

APPENDIX

FOMC NOTES - PRF
May 20, 1997

Mr. Chairman:

Since your last meeting, we have had quite a move in dollar-yen.

In domestic operations, unexpectedly-higher tax revenues provided the Desk with the opportunity to set a new record for outstanding temporary operations.

I will first try to explain the movements in dollar-yen and, then, our domestic operations.

As you can see on the first page of charts,

U.S. short-term forward rates first rose and then declined,

returning to levels just below where they traded at the time of your last meeting;

but still well above their levels prior to the Chairman's Humphrey-Hawkins testimony in late February.

German forward rates have declined modestly, reflecting a continuation of expectations for:

relatively weak growth;

political stalemate on tax and pension reform; and

no change in rates by the Bundesbank for the foreseeable future.

In contrast, Japanese forward rates have been rising since the start of the new fiscal year on April 1st.

This shift in expectations appears to reflect:

an unwinding of the extremely pessimistic market sentiment toward the Japanese economy.

With the traders' skepticism being eroded,
and loud noises from some quarters of the Bank of Japan and
the Ministry of Finance that monetary policy will be firmed,
markets -- once again -- are beginning to price in a
tightening by the Bank of Japan later this year.

Turning to the second page, as you can see in the first panel,

Consistent with the pattern of short-term expectations:

U.S. bond yields, shown in green, continued to back up
in early April,

along with those of Germany and the United Kingdom,

but began to decline with the release of the first quarter
Employment Cost Index, at the end of April.

As you can see, U.K. yields, shown in purple, dropped sharply on
May 6th with the Chancellor's announcement of a 25 basis point
increase in base rates and the granting of operational
independence to the Bank of England.

Again in contrast, Japanese 10-year bond yields,
in the second panel in red,
began sharply rising from the end of April through early May,

reflecting the change in sentiment about the domestic
economy; and

accelerating as the Nikkei broke through the 20 thousand
level.

In the bottom panel, you can see the sharp decline
of the dollar against the yen, depicted in red,
beginning on May 6th, and then accelerating quickly.

At the time, most market analysts focused upon the conjunction
of:

The relentless verbal intervention
by Ministry of Finance officials, throughout the week
of May 5th - 9th,
seeking to strengthen the yen vs the dollar; and

The Chairman's speech at NYU on the evening of May 8th, which market participants perceived as implying a decreased likelihood of an increase in U.S. rates at this meeting.

However, among the causes of this extraordinary exchange-rate movement I think the back-up in Japanese interest rates, and interest rate expectations, deserves our special attention, as it triggered an initial unwinding of the infamous "yen carry trade".

To begin with, it is worth noting,

the relative stability of dollar-mark; depicted in the bottom panel in blue, and

the lack -- so far -- of any apparent knock-on consequences for other U.S. asset markets from the significant move in dollar-yen.

Turning to the third page of charts, you can see

The sharp upward movement in the Japanese 10-year bond yield, again depicted in the first panel,

The decline in 10-year differentials with Japan for U.S., German and U.K. bonds since April 1st, in the second panel;&

The percent appreciations of the yen against the dollar, the mark and the pound sterling, also since April 1st, in the third panel.

Taking all this together,

I think that the backup in Japanese rates, which accelerated from May 6th through the 9th,

Coupled with the downward drift in U.S. and other long-term rates,

Gave the strong impression that the market may have been passing through the peak in interest-rate differentials between Japan and the rest of the world;

encouraging many of those who had borrowed yen
to finance trades into higher yielding assets
to begin to close out these positions.

So, while the yen strengthened against the dollar,

I think we need to be careful to avoid
a completely "dollar-centric" view of the world;

And need to recognize that the yen strengthened
against a wide range of currencies,
with pressures being felt not only
in the major exchange rates;
but also in emerging markets from the Czech Republic to Thailand,
whose currencies came under pressures at the same time.

In all likelihood, this is just the first chapter in the
unwinding of leveraged yen financing.

Turning to domestic operations,

As described in detail in our written report,
the Desk faced what seemed, on some days,
to be the Sisyphean task
of injecting ever-larger quantities of reserves
to offset an historic forecast miss
in anticipated tax inflows.

On the fourth page of charts,
in the first panel, you can see:

- Our original forecast for the Treasury's Fed Balance,
as of April 14th,
depicted in the flat, black line at the bottom;
- Treasury's actual balance,
depicted in the heavy blue line,
- Our one-day prior forecast in green, and
- Our same-day forecast, in red.

It's easy to see the gap between
our original forecast and the actual.

But the scale and the slope of the lines
makes it a little harder to appreciate

the significance of the gap between our one-day out forecast,
in green,
and our revision of that forecast the next morning,
in red,

-- which from April 22nd to April 30th, was never less
than 2.2 billion and ranged as high as 9 billion.

In the bottom panel, you can see how the Desk responded,
arranging a series of term RPs, until, by April 30th, we had just
less than 52 billion [par amount] in outstanding RPs on our
books.

On the fifth page of charts,

you can see the daily range and daily effective rate for the
Fed Funds market,

For the same period of last year, in the top panel,

And for this year, in the bottom panel.

