contrast, a decision to keep policy steady would





suggest that policy makers are prepared to show considerable patience with strong economic activity in the absence of a rise in the inflation rate.

### Fiscal and Political Developments

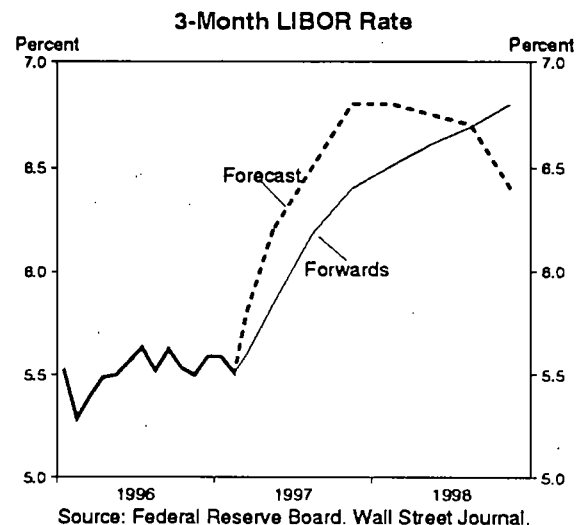
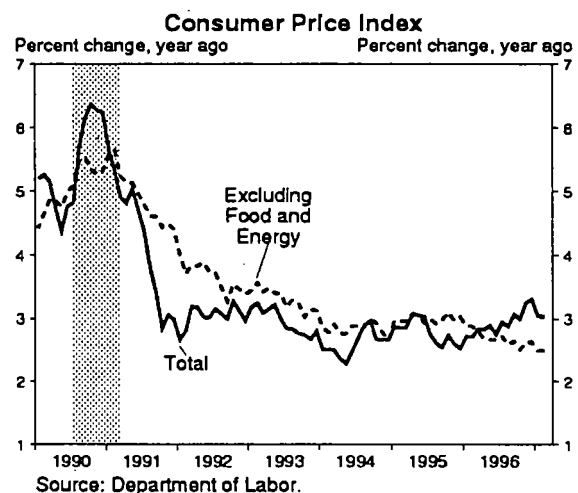
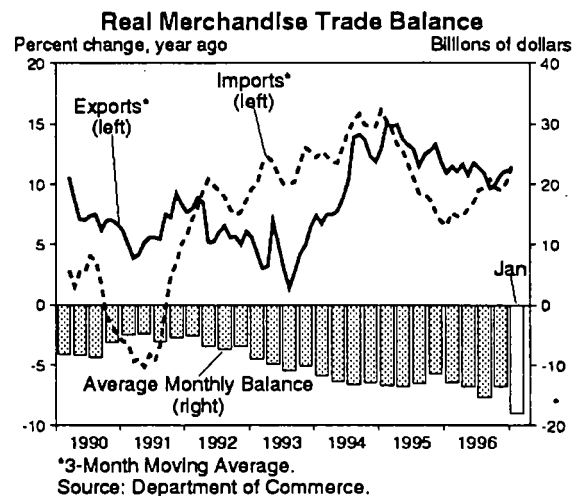
When Congress returns from a two-week Easter recess that begins today, the budget process will enter a crucial period. House and Senate budget leaders at that point are expected to present their blueprints for fiscal balance by 2002, which will be fashioned into a formal congressional budget resolution. These proposals will offer a fresh opportunity for intensified negotiations between lawmakers and the Clinton administration toward multi-year budget reforms. If there is no progress toward a deal by mid-to-late May, however, many lawmakers will be inclined to give up on the effort in favor of a piecemeal approach to the budget, which would offer little potential for genuine fiscal restraint in the near future.

### 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 recommend an outright short position in June 1997 Eurodollar futures, on two grounds: (1) it is very likely that the Fed will tighten at their meeting next Tuesday; (2) such a step will force market participants to raise the probabilities they assign to at least one additional rate rise before mid-summer, because it will show that the central bank is more sensitive to strong economic growth (which should persist in the near term) than low inflation. A target of 93.75 should be retained, with stops lowered from 94.30 to 94.18, a level which should not be revisited unless the Fed chooses to further delay action. In that unlikely event, we would want to close out all short positions immediately as we would expect the Eurodollar futures market to rally sharply.

Based on this reasoning, we remain neutral on the bond market at current price levels. The bond market already appears to discount about 50 basis points of Fed tightening, and hence, yields may not rise much further until it becomes clear that the central bank faces a bigger-than-expected job in slowing the economy to or below trend growth. In the event that bonds should rally in the wake of a Fed rate increase, we would look to reestablish shorts in anticipation of another price downdraft once the dimensions of the Fed's prospective task become better appreciated.





## II. Capital Gains Tax Reduction: Hostage to the Budget

Broad-based capital gains tax reduction has been a long awaited, but unrealized goal of many investors and the Republican leadership in Congress.<sup>1</sup> Prospects this year are tied closely to the budget negotiation process. Without agreement on a balanced budget plan, the likelihood of tax relief on this front is virtually nil this year. If a budget deal is reached, however, then the prospects for a reduction in the effective long-term capital gains tax rate improve dramatically. President Clinton has not ruled out such cuts and capital gains tax reduction is a top priority among many Republicans.

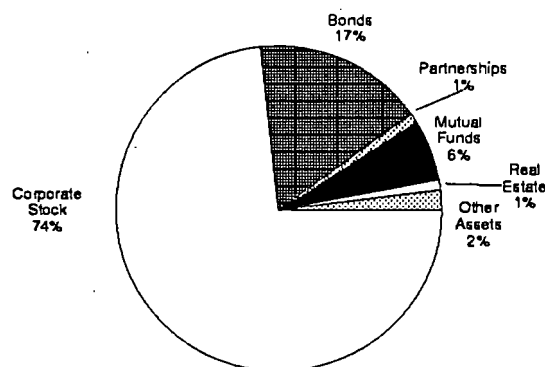
At this point, we would put the probability of a broad-based capital gains tax cut at no more than 50%. This reflects two factors. First, the prospects for a budget deal have faded somewhat in recent weeks. Second, there is a possibility that the reductions in spending that would push the budget towards balance could be separated from the tax cut proposals. In this case, there is a chance that there could be a balanced budget deal without any agreement on a tax cut package. Under such circumstances, capital gains legislation is very unlikely to be enacted on its own. It must be packaged with other tax cut proposals, such as a child tax credit, that help lower income groups so that the tax cut benefits are not skewed toward high-income households.

### Q. What would be the likely form of capital gains tax cut legislation?

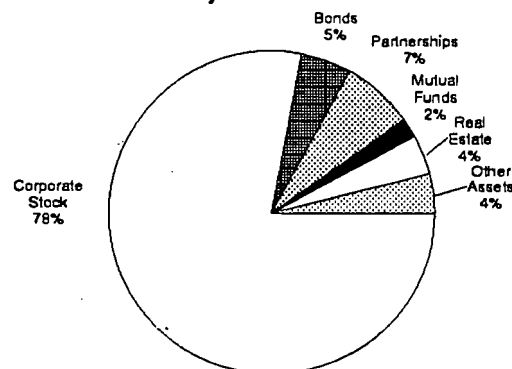
The most likely form of capital gains tax reduction would be a 50% exclusion of long-term capital gains from the taxable income of individual investors. This would effectively reduce the top rate on long-term capital gains to 19.8% (half of the top marginal income tax rate of 39.6%) from the current top long-term capital gains rate of 28%. The exclusion would apply broadly to stocks, other financial instruments, and real estate, but probably would exclude collectibles such as art or stamps.

Republican proposals to cut capital gains taxes also generally include a capital gains tax cut for corporations and indexation of capital gains to inflation (for example, see HR 1033 and S 2). These

Distribution of Long Term Capital Gains, 1994  
By Number of Transactions

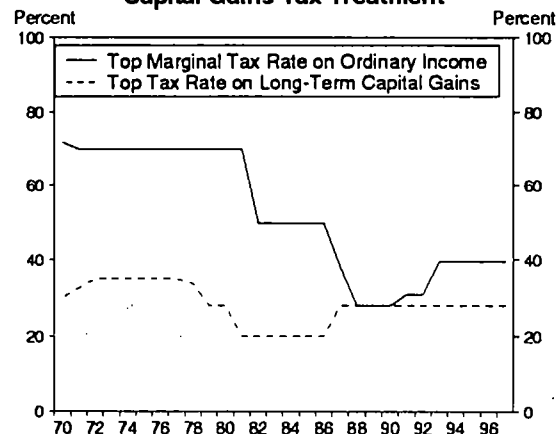


By Dollar Value



Source: Joint Committee on Taxation.

Capital Gains Tax Treatment



Source: The Capital Gains Controversy: A Tax Analysts Reader.

<sup>1</sup> For a more complete discussion of the issues surrounding capital gains tax reduction see *Capital Gains Tax Reduction: Pluses and Minuses*, April 1995.



elements are very unlikely to be enacted into law. Not only will Democrats object strongly to such provisions, but also revenue constraints suggest narrower capital gains tax relief is likely. Indexation is likely to fail, in part because of the complexity of implementing such a proposal.

**Q. What will be the effective date of any capital gains tax reduction?**

Current legislative proposals generally anticipate that any capital gains tax cut would apply retroactively to the beginning of 1997. However, this intention is likely to fall victim to revenue constraints. For example, we estimate that postponement of the effective date to October 1, 1997 would save roughly \$10 billion in tax revenue.

**Q. Proponents of capital gains tax cuts argue that such cuts would spur saving and investment and economic growth. How valid are these arguments?**

We are generally skeptical that capital gains tax reduction would have a major impact on saving and/or investment. Given the ability of investors to defer capital gain realizations and the bump-up in basis at death that allows avoidance of capital gains taxes altogether, the effective rate on capital gains is far lower than the 28% top statutory rate. In fact, assuming no change in the pace of realizations, we estimate that a reduction in the statutory rate to 19.8% from 28% would likely cut the effective rate by about 3 percentage points to around 7%.<sup>2</sup> This would be too small a change to have much of an impact on saving and investment, especially when one considers that saving rates historically have been very insensitive to changes in rates of return.

**Q. Does this mean that there are no benefits from capital gains tax reduction?**

No. Clearly, the current marginal capital gains tax rate deters efficient portfolio allocation, especially among investors with smaller-sized portfolios that are not growing rapidly. While this probably does not result in a significant loss in the efficiency of the allocation of capital given the important role of tax-advantaged investors (e.g., pension funds, investors via 401(k) plans, life insurance companies) in helping to set capital asset prices, it does cause investors

**Household Corporate Equity Holdings, 1995**

| Income (\$)        | Percent of Families | Median Value for Families with Holdings (\$000) |
|--------------------|---------------------|-------------------------------------------------|
| Less than \$10,000 | 2.5%                | \$2.0                                           |
| 10,000-24,999      | 9.2                 | 5.7                                             |
| 25,000-49,999      | 14.3                | 6.9                                             |
| 50,000-99,999      | 26.0                | 5.7                                             |
| 100,000 and more   | 45.2                | 30.0                                            |
| All Families       | 15.3%               | \$8.0                                           |

Source: Survey of Consumer Finances, Federal Reserve Board.

**Household Mutual Fund Holdings, 1995**

| Income (\$)        | Percent of Families | Median Value for Families with Holdings (\$000) |
|--------------------|---------------------|-------------------------------------------------|
| Less than \$10,000 | 1.8%                | \$25.0                                          |
| 10,000-24,999      | 4.9                 | 8.0                                             |
| 25,000-49,999      | 12.4                | 12.5                                            |
| 50,000-99,999      | 20.9                | 15.0                                            |
| 100,000 and more   | 38.0                | 48.0                                            |
| All Families       | 12.0%               | \$19.0                                          |

Source: Survey of Consumer Finances, Federal Reserve Board.

**Capital Gain Realizations, Tax Year 1994**

| Adjusted Gross Income (\$) | Total Returns with Gains (millions) | Percent of Returns with Gains in Income Class | Amount (billions) | Share |
|----------------------------|-------------------------------------|-----------------------------------------------|-------------------|-------|
| Less than \$15,000         | 1.6                                 | 3.6%                                          | \$ 6.6            | 4.7%  |
| 15,000-29,999              | 1.6                                 | 5.4                                           | 5.9               | 4.2   |
| 30,000-49,999              | 1.7                                 | 8.3                                           | 8.2               | 5.8   |
| 50,000-74,999              | 1.7                                 | 12.8                                          | 10.8              | 7.7   |
| 75,000-99,999              | 0.9                                 | 19.2                                          | 9.0               | 6.4   |
| 100,000-199,999            | 1.1                                 | 32.5                                          | 19.7              | 14.1  |
| 200,000 and more           | 0.6                                 | 50.2                                          | 79.8              | 57.0  |
| All Returns                | 9.2                                 | 7.9%                                          | \$139.9           |       |

Source: Statistics of Income (SOI) Bulletin, Spring 1996, Internal Revenue Service.

themselves to hold portfolios that are less than optimal as far as diversification and risk characteristics. Also, the current capital gains tax system would have to be characterized as very inefficient. Academic studies indicate that less than 50% of the unrealized capital gains of taxable investors are ultimately subject to a capital gains tax.

**Q. How much would a 50% exclusion cost in terms of foregone government revenue?**

No one really knows, because it depends on how responsive the rate of realizations is to reductions in the capital gains tax rate. In terms of budget scoring, a capital gains tax cut probably will be scored as a revenue loser over the 1998-2002 period that is relevant to current efforts to negotiate a balanced budget plan. In December 1995, the Joint Committee on Taxation scored similar capital gains tax cut legislation as losing about \$27 billion over the 1996-2002 period and as losing \$21 billion over the shorter, five year 1996-2000 period.

<sup>2</sup> The actual reduction in the effective rate would undoubtedly be smaller as the rate of realizations climbed in response to the reduction in the capital gains tax rate.

The Goldman Sachs logo, consisting of the words "Goldman Sachs" in a white serif font on a black rectangular background.

Most likely, the Joint Committee on Taxation will score the new proposal less negatively for two reasons. First, the stock market has appreciated roughly 70% since the beginning of 1995. Thus, there has probably been a significant buildup of unrealized gains. Second, the well-publicized push of Republicans for capital gains tax relief has undoubtedly caused some investors to delay selling appreciated assets. This suggests that there will be a bigger revenue surge in the year following enactment now than what was built into the 1995 Joint Committee on Taxation projections.

**Q. What are the implications of enactment for equity prices?**

There is likely to be a short-run negative impact on equity prices as investors sell appreciated assets and a longer-run positive impact on equity market valuation. In terms of short-term selling pressure, the 1986 experience is instructive. In mid-1986 the Tax Reform Act of 1986 was enacted. The Act raised the capital gains tax prospectively at the start of 1987 by eliminating the capital gains exclusion. This raised the top marginal capital gains tax rate to 28% at the start of 1987 from 20%. This caused a surge of selling as investors rushed to take advantage of the lower top rate before the increase in 1987. This held down stock prices temporarily. Once 1987 arrived and this selling pressure stopped, the stock market surged ahead.

This time around the selling pressure probably will not be as intense given that the rate will be lowered rather than raised. Thus, there is no window during which investors must act to take advantage of the lower capital gains rate. This should mitigate against a surge in realizations. However, given the long-anticipated nature of the capital gains tax cut combined with the sharp appreciation of stock prices, the pace of realizations will undoubtedly climb. This could restrain stock prices for an undetermined period, perhaps a few months.

Over the long-run, a cut in the capital gains tax rate would tend to push up equity prices by raising the after-tax rate of return. To see this, assume a 2% dividend yield and 8% capital appreciation per year, a decline in the effective capital gains tax rate to 7% from 10%, and a marginal tax rate of 39.6%. With

these assumptions, one can show that the dividend yield would need to decline by about 40 basis points to keep after-tax returns unchanged. A 25% rise in stock prices would be required to reduce the dividend yield by that amount.

A number of factors suggest that the impact would be substantially less than this. First, the demand for equities is also determined by non-taxable investors. Assuming, the impact is roughly proportional to their share of equity holdings, this implies a rise in equity prices of about one-half of 25% or roughly 12%. Second, as equity prices increased and the cost of equity financing declined, this would increase the supply of equities from corporate issuers, exerting downward pressure on equity prices. Third, if the capital gains tax cut did not generate a rise in the savings rate, the increase in equity prices would be accompanied by a rise in interest rates. Otherwise, the cost of capital would fall, which would be inconsistent with an unchanged saving supply. The rise in interest rates would also tend to cap any rise in equity market valuation. Fourth, to the extent that investors currently anticipate a capital gains tax cut, some of its potential impact on valuation may already be reflected in the level of equity prices. On balance, these factors suggest that while a capital gains tax cut would be positive development for the equity market, the degree of uplift would be relatively modest.

**Q. What other effects might capital gains tax reduction have on the real economy?**

One consequence might be increased consumer spending as investors realized gains and increased their liquidity. In this respect, the experience during the second half of 1986 is illuminating. The surge in capital gains realizations was accompanied by a 2 percentage point drop in the saving rate between the second and fourth quarters of 1986. Apparently, the liquidation of equity holdings helped facilitate greater spending. In this regard, the lack of an apparent wealth effect over the past few years may be due, in part, to the fact that the expectation of capital gains tax legislation has caused the realization rate to fall and this has helped to thwart the wealth effect.

**Bill Dudley**



## Key U.S. Economic Data

|                                            | Latest Monthly Data |         |         |         | 6 Mo<br>Trend | 12 Mo<br>Trend | Next<br>Release |
|--------------------------------------------|---------------------|---------|---------|---------|---------------|----------------|-----------------|
|                                            | '97 Feb             | '97 Jan | '96 Dec | '96 Nov |               |                |                 |
| Nonfarm Payrolls (ch. Thousands)           | 339                 | 247     | 231     | 181     | 210           | 228            | Apr 4           |
| Unemployment Rate (%)                      | 5.3                 | 5.4     | 5.3     | 5.3     | 5.3           | 5.3            |                 |
| Index of Hours Worked (% ch)               | 2.7                 | -1.6    | 0.8     | 0.8     | 5.8           | 3.9            |                 |
| Average Hourly Earnings (% ch)             | 0.2                 | 0.2     | 0.4     | 0.8     | 3.7           | 3.8            |                 |
| Producer price finished goods index (% ch) | -0.4                | -0.3    | 0.6     | 0.1     | 1.4           | 2.2            | Apr 11          |
| Excluding food and energy                  | -0.1                | 0.0     | 0.1     | -0.1    | 0.0           | 0.4            |                 |
| Consumer price index (% ch)                | 0.3                 | 0.1     | 0.3     | 0.3     | 3.1           | 3.0            | Apr 15          |
| Excluding food and energy (% ch)           | 0.2                 | 0.1     | 0.2     | 0.2     | 2.5           | 2.5            |                 |
| Retail sales (% ch)                        | 0.8                 | 1.5     | 0.5     | -0.1    | 8.6           | 5.1            | Apr 11          |
| Excluding motor vehicles (% ch)            | 0.5                 | 1.4     | 0.3     | 0.2     | 7.4           | 5.4            |                 |
| Industrial Production (% ch)               | 0.4                 | -0.1    | 0.4     | 0.8     | 3.9           | 3.8            | Apr 16          |
| Manufacturing                              | 0.8                 | -0.3    | 0.6     | 0.8     | 4.5           | 4.3            |                 |
| Capacity utilization (%)                   | 83.3                | 83.2    | 83.5    | 83.4    | 83.2          | 83.2           | Apr 16          |
| Manufacturing                              | 82.5                | 82.1    | 82.5    | 82.4    | 82.3          | 82.2           |                 |
| Housing Starts (annual rate, thousands)    | 1528                | 1362    | 1353    | 1486    | 1434          | 1461           | Apr 16          |
| Single-family                              | 1215                | 1117    | 1024    | 1133    | 1124          | 1150           |                 |
| Trade balance (billions, monthly)          | --                  | -12.7   | -10.5   | -8.0    | -10.2         | -9.8           | Apr 17          |
| Merchandise                                | --                  | -19.0   | -16.9   | -14.4   | -16.4         | -15.9          |                 |
| Factory Orders (% ch)                      | --                  | 2.5     | -1.5    | -0.5    | 3.8           | 5.2            | Apr 2           |
| Durable Goods                              | --                  | 3.6     | -1.8    | -1.7    | 2.8           | 4.5            | Mar 26          |
| Personal Income (% ch)                     | --                  | 0.3     | 0.7     | 0.6     | 5.9           | 6.1            | Mar 31          |
| Wages and Salaries                         | --                  | -0.1    | 1.1     | 0.8     | 6.7           | 6.9            |                 |
| Purchasing Managers' Index (%)             | 53.1                | 52.0    | 53.8    | 52.4    | 52.2          | 51.3           | Apr 1           |
| Consumer Sentiment U Mich (Feb 66=100)     | 99.7                | 97.4    | 96.9    | 99.2    | 97.4          | 95.2           | Mar 28          |
| Conference Board (1985=100)                | 118.4               | 118.7   | 114.2   | 109.5   | 113.3         | 108.8          | Mar 25          |

Note: Percentage changes are month to month for last four months, annualized for 6- and 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 meeting will be the major focus of attention, with a 25-basis point tightening of monetary policy expected. A benign inflation environment suggests that a 50-basis point tightening is very unlikely. Also, we expect that the FOMC will leave the discount rate unchanged. A discount rate increase would signal a more aggressive monetary policy posture (March 25).
- The Conference Board's consumer confidence index is likely to move higher, reflecting improved labor market conditions. Investors should pay particular attention to the job availability index as this is a standard favored by Chairman Greenspan for assessing the level of job insecurity (March 25).
- Durable goods orders are likely to rise only slightly as a drop in autos and aircraft orders offsets strength elsewhere (March 26).
- New home sales appear likely to weaken sharply in February, reversing the upward surge in January (March 28).