Looking at the bottom panel for this year,

the five or so instances of high ranges,
were associated with elevated late-day funds rates,

when we either experienced large projection misses,
or when the dealers' propositions
fell short of our objectives.

If you focus on the short red lines
which indicate the daily effective rates,
1997 looks much like 1996:
the weighted-average effective rates
are reasonably close to the target.

However, if one focuses on the difference in the ranges between 1996 and 1997, With 1997's wider fluctuations, one might be tempted to assume (as we initially did) that our forecast misses in 1997 were larger and more numerous than in 1996.

But that is not the case: the misses between our same-day forecast and the actual Treasury balance (the difference between the red and the blue lines on the previous page) [and actual reserve levels] were roughly comparable in both years.

Thus, our initial conclusion is that the market is somewhat more sensitive this year, compared to last year, which may be owing to the lower operating balances.

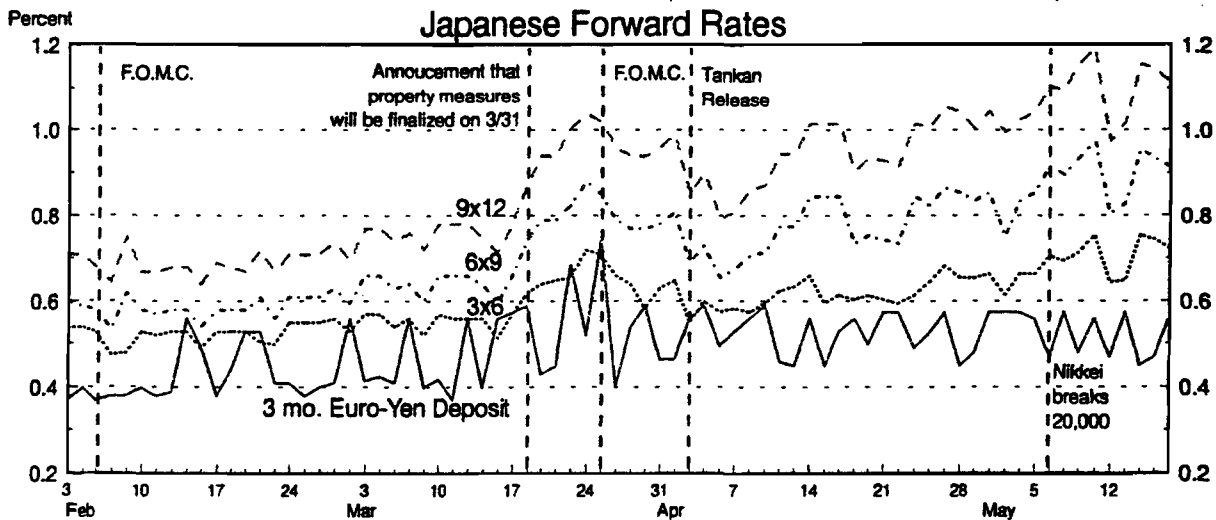
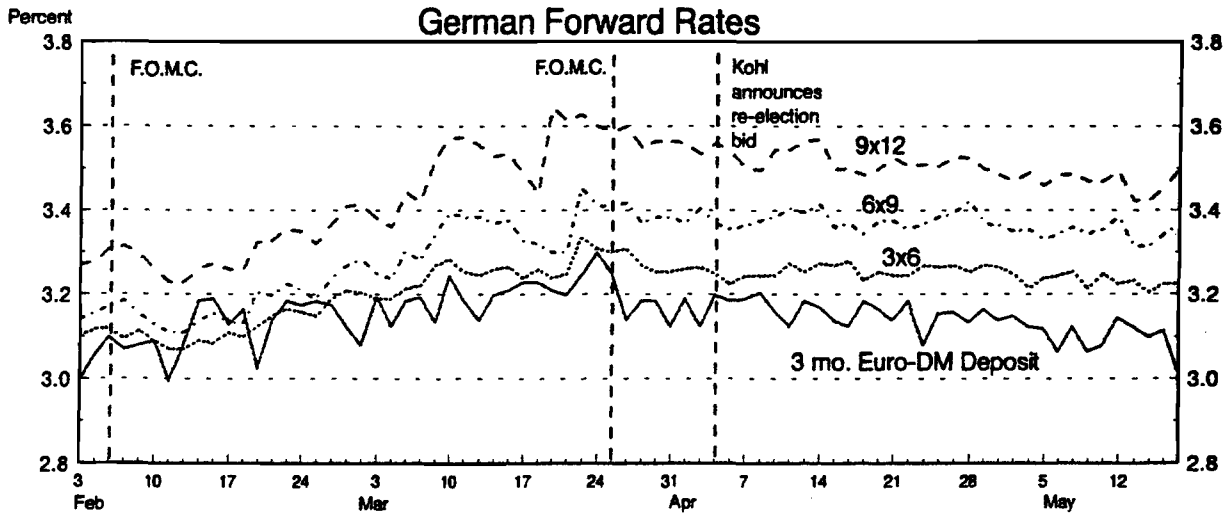