### Economic Releases and Other Events

| Date       | Time  | Indicator                             | Estimate |           | Last Report |
|------------|-------|---------------------------------------|----------|-----------|-------------|
|            |       |                                       | GS       | Consensus |             |
| Tue Mar 25 | 10:00 | Consumer Confidence (Mar)             | 119.0    | 118.0     | 118.4       |
|            | 10:00 | Existing Home Sales (Feb)             | +1.0%    | +1.0%     | +2.1%       |
| Wed Mar 26 | 8:30  | Durable Goods Orders (Feb)            | +0.2%    | 0.0%      | +4.0%       |
| Fri Mar 28 | 8:30  | Real GDP (Q4 '96—Revision)            | +3.9%    | +4.0%     | +3.9%       |
|            | 8:30  | Chain-Weight Price Index (Q4 '96—Rev) | +1.8%    | +1.4%     | +1.8%       |
|            | 10:00 | New Home Sales (Feb)                  | -8.0%    | -5.7%     | +8.6%       |

- FOMC Meeting (Tue, Mar 25)
- Treasury 2-Year Note Auction (Tue, Mar 25)
- Treasury 1-Year Bill Auction (Wed, Mar 26)
- Treasury 5-Year Note Auction (Wed, Mar 26)
- APICS Survey (Thu, Mar 27 - 8:30)
- Consumer Sentiment—Final (Thu, Mar 27 - 10:00)
- Help-Wanted Index (Thu, Mar 27 - 10:00)
- February FOMC Minutes (Thu, Mar 27 - 2:00)

### Interest Rates: Forecast vs. Forward Yields:

|              | 3 mo | 6 mo | 12 mo |
|--------------|------|------|-------|
| LIBOR 3 mo   | 6.2% | 6.5% | 6.8%  |
| Forward      | 5.9  | 6.2  | 6.5   |
| 2 Yr T-Note  | 6.6  | 6.8  | 7.0   |
| Forward      | 6.4  | 6.5  | 6.7   |
| 10 Yr T-Note | 7.0  | 7.1  | 7.2   |
| Forward      | 6.8  | 6.8  | 6.9   |

### Key Numbers in the Business Outlook

|                    | 1996 | 1997 |      | 1996  | 1997E |
|--------------------|------|------|------|-------|-------|
|                    | Q4   | Q1E  | Q2E  |       |       |
| Real GDP           | 3.9% | 3.5% | 3.4% | 2.4%  | 3.3%  |
| Ind. Prod., Mfg.   | 4.3  | 4.0  | 5.1  | 2.8   | 4.7   |
| CPI                | 3.3  | 2.7  | 3.2  | 2.9   | 3.1   |
| After-Tax Profits* | 9.3E | 4.4  | 5.0  | 14.7E | 3.0   |
| Unemployment       | 5.3  | 5.3  | 5.1  | 5.4   | 5.1   |

\* Excluding inventory profits; adjusted for depreciation distortions.

TO: Gene Sperling  
White House

FROM: Gaia Federiconi  
Goldman, Sachs & Co.

TEL:

RE:



**Investment  
Research**

DATE: Jan 31, 1997

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| BAS  | Bearer A Shares              | EC      | Euro Convertibles               | NVS     | Nonvoting Shares           |
| BS   | Bearer Shares                | ED      | Equity Derivatives              | OS      | Ordinary Shares            |
| CD   | Convertible Debentures       | ES      | Equity Securities               | PC      | Participating Certificates |
| CPF  | Convertible Preferreds       | For RS  | Foreign Registered Shares       | RBS     | Registered Bearer Shares   |
| CLA  | Class A Shares               | G       | Genucocohein                    | RS      | Registered Shares          |
| CLB  | Class B Shares               | Gds     | Global Depositary Receipts/Shrs | ZC      | Zero Coupon Convertibles   |
| CS   | Common Stock                 | New CLA | New Class A Special Shares      |         |                            |

CPF(RTRSY) News Corp. convertible preferred convertible into Reuters ordinary shares

EC(RTRSY) United News Euro convertibles convertible into Reuters ordinary shares

EC(ENT) Elf Aquitaine Euro convertibles convertible into Enterprise Corp. ordinary shares

EC(MMM) D&K Euro convertibles convertible into Minnesota Mining & Mfrg common stock

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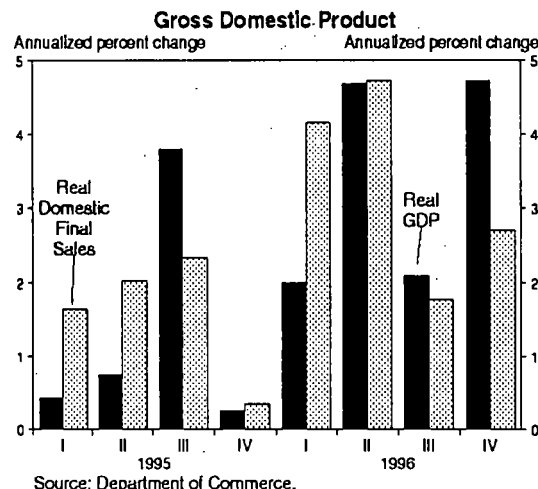
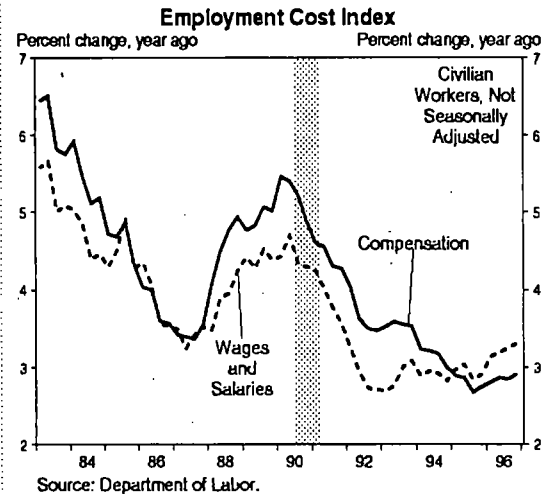
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# U.S. Economics Analyst

## Labor Costs: The Horse Is Out of the Barn

- The conventional wisdom in financial markets is probably right in assuming that the 0.8% fourth-quarter rise in the employment cost index will not be enough to provoke a tightening in monetary policy at the Feb. 4-5 FOMC meeting, although such a move cannot be completely ruled out.
- However, the report confirmed—via an ongoing acceleration in wages and salaries—that the U.S. labor market is tight, as discussed in detail on pp. 4-6. This acceleration is widespread across major regions, occupations, and industries. Moreover, it appears that the long downward trend in benefit cost inflation is over, in which case price inflation is apt to come under more upward pressure.
- On the growth front, most of the latest indicators have been a bit softer than expected, although still consistent with above-trend growth. While real GDP rose at a 4.7% annual rate last quarter, real domestic final sales rose at a more moderate 2.8% pace. Meanwhile, weakness in durable goods orders was skewed toward electrical equipment, and confidence remained high.
- In this context, it is probably only a matter of time before Fed officials decide to raise interest rates. We expect that the next tightening phase will begin sometime this spring, possibly as early as late March.
- President Clinton's State of the Union Address and fiscal 1998 budget message are apt to evoke a partisan response from Republican congressional leaders on delivery. Even so, the prospects for a bipartisan compromise look good.



## Trade Recommendations

- Close out short positions in December 1997 Eurodollar futures.
- Cover shorts in March '97 T-bonds; establish long position on a break of 111.24, with a target of 114.00.

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**Issue No: 97/5  
January 31, 1997**

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## I. Weekly Wrapup

### Economic and Market Overview

Bonds gained ground on balance during the week, as most market participants concluded that labor costs were not rising fast enough to provoke an immediate tightening in U.S. monetary policy. But the failure to hold onto larger gains following softer-than-expected economic reports suggests that residual worries about a near-term tightening persist in some quarters. In this setting, equity prices have been volatile, but the dollar has continued to strengthen, reaching another four-year high against the yen.

Last quarter's 0.8% rise in the employment cost index matched published consensus figures, but a sell-off prior to the report implicitly built in fears of a larger increase. Thus, the news provoked a collective sigh of relief. Still, as discussed in detail on pp. 4-6, the report confirms a pattern of ongoing acceleration in wages and salaries and also suggests that the long downward trend in benefit cost inflation has ended.

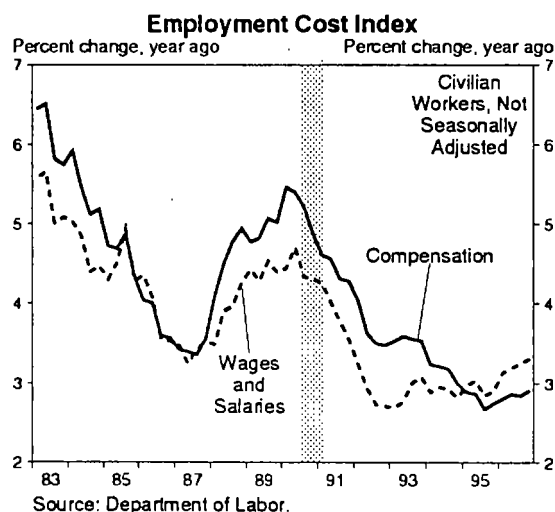
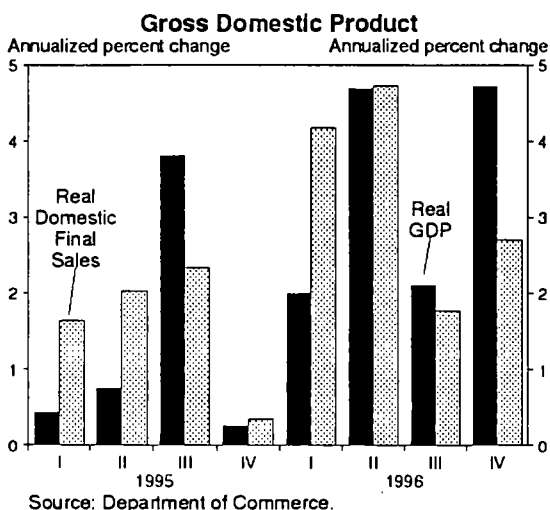
Meanwhile, real GDP surged at a 4.7% annual rate in the fourth quarter, according to preliminary estimates. However, almost half of this growth (2.2 percentage points) was due to trade balance improvement, much of which is apt to be reversed this quarter. In light of this, the 2.8% annualized increase reported for real domestic final sales is probably the best gauge of the underlying growth trend. While this figure fell well short of our 3.9% expectation, mainly because of declines in home building and business equipment outlays, it is still clearly above our 2% estimate of long-term sustainable growth.

Financial markets may have difficulty coping with wage inflation and stronger growth, but consumers definitely are not. Both developments propelled the Conference Board's index of consumer confidence to 116.8, an eight-year high. The job availability index, showing the percentage of respondents who feel jobs are plentiful minus the percentage saying jobs are hard to get, also rose to +10.8%. These results bode well for continued strength in consumer spending.

Other data during the week were on the soft side, including an unexpected 1.7% drop in durable goods orders. This followed a similar decline in November. In both months, the declines were concentrated in electrical equipment, which could reflect aggressive pricing and changeovers to a new product cycle in the computer industry. Thus, it is unclear how much weight should be attached to these figures. Even after factoring in the November and December readings, total durable goods orders remained in the growth channel that prevailed throughout the year. And backlogs of unfilled orders held steady in December, after having climbed through much of 1996.

### Federal Reserve Policy

In his latest testimony, Chairman Greenspan focused on the CPI bias and gave few additional clues about his reading on the economy, expressly deferring any discussion of monetary policy until the February 27 Humphrey-Hawkins hearings. Although a rate hike at the February 4-5 FOMC meeting cannot be ruled out completely, it does not appear that Fed officials are in a big hurry to tighten credit.





That said, Fed officials have been struck by the robust pace of economic growth, as indicated by Chairman Greenspan in his previous testimony, and they will undoubtedly scrutinize both the growth and inflation data closely in coming weeks for any signs that the brakes on economic activity need to be applied soon. In this regard, they will be especially attentive to signs of further labor-market tightening, mindful of the fact that the indexes of employment costs are all tilting higher. Unless conditions change, it is highly probable that a tightening will begin sometime this spring, quite possibly as early as late March.

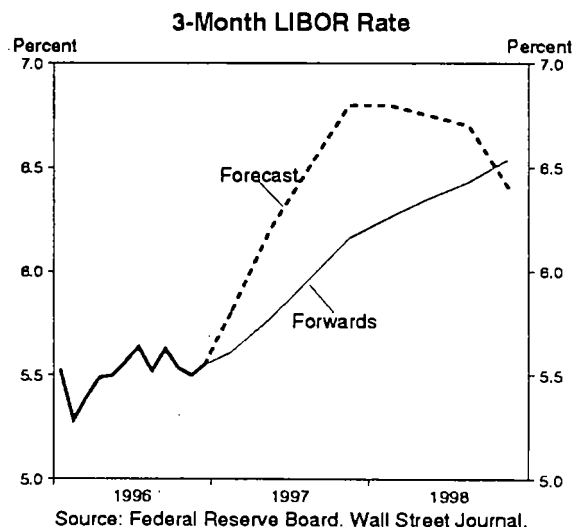
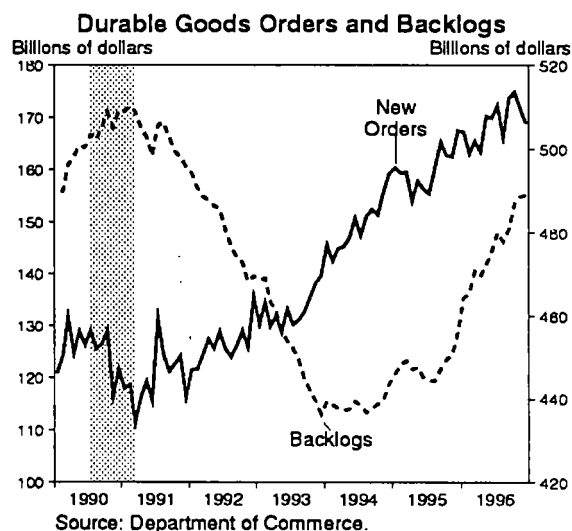
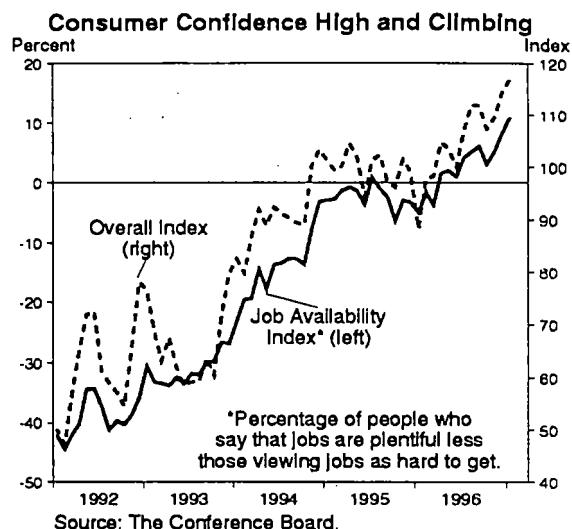
### Fiscal and Political Developments

Republican response to President Clinton's State of the Union address and fiscal 1998 budget plan is apt to carry a negative spin, despite somewhat more favorable underlying sentiments. For instance, as a means of scoring political points, Republicans are likely to attack the president's budget on the grounds that 1) budget assumptions work off the basis of OMB estimates rather than CBO projections, 2) Clinton's plan will likely show little, if any, deficit reduction over the next three years, pushing major cuts out past the year 2000, and 3) his plan will probably include a tax cut of approximately \$100 billion over the next five years, barely half of the \$194 billion sought by Senate Republicans. Beneath the rhetoric, however, the prospects for a deal later this year remain good, with modest variations from the president's blueprint.

### 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 the FOMC is very unlikely to boost rates at their meeting next week, we recommend covering short positions in both December 1997 Euros and March T-bond futures. The combination of a steady Fed stance and probable soft January data on hourly earnings and the workweek could foster a more sanguine outlook among investors regarding medium-term monetary policy prospects. Such a change in sentiment should not depress forward Eurodollar rates very much, because the money market does not now discount much risk of tightening during 1997. The bond sector, by contrast, seems to reflect greater concerns about future rate hikes, with the bill-to-bond yield spread currently about 30 basis points above average. For this reason, we would advise getting long March T-bonds on an intra-day price break above 111.24, with an objective of 114.00.





## II. Labor Costs: The Horse Is Out of the Barn

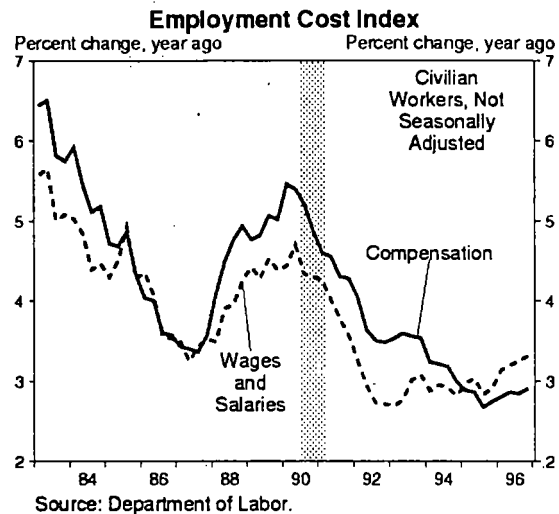
Cognizant of the importance Federal Reserve officials will attach to signs of rising labor-market stress in assessing inflation risks, financial markets stood still for a split second on January 28 as the U.S. Labor Department released its latest data on the employment cost index (ECI). This report revealed that the index of total compensation—wages and salaries plus fringe benefits—was 0.8% higher at the end of the fourth quarter than at the end of the third. Over the entire year, the index advanced 2.9%, marginally above the 2.8% increase posted in the 12 months to September.<sup>1</sup>

Will this slight pickup in labor cost inflation prompt a tightening in monetary policy? Probably not at the February 4-5 FOMC meeting. But the report does indicate that the labor-cost horse is out of the barn. Widespread increases in the rate at which wages and salaries are rising—across regions, occupations, and industries—confirm that the U.S. labor market is tight. It also appears that the long downward trend in benefit inflation is over. Under these circumstances, and with above-trend growth likely to push the jobless rate down toward 5%, it is only a matter of time before Fed officials begin raising interest rates—possibly as soon as late March.

### Labor Markets Are Tight

In recent years, the analysis of U.S. labor costs has focused increasingly on gauges of total compensation, which include fringe benefits as well as wages and salaries. For the most part, this reflects the strong secular growth rate in benefits and, more recently, the aggressive efforts of U.S. firms to curb this growth. Also, the development of the ECI as a comprehensive index of labor costs—one that is independent of shifts in the mix of jobs—has vastly improved the quality of information in this area.

Laudable as the focus on total compensation may be for the purpose of tracking labor costs and their likely impact on price inflation, those interested in labor-market developments should also pay close attention to the indexes of wages and salaries. This is because few workers know much about the benefits attached

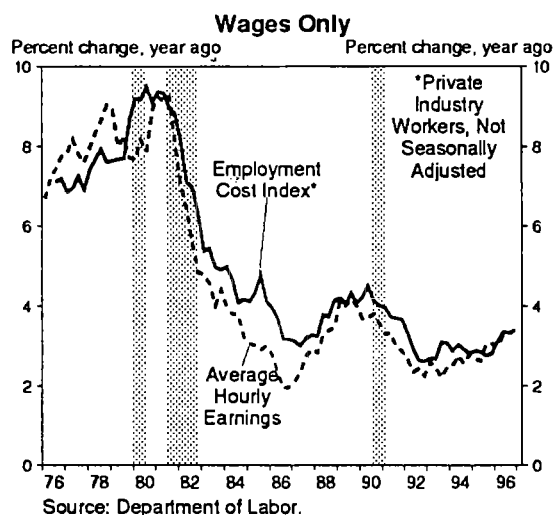


to the job opportunities they may be considering, and it is doubtful that many of those who do base the decision on this information. Thus, shifts in the rate at which wages and salaries are rising are probably better signals of changes in labor-market tightness.

The message from these indexes is that the U.S. labor market has been stretched for at least a year and that an unemployment rate below 5½% is not compatible with stable inflation, at least in wages. On a year-to-year basis, increases in the wages and salaries index hit a cyclical low of 2.7% in the second half of 1992 and early 1993. This measure of wage inflation then fluctuated mostly in a tight 2¾%-3% range over the next three years, rising gradually as unemployment fell. During the second half of this period, the jobless rate held steady in a narrow range around a 5.6% average. In early 1996, as a strengthening economy pushed this rate below 5½%, inflation in wages and salaries picked up more visibly, reaching 3.3% by yearend. Both the timing and gradual pace of this pickup imply that the non-accelerating-inflation rate of unemployment (NAIRU) is between 5½% and 6%.

With this perspective, it should also be apparent that monthly figures on average hourly earnings—suitably smoothed to reduce volatility—can provide a useful real-time gauge of changing labor-market tensions. This body of data is often criticized, rightly, as an imperfect indicator of wage rates because it includes changes in the mix of employment and overtime and covers only production and nonsupervisory workers. Even so, changes in average hourly earnings bear an 86% correlation with changes in the ECI for wages

<sup>1</sup> In order to match publicly cited figures, we follow the Labor Department's custom of citing year-to-year changes without seasonal adjustment. Calculations based on seasonally adjusted data will differ to the extent that seasonal patterns shift from one year to the next, and they may be more appropriate for this reason. However, the differences are not large enough to alter the conclusions.

and salaries. Moreover, since the mid-1980s, changes in average hourly earnings have tended to foreshadow changes in the ECI for wages and salaries, probably because shifts in the mix of employment put pressure on wage rates to rise. Thus, over the past three years, year-to-year gains in average hourly earnings have risen from 2.2% to 3.4%—a bit more than the 2.6%-3.4% acceleration in the private-sector wage and salary component of the ECI because of the shift to higher-paying jobs and longer overtime.

### Wage and Salary Acceleration Is Widespread

The acceleration in wages and salaries is not only a long-standing phenomenon. It is also widespread across regions, occupations, and industries, judging from components of the ECI. In particular:

1. The acceleration has been surprisingly similar across the country. For all four major regions, year-to-year increases in wage and salary indexes hit cyclical lows between mid-1992 and mid-1993. And, while the timing of the acceleration has varied, all four posted gains in 1996 that were 1 to 1½ percentage points above those lows.<sup>2</sup> This suggests two conclusions: First, labor-market tightness is national in scope. Second, the NAIRU may vary across regions, given that the acceleration has occurred at different rates of unemployment.
2. All major occupational groups have seen some acceleration, though to varying degrees. Like

<sup>2</sup> At first blush, this appears inconsistent with the 0.8-point acceleration in the private-sector aggregate of these four indexes. The inconsistency results from the fact that the regional indexes reached their lows at different times.

the regional indexes, year-to-year gains for all three major occupational indexes bottomed about four years ago. However, most of the 1.5-point run-up in service-worker wage inflation occurred in the second half of 1996. In contrast, blue-collar wages posted the smallest but steadiest acceleration. In between, white-collar wage inflation was highly volatile—surging in 1994, giving back most of this gain in 1995, and then picking up again in 1996.

3. Some acceleration has occurred in all major industries, albeit unevenly. In the construction, durable goods manufacturing, public utilities, and services industries, wage and salary inflation has picked up sharply in recent quarters; in all but services, this pickup followed a significant easing. Wage and salary gains in retail trade also picked up sharply in 1996, after a long period of gradual rise. In contrast to these areas of rising pressure, the small acceleration in transportation over the past four years masks a much larger pickup that has almost unwound in the past year and a half; wages and salaries in the state and local sector have followed a similar path. In between, year-to-year gains in wholesale trade, finance, insurance, and real estate have risen substantially over the past four years, although these pressures appear to have eased a bit in the second half of 1996. Finally, in retail trade the acceleration has been consistent, though erratic.

### Wage and Salary Acceleration Widespread

| Index Category   | Year-to-Year Change |        | Quarters of Acceleration |
|------------------|---------------------|--------|--------------------------|
|                  | Lowest              | Latest |                          |
| By Region:       |                     |        |                          |
| Northeast        | 2.4%                | 3.3%   | 17                       |
| South            | 2.5                 | 3.8    | 14                       |
| Midwest          | 2.4                 | 3.3    | 16                       |
| West             | 2.3                 | 3.1    | 14                       |
| By Occupation:   |                     |        |                          |
| White-collar     | 2.5                 | 3.5    | 17                       |
| Blue-collar      | 2.5                 | 3.0    | 17                       |
| Svc. Workers     | 2.1                 | 3.5    | 15                       |
| By Industry:     |                     |        |                          |
| Construction     | 1.8%                | 2.9    | 6                        |
| Durable Mfg.     | 2.6                 | 3.3    | 3                        |
| Nondur. Mfg.     | 2.4                 | 3.3    | 11                       |
| Transportation   | 2.3                 | 2.5    | 15                       |
| Public Utilities | 2.1                 | 2.9    | 2                        |
| Wholesale Tr.    | 1.4                 | 3.3    | 17                       |
| Retail Trade     | 2.1                 | 4.3    | 17                       |
| FIRE*            | -0.2                | 3.2    | 15                       |
| Services         | 2.4                 | 3.6    | 4                        |

\* Finance, Insurance, and Real Estate

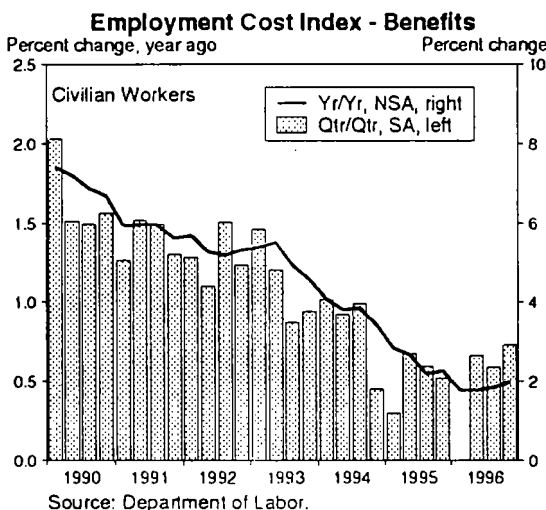


## Benefit Inflation Has Probably Turned Up

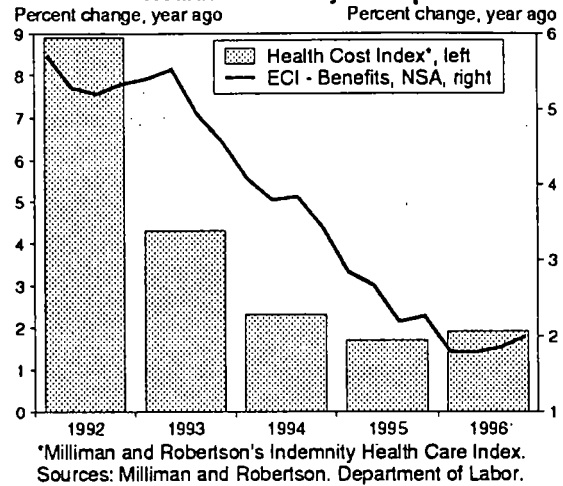
Of course, it is the behavior of overall labor costs—including benefits—that ultimately affects the prices business firms charge for their output. Until recently, year-to-year increases in benefit costs were in a steep downward trend, falling from nearly 7½% in early 1990 to about 1¾% in mid-1996, as employers took aim at this secularly rising portion of total labor costs. Until mid-1995, these efforts succeeded in shielding total compensation, and hence prices, from the gradual upward trend in wage and salary inflation.

In the following year, however, the moderate rate of increase in benefit costs, while still low, failed to offset the impact of wage and salary acceleration on total compensation. This underscores a frequently overlooked point: *To neutralize the effects of a tight labor market on wages and salaries, it is not enough for the inflation rate in benefits to remain low; it must continue to drop.* But since mid-1996, the rate at which benefit costs are rising has actually edged up to 2%. While this hardly qualifies as evidence of a major turning point, there are indications that the low point has probably passed:

1. **Benefit cost increases were unusually small in early 1996.** Many firms boosted deductibles and took other measures in an aggressive effort to push employees from expensive fee-for-service plans into lower-cost managed care options. As a result, increases in benefit costs fell well below the norm—to zero on a seasonally adjusted basis in early 1996. To the extent this does not recur in 1997, the 2%-3% range for annualized cost increases in other recent quarters may be more representative of the current trend.



## Health Costs May Pickup



2. **Pressures are building for larger increases in health insurance premiums.** According to Milliman and Robertson, a leading actuarial firm, strong income growth in recent years portends an increase in consumption of medical services, with attendant pressures on insurance premiums. These pressures will probably be most intense for the fee-for-service plans. But health maintenance organizations (HMOs) are also likely to boost premiums in an effort to restore the margins squeezed by aggressive pricing in recent years.
3. **The pool of workers available and likely to shift into managed care is dwindling.** This has been a key cost-cutting device in recent years over and above the trend toward smaller annual premium increases. For example, a recent survey by KPMG indicates that about 5% of the work force shifted out of fee-for-service plans in 1996 and that HMOs garnered a similar amount. With the same survey showing a cost differential of about 5%, the shift alone may have shaved about 0.25% from the health insurance portion of last year's benefit cost increase. But there is clearly a limit to this type of saving. Already, the KPMG data show only 26% of the surveyed workers in fee-for-service plans, with others in some form of managed care. It is fair to presume that many of these hold-outs are probably quite resistant to any change in their health coverage.

Ed McKelvey



## Key U.S. Economic Data

|                                            | Latest Monthly Data |         |         |         | 6 Mo  | 12 Mo | Next    |
|--------------------------------------------|---------------------|---------|---------|---------|-------|-------|---------|
|                                            | '97 Jan             | '96 Dec | '96 Nov | '96 Oct | Trend | Trend | Release |
| Nonfarm Payrolls (ch. Thousands)           | --                  | 262     | 127     | 261     | 194   | 214   | Feb 7   |
| Unemployment Rate (%)                      | --                  | 5.3     | 5.3     | 5.2     | 5.3   | 5.4   |         |
| Index of Hours Worked (% ch)               | --                  | 0.9     | 0.7     | -0.7    | 2.2   | 3.6   |         |
| Average Hourly Earnings (% ch)             | --                  | 0.5     | 0.8     | -0.1    | 3.8   | 3.8   |         |
| Producer price finished goods index (% ch) | --                  | 0.5     | 0.4     | 0.4     | 3.5   | 2.9   | Feb 14  |
| Excluding food and energy                  | --                  | 0.1     | 0.1     | -0.3    | 0.6   | 0.6   |         |
| Consumer price index (% ch)                | --                  | 0.3     | 0.3     | 0.3     | 3.0   | 3.2   | Feb 19  |
| Excluding food and energy (% ch)           | --                  | 0.1     | 0.2     | 0.2     | 2.4   | 2.6   |         |
| Retail sales (% ch)                        | --                  | 0.6     | -0.2    | 0.7     | 3.8   | 4.5   | Feb 13  |
| Excluding motor vehicles (% ch)            | --                  | 0.6     | 0.0     | 0.7     | 3.3   | 4.4   |         |
| Industrial Production (% ch)               | --                  | 0.7     | 0.8     | 0.0     | 3.8   | 4.3   | Feb 14  |
| Manufacturing                              | --                  | 1.0     | 0.6     | 0.0     | 5.0   | 4.9   |         |
| Capacity utilization (%)                   | --                  | 83.5    | 83.2    | 82.8    | 83.2  | 83.1  | Feb 14  |
| Manufacturing                              | --                  | 82.6    | 82.1    | 81.8    | 82.2  | 82.1  |         |
| Housing Starts (annual rate, thousands)    | --                  | 1329    | 1514    | 1385    | 1449  | 1465  | Feb 20  |
| Single-family                              | --                  | 1024    | 1161    | 1088    | 1133  | 1155  |         |
| Trade balance (billions, monthly)          | --                  | --      | -8.4    | -8.0    | -9.7  | -9.1  | Feb 19  |
| Merchandise                                | --                  | --      | -14.7   | -14.1   | -15.8 | -15.2 |         |
| Factory Orders (% ch)                      | --                  | --      | -0.4    | 1.1     | 4.0   | 6.1   | Feb 5   |
| Durable Goods                              | --                  | -1.7    | -1.7    | 0.6     | 0.9   | 5.7   | Feb 27  |
| Personal Income (% ch)                     | --                  | --      | 0.5     | 0.0     | 5.3   | 5.5   | Feb 3   |
| Wages and Salaries                         | --                  | --      | 0.6     | -0.1    | 6.0   | 6.0   |         |
| Purchasing Managers' Index (%)             | --                  | 53.8    | 52.4    | 50.4    | 51.7  | 50.1  | Feb 3   |
| Consumer Sentiment U Mich (Feb 66=100)     | 97.4                | 96.9    | 99.2    | 96.5    | 96.7  | 94.3  | Feb 28  |
| Conference Board (1985=100)                | 116.8               | 114.2   | 109.5   | 107.3   | 111.9 | 107.0 | Feb 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 Federal Open Market Committee meets to consider both short-term policy adjustments and longer-term objectives. A rate hike is unlikely, but not altogether impossible (Feb. 4-5).
- President Clinton outlines policy proposals for the second term in his State of the Union Address and in his budget message (Feb. 4, 6). Republican response is apt to sound a bit partisan, understating the probability of a budget deal later this year.
- Headline figures for payroll employment and the unemployment rate are likely to look quite strong, in part for statistical reasons. But figures for average hourly earnings and hours worked are apt to look somewhat softer, following the normal pattern for the first month of a quarter (Feb. 7).

### Economic Releases and Other Events

| Date      | Time  | Indicator                          | Estimate   |            | Last Report |
|-----------|-------|------------------------------------|------------|------------|-------------|
|           |       |                                    | GS         | Consensus  |             |
| Mon Feb 3 | 8:30  | Personal Income (Dec)              | +0.7%      | +0.6%      | +0.5%       |
|           | 8:30  | Personal Consumption (Dec)         | +0.5%      | +0.4%      | +0.5%       |
|           | 10:00 | Purchasing Managers Index (Jan)    | 53.0%      | 54.0%      | 53.8%       |
|           | 10:00 | Construction Spending (Dec)        | -1.2%      | -0.7%      | +1.9%       |
|           |       | Domestic Motor Vehicle Sales (Jan) | 13.1m      | 12.9m      | 12.7m       |
| Tue Feb 4 | 10:00 | Leading Indicators (Dec)           | +0.1%      | +0.1%      | +0.1%       |
|           | 10:00 | New Home Sales (Dec)               | -6.7%      | -4.7%      | +14.2%      |
| Wed Feb 5 | 10:00 | Factory Orders (Dec)               | 0.0%       | +0.7%      | -0.4%       |
| Fri Feb 7 | 8:30  | Civilian Unemployment Rate (Jan)   | 5.2%       | 5.3%       | 5.3%        |
|           | 8:30  | Nonfarm Payroll Employment (Jan)   | +350,000   | +175,000   | +262,000    |
|           | 3:00  | Consumer Credit (Dec)              | +\$5.0 bil | +\$6.6 bil | +\$7.4 bil  |

- Treasury Announces Market Borrowing Estimates (Mon, Feb 3 - 3:00)
- FOMC Meeting (Tue-Wed, Feb 4-5)
- State of the Union Address (Tue, Feb 4)
- Treasury Announces February Refunding (Wed, Feb 5 - 2:30)
- OMB Fiscal 1998 Budget Due (Thu, Feb 6)
- Chain-Store Sales Results (Thu, Feb 6)
- Wholesale Trade (Fri, Feb 7 - 10:00)
- December FOMC Minutes (Fri, Feb 7 - 4:30)

### Interest Rates: Forecast vs. Forward Yields:

|              | 3 mo | 6 mo | 12 mo |
|--------------|------|------|-------|
| LIBOR 3 mo   | 5.8% | 6.2% | 6.8%  |
| Forward      | 5.7  | 5.9  | 6.2   |
| 2 Yr T-Note  | 6.2  | 6.5  | 7.0   |
| Forward      | 6.2  | 6.3  | 6.4   |
| 10 Yr T-Note | 6.7  | 7.0  | 7.2   |
| Forward      | 6.6  | 6.7  | 6.8   |

### Key Numbers in the Business Outlook

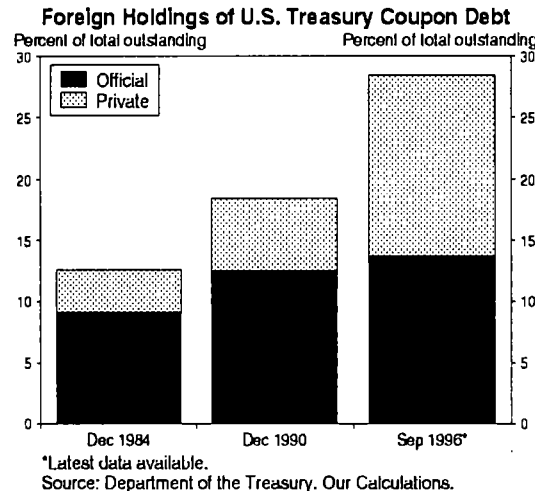
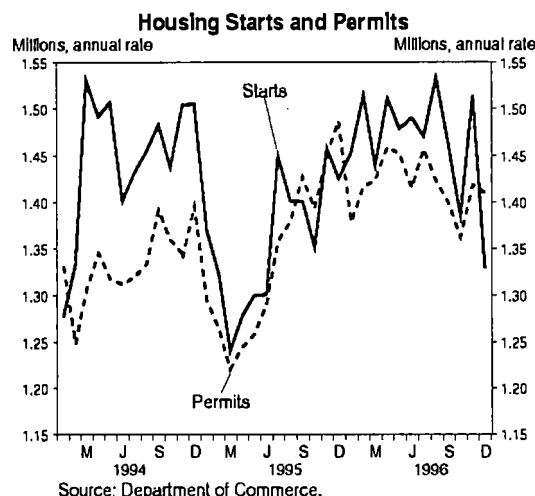
|                     | 1996 |       | 1997 |       |
|---------------------|------|-------|------|-------|
|                     | Q3   | Q4    | Q1E  | 1996E |
| Real GDP            | 2.1% | 4.7%* | 2.4% | 2.5%  |
| Ind. Prod., Mfg.    | 5.7  | 4.1*  | 5.7  | 3.3*  |
| CPI                 | 2.3  | 3.2*  | 3.5  | 2.9*  |
| After-Tax Profits** | 10.2 | 11.3E | 6.6  | 15.2  |
| Unemployment        | 5.3  | 5.3*  | 5.1  | 5.4*  |

\* Actual

\*\* Excluding inventory profits; adjusted for depreciation distortions.

## Foreign Demand for U.S. Treasuries: No Drop Likely Soon

- Chairman Greenspan's latest testimony implies that the next change in U.S. monetary policy will be a tightening. Such a move is unlikely to occur as early as the Feb. 4-5 FOMC meeting, however, barring a sharp, unexpected acceleration in the fourth-quarter employment cost index.
- Bad weather was partly responsible for the latest softer-than-expected readings on housing starts and jobless benefit claims. Meanwhile, the Fed's "beige book" summary of regional conditions did not show as clear a pick-up in growth as have the national economic data.
- Prospects for a budget-balancing accord remain good, although a large downward revision to the Congressional Budget Office's baseline deficit projection make it much easier to achieve such a deal without materially changing the trends in entitlements that cause longer-term imbalances.
- Foreign purchases of U.S. Treasury debt since early 1995 have been massive, with private investors absorbing the bulk of note and bond offerings. The regional distribution of Treasury coupon sales abroad has not changed, with Europeans accounting for about half.
- Our analysis indicates that past market returns are the primary determinant of private foreign demand for Treasuries, with changes in official behavior recently dominated by fluctuations in the dollar's value. The relative attractiveness of U.S. yields augurs for continued solid external purchases, barring a sharp acceleration in European economic growth.



### Trade Recommendations

- Stay short the Dec '97 Euro, with a target of 93.40 and a stop on a close above 93.90.
- Stay short March '97 T-bond futures, with a target of 109.00 and a stop on a close above 111.16.

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**Issue No: 97/4  
January 24, 1997**

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## I. Weekly Wrapup

### Economic and Market Overview

With hardly any new data to digest, financial market participants dissected Federal Reserve Chairman Alan Greenspan's Senate Budget testimony for clues about the near-term direction of U.S. monetary policy. What they found was initially to their liking, although most of the post-testimony gains had dissipated toward the end of the week—except in the case of the dollar, which reached a 4-year high against the yen.

The two figures that were released fell to the soft side of general expectations, although both followed sharp improvements and were clouded by bad weather. For example, starts of new housing units dropped 12.2% in December after rising 9.3% in November. Last month's losses were concentrated in the West, where heavy rains caused builders to put off breaking ground on many new projects. Permits for new home building, which are less prone to such disruptions, fell only 0.6%, to a level 6.1% above the starts rate. In the past, inversions between permits and starts have usually signaled a near-term rebound in starts. Likewise, initial claims for jobless insurance jumped 34,000 in the week ended January 18 after dropping 45,000 in the prior week; shifts in the weather were also partly behind these large swings.

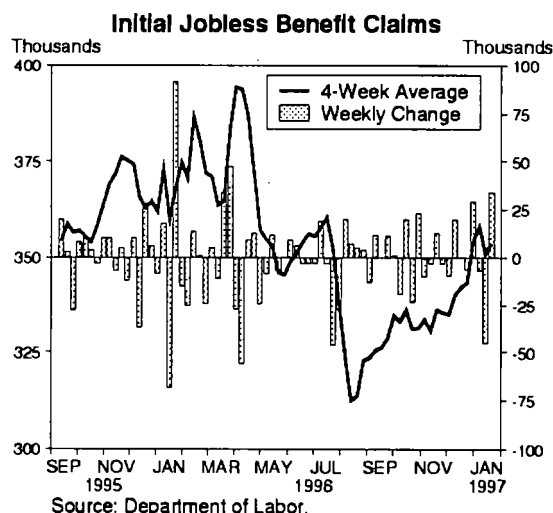
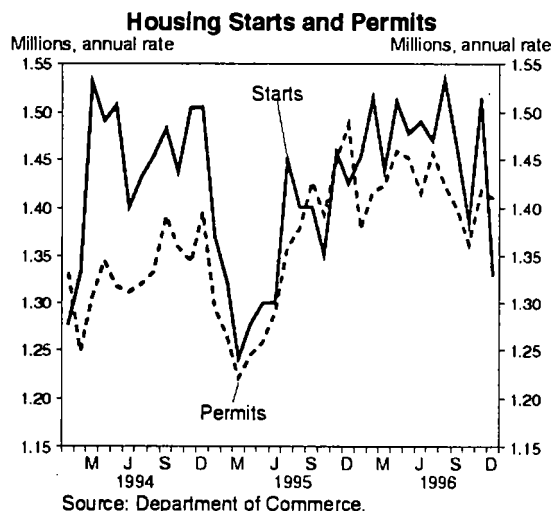
Unlike most recent economic indicators, the Federal Reserve's latest "beige book" found little evidence of a shift in the "moderate" pace of economic growth. Although most districts characterized local labor markets as tight, they reported only scattered signs of rising wage inflation—also in contrast to national indexes—and no increased price inflation outside the

energy sector. Over the past year, the Conference Board's survey of regional conditions has picked up a noticeable shift in the locus of economic strength from the nation's midsection to its coastal regions; while reduced export growth is probably the main reason, labor-market constraints may also be a factor.

### Federal Reserve Policy

Chairman Greenspan's characteristically even-handed testimony on the economy's outlook and prospects did not indicate an imminent change in policy. In several respects, however, his remarks clearly imply that the next move—whenever it comes—will be a tightening. First, he was struck by the strength of recent growth and noted that it was occurring at a time when resource utilization was quite high. Second, he did not enumerate a list of reasons why this growth should slow, as he had in last July's Humphrey-Hawkins testimony. Together, these two points suggest that Mr. Greenspan now sees the risks as evenly balanced around an unsustainable growth trend. Third, he reiterated the importance of basing policy on forecasts rather than current trends. Finally, he devoted the bulk of his prepared remarks to an analysis of inflation and noted that the period of subdued wage and price pressures might be ending. Together, these last two points suggest that an uptick in inflation is not a prerequisite for monetary tightening and that labor market indicators will be critical in the Fed's policy deliberations.

In this context, the fourth-quarter employment cost index—due for release January 28—will be a key focus of attention. Fed officials regard this index as



the best gauge of labor costs, and they will be looking to see whether there has been much acceleration in total hourly compensation. If so, Mr. Greenspan's next trip to Capitol Hill, just two days later, might contain more warnings of an increase in interest rates.

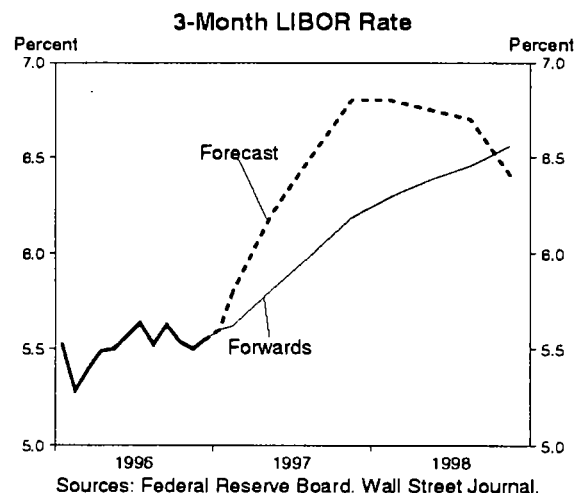
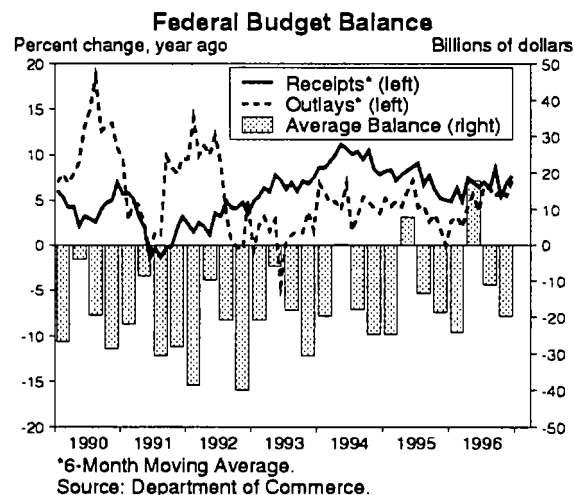
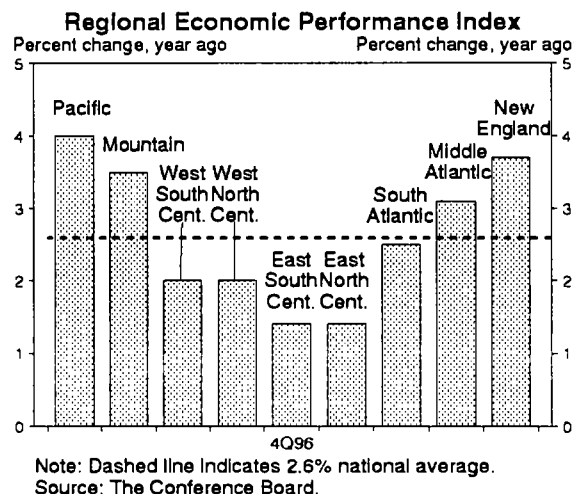
## Fiscal and Political Developments

Prospects for an accord leading to a balanced federal budget in 2002 remain good, but several events in recent days underscore the likelihood that any such deal will skirt the fundamental issues leading to longer-term imbalance. First, a senior Congressional Budget Office official noted that the CBO would announce a large reduction to its baseline deficit forecast, shaving the estimated 2002 shortfall by about one-third. This makes it much easier to reach a balance in five years without seriously cutting entitlement outlays. Second, President Clinton closed part of the gap between his Medicare proposals and those of the Republican congressional majority, offering to cut \$138 billion in six years; however, this latest proposal would not make material headway either in resolving Medicare's longer-term solvency or in reducing overall public and private outlays on healthcare. Finally, in a move that could prolong the negotiations, several Senate Republicans, led by Finance Committee Chairman William Roth (R., DE), have increased the size of the tax cuts they will be seeking to \$194 billion, about double the cut most recently proposed by the administration; to the extent the final agreement embodies a large tax cut, meaningful long-term deficit reduction will be that much harder to achieve.

## Market Outlook and Comments on Value

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

Although our enthusiasm for short positions is fading in light of the bearish sentiment in the bond market and our expectation that Fed officials will keep monetary policy unchanged at the Feb. 4-5 FOMC meeting, we would remain short for one more week. Our expectations of high-side surprises on the employment cost index report and real GDP growth in the fourth quarter could cause market participants to become more fearful of a tightening at the Feb. 4-5 FOMC meeting, pushing yields up. We would remain short both the Dec '97 Eurodollar future, with a stop on a close above 93.90 and a target of 93.40, and the March '97 T-bond future, with a stop on a close above 111.16 and a target of 109.00, closing out the bond short if our target were reached.



## II. Foreign Demand for U.S. Treasuries: No Drop Likely Soon

There has been a notable shift in the composition of U.S. Treasury debt ownership over the past few years, with enormous foreign net purchases taking place amid reduced new issuance. While robust demands from overseas central banks have been widely recognized, data on foreign net Treasury purchases reveal that private buying has been even larger. In fact, private foreign holdings of coupon Treasuries have surpassed those of central banks, a radical change from earlier periods.<sup>1</sup> It is also noteworthy that, despite a marked step-up in the aggregate pace of buying, the regional distribution of overseas Treasury ownership has not changed much, with Europe remaining by far the largest source of demand.

Our analysis indicates that lagged Treasury market returns have been a key historical determinant of foreign purchases, with private investors tending to pursue mean-reversion strategies. Whereas the dollar's exchange value has not been a consistently significant influence, in the past two years foreign central banks have clearly changed their behavior, accumulating Treasuries in an effort to hold down their currencies in relation to the greenback and thereby stimulating domestic business activity.

Looking ahead, unusually attractive yields on U.S. debt relative to those in other major bond markets should help keep private foreign purchases on a firm path, but central bank demands are likely to wane now that the dollar has risen materially against most European currencies and the yen. The main risk to a continuation of these flows would be a significant acceleration in European economic growth, which would probably cause local bond yields to rise.

### Historical Evidence on Foreign Treasury Purchases

We have reviewed statistics on international capital movements since the early 1970s to evaluate patterns of foreign demand in the U.S. government securities market. The major findings are as follows:

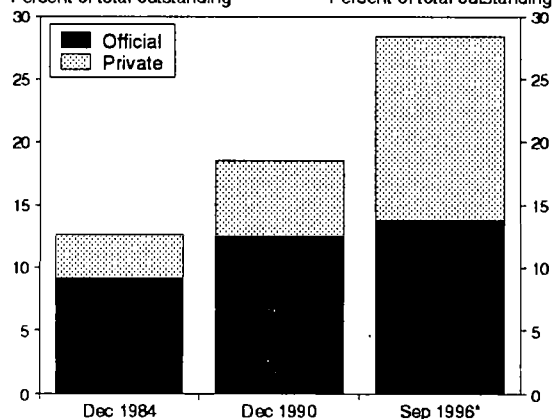
1. **Total foreign acquisitions of U.S. debt have exploded since 1993.** In the latest eleven quarters (ending September 1996), net overseas purchases of Treasury notes and bonds totaled

<sup>1</sup> Our analysis focuses on foreign ownership of coupon securities as data on Treasury bills are not available.

\$361.2 billion, nearly matching the total amount acquired over all previous periods (\$388.2 billion). The 27% annual foreign accumulation rate over that interval was more than four-and-a-half times the growth in the total stock of such debt (5.8%). External demands for Treasury bills, meanwhile, have also been exceptionally strong; based on custody account figures from the Federal Reserve, we estimate roughly \$200 billion in cumulative foreign central bank T-bill purchases over the past five years, exceeding the increase in total marketable bill supplies.

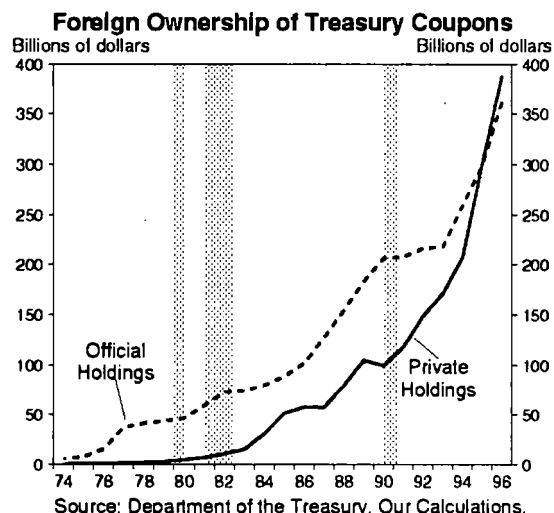
This marks the second major updraft in foreign demands for Treasuries during the past 15 years. The first such episode—beginning in 1984—coincided with the lifting of federal withholding taxes on interest paid to foreign entities.

**Foreign Holdings of U.S. Treasury Coupon Debt**  
Percent of total outstanding



\*Latest data available.  
Source: Department of the Treasury. Our Calculations.

2. **Among foreigners, private ownership of Treasury coupon issues has surpassed that of central banks and other official entities.** Much has been written lately about the extraordinary rate of U.S. debt accumulation by foreign central banks. The surprising fact, however, is that the absolute volume of buying outside the bill sector has been far greater among private accounts. Private foreigners have expanded their Treasury coupon debt holdings by a cumulative 291% since 1990, compared to 78% among official institutions. Between December 1994 and September 1996, the annual growth rates for the two groups were 42.9% and 20.9%, respectively. These trends have driven private foreign



ownership of Treasury coupons above the combined volume held by central banks and international organizations for the first time, as of the third quarter of 1995. Only six years ago, foreign official organizations held more than twice as many U.S. government notes and bonds as non-U.S. private investors.

3. Excluding off-shore investment funds, the regional distribution of foreign demands for Treasury coupon securities recently has mirrored earlier patterns. Unlike the prior large acceleration in foreign purchases of Treasury issues during 1984-1986, when there was an appreciable shift in the regional composition of demand toward the Far East, the distribution of net purchases has not been materially altered of late. Since December 1994, close to 52% of foreign accumulation of U.S. notes and bonds has been in Europe, marginally greater than the 48% share attributable to that region between 1974 and 1994. Japanese purchases account for another 17%, slightly less than earlier averages, while non-Japan Asian nations continue to comprise 18%-19%.

**Net Foreign Purchases of Treasury Coupons, By Region\***  
(% of total)

|                  | 1974-1994 | Jan. 1995 - Sep. 1996 |
|------------------|-----------|-----------------------|
| Europe           | 48.1%     | 51.7%                 |
| Japan            | 21.6      | 17.3                  |
| Asia (ex. Japan) | 18.3      | 18.7                  |
| All Other        | 12.0      | 12.3                  |

\* Excluding Caribbean countries, where flows are dominated by large investment funds.

## Estimating Key Factors In Overseas Demand For Treasuries

In an effort to understand the main forces that normally determine non-U.S. demands for Treasury coupon issues, we have constructed an econometric model and analyzed quarterly data on purchases since 1984. In addition to total foreign net purchases, we have subdivided these transactions by type of buyer (private or official), and also by major regions of domicile (Europe, Japan, and non-Japan Asia).

**Modeling Net Foreign Treasury Purchases**

| Dependent Variable | Treasury Return Terms | U.S. Return Terms | 1995-1996 Dummy    | Adjusted R-squared |
|--------------------|-----------------------|-------------------|--------------------|--------------------|
| Total              | -1656.5*<br>(399.3)   | 155.7<br>(805.1)  | 1063.0*<br>(425.3) | 0.57               |
| Private            | -819.4*<br>(327.0)    | 276.5<br>(370.2)  | 390.0<br>(403.9)   | 0.50               |
| Official           | -932.4*<br>(310.1)    | -241.4<br>(386.1) | 976.1*<br>(386.7)  | 0.29               |
| Europe             | -738.6*<br>(324.5)    | 55.5<br>(379.3)   | 161.0*<br>(59.4)   | 0.37               |
| Japan              | -566.2*<br>(183.2)    | 229.8*<br>(139.0) | 76.1*<br>(36.3)    | 0.38               |
| Non-Japan Asia     | -159.5<br>(137.9)     | 45.0<br>(96.7)    | 7.7<br>(25.3)      | 0.28               |

Notes: Constant, trend, trend-square, and error-correction terms are not shown. In almost all cases, they are significant and have the expected sign. Robust standard errors are in parentheses. \* indicates that the coefficient is statistically significant at the 5% level. The dependent variable is the foreign net purchases of marketable Treasury Notes and Bonds in total and for each indicated subgroup. Reported coefficients on Treasury and U.S. dollar returns are the sum of four quarterly lags of the series. The sample period is 1984Q1 to 1996Q3.

Our model employs an error-correcting specification including two independent economic factors: (1) lagged Treasury bond returns, on the theory that foreign investment behavior is adaptive to recent yield movements, and (2) changes in the dollar exchange rate, since overseas investors care deeply about how returns on dollar-denominated investments translate into home-currency terms. In addition, because foreign central banks have lately endeavored to influence the dollar's market value to suit domestic economic objectives, we have added a dummy variable for 1995-1996, multiplied by the dollar exchange rate.<sup>2</sup>

This model is fairly successful in describing past patterns of foreign purchases of U.S. debt, accounting for 57% of the quarterly variations. Consistent with our expectations, past Treasury returns appear to be an important determinant of future foreign demands. We find that foreign investors tend to employ an adaptive mean-reversion strategy in their investments in notes and bonds, buying more when prices have

<sup>2</sup> Our model also includes trend, trend-squared, and error-correction terms to control for the quadratic growth in foreign Treasury holdings.

fallen and less when prices have risen. This result is observed for both private and official purchases, as well as for demands from both Europe and Japan.

Surprisingly, our analysis suggests that foreign investors have generally not altered their Treasury investment behavior based on changes in the dollar's value over the past twelve years. Coefficients on exchange rate terms were statistically insignificant in explaining total, private, official, European, and non-Japanese Asian purchases. Only in the case of Japan has the dollar exchange rate been a consistent determinant of the appetite for Treasury coupon debt.

We do find that the dollar has been an important factor in foreign demand for Treasury coupons in the official community over the past two years. Since the start of 1995, each 1% increase in the greenback's value has been associated with a roughly \$1 billion net purchase of U.S. government notes and bonds by overseas central banks. Regionally, such purchases have come primarily from Europe, but also to a lesser extent from Japan and non-Japan Asia. These results are broadly consistent with our earlier research on the unprecedented increase in Federal Reserve custody holdings of Treasury securities for central banks in the past several years (see *The Weekly Analyst*, October 22, 1996). Foreign monetary authorities clearly have been using purchases of Treasuries to lift the dollar's exchange market value, with the goal of stimulating their domestic economies via exports.

#### External Private Purchases of Treasuries Should Remain Sturdy For Awhile

The foreign impulse to purchase Treasuries will likely persist, though probably at a somewhat diminished pace. From the perspective of private foreign parties, the United States remains a relatively bright spot in the global bond universe. Yields on Treasury 10-year debt presently are only 34 basis points below the 1991-1995 average, whereas yields in most other major bond markets are dramatically lower on the same comparison. Based on our Global Economics Group's forecasts, which anticipate a persistence of this general condition, foreign private cash flows to the Treasury market should be well supported in the coming months.

At the same time, it would not be surprising if official purchases of Treasuries were somewhat more muted than in the recent period, because the "orderly adjustment" upward in the U.S. dollar's value sought by central banks has been largely accomplished. To be sure, the moderate dollar downturn that we project

#### U.S. Yields Look Relatively Attractive

| Country           | 10-Year Bond Yields |         |        |
|-------------------|---------------------|---------|--------|
|                   | 1991-1995           | 1/23/97 | Change |
| Japan             | 4.72%               | 2.60%   | -2.12% |
| France            | 8.13                | 5.59    | -2.54  |
| Germany           | 7.35                | 5.72    | -1.63  |
| Spain             | 11.06               | 6.62    | -4.44  |
| Canada            | 8.68                | 6.63    | -2.05  |
| Sweden            | 9.80                | 6.71    | -3.09  |
| Italy             | 11.00               | 7.20    | -3.80  |
| United Kingdom    | 8.64                | 7.35    | -1.29  |
| 8 Country Average | 8.67                | 6.05    | -2.62  |
| United States     | 6.88                | 6.54    | -0.34  |

over the next 12 months would probably attract foreign official investment in an effort to mitigate the descent. The degree of this demand should not be as great as in the past two years, however, since the economies of most other major industrial countries seem poised to gradually improve and, hence, the rationale for aggressive dollar support efforts is no longer as strong.

#### Major Risk: Possible Pickup In European Growth

Probably the greatest threat to a continuation of solid overseas demands in the Treasury securities market this year is the possibility that European economic activity will finally gain speed. With business conditions already buoyant in the United Kingdom, short-term interest rates on the European continent at modern historical lows, and the dollar relatively firm against the German deutschemark, a number of fundamental factors conducive to a regional growth upturn are now in place. Should such a pick-up occur, bond markets in those countries would likely deteriorate as expectations for indefinitely accommodative monetary policies diminished. A rise in European interest rates would tend to squeeze yield differentials with the United States, and also would make a further appreciation of the dollar versus core European currencies more problematic. Under these circumstances, European appetite for U.S. government securities would probably shrink.

John Youngdahl

John Simpson

# Key U.S. Economic Data

|                                            | Latest Monthly Data |         |         |         | 6 Mo  | 12 Mo | Next    |
|--------------------------------------------|---------------------|---------|---------|---------|-------|-------|---------|
|                                            | '96 Dec             | '96 Nov | '96 Oct | '96 Sep | Trend | Trend | Release |
| Nonfarm Payrolls (ch. Thousands)           | 262                 | 127     | 261     | -2      | 194   | 214   | Feb 7   |
| Unemployment Rate (%)                      | 5.3                 | 5.3     | 5.2     | 5.2     | 5.3   | 5.4   |         |
| Index of Hours Worked (% ch)               | 0.9                 | 0.7     | -0.7    | 0.8     | 2.2   | 3.6   |         |
| Average Hourly Earnings (% ch)             | 0.5                 | 0.8     | -0.1    | 0.3     | 3.8   | 3.8   |         |
| Producer price finished goods index (% ch) | 0.5                 | 0.4     | 0.4     | 0.2     | 3.5   | 2.9   | Feb 14  |
| Excluding food and energy                  | 0.1                 | 0.1     | -0.3    | 0.2     | 0.6   | 0.6   |         |
| Consumer price index (% ch)                | 0.3                 | 0.3     | 0.3     | 0.3     | 3.0   | 3.2   | Feb 19  |
| Excluding food and energy (% ch)           | 0.1                 | 0.2     | 0.2     | 0.3     | 2.4   | 2.6   |         |
| Retail sales (% ch)                        | 0.6                 | -0.2    | 0.7     | 0.7     | 3.8   | 4.5   | Feb 13  |
| Excluding motor vehicles (% ch)            | 0.6                 | 0.0     | 0.7     | 0.5     | 3.3   | 4.4   |         |
| Industrial Production (% ch)               | 0.8                 | 0.8     | -0.1    | 0.2     | 4.3   | 5.1   | Feb 14  |
| Manufacturing                              | 1.1                 | 0.7     | -0.1    | 0.3     | 5.1   | 5.6   |         |
| Capacity utilization (%)                   | 83.8                | 83.4    | 83.0    | 83.4    | 83.4  | 83.2  | Feb 14  |
| Manufacturing                              | 82.8                | 82.2    | 81.9    | 82.3    | 82.2  | 82.1  |         |
| Housing Starts (annual rate, thousands)    | 1329                | 1514    | 1385    | 1461    | 1449  | 1465  | Feb 20  |
| Single-family                              | 1024                | 1161    | 1088    | 1138    | 1133  | 1155  |         |
| Trade balance (billions, monthly)          | --                  | -8.4    | -8.0    | -11.4   | -9.7  | -9.1  | Feb 19  |
| Merchandise                                | --                  | -14.7   | -14.1   | -17.5   | -15.8 | -15.2 |         |
| Factory Orders (% ch)                      | --                  | -0.4    | 1.1     | 2.6     | 4.0   | 6.1   | Feb 5   |
| Durable Goods                              | --                  | -1.6    | 0.5     | 4.5     | 1.7   | 5.7   | Jan 29  |
| Personal Income (% ch)                     | --                  | 0.5     | 0.0     | 0.6     | 5.3   | 5.5   | Feb 3   |
| Wages and Salaries                         | --                  | 0.6     | -0.1    | 0.7     | 6.0   | 6.0   |         |
| Purchasing Managers' Index (%)             | 54.0                | 52.4    | 50.4    | 51.7    | 51.7  | 50.1  | Feb 3   |
| Consumer Sentiment U Mich (Feb 66=100)     | 96.9                | 99.2    | 96.5    | 94.7    | 96.2  | 93.6  | Jan 31  |
| Conference Board (1985=100)                | 113.8               | 109.5   | 107.3   | 111.8   | 110.2 | 104.6 | Jan 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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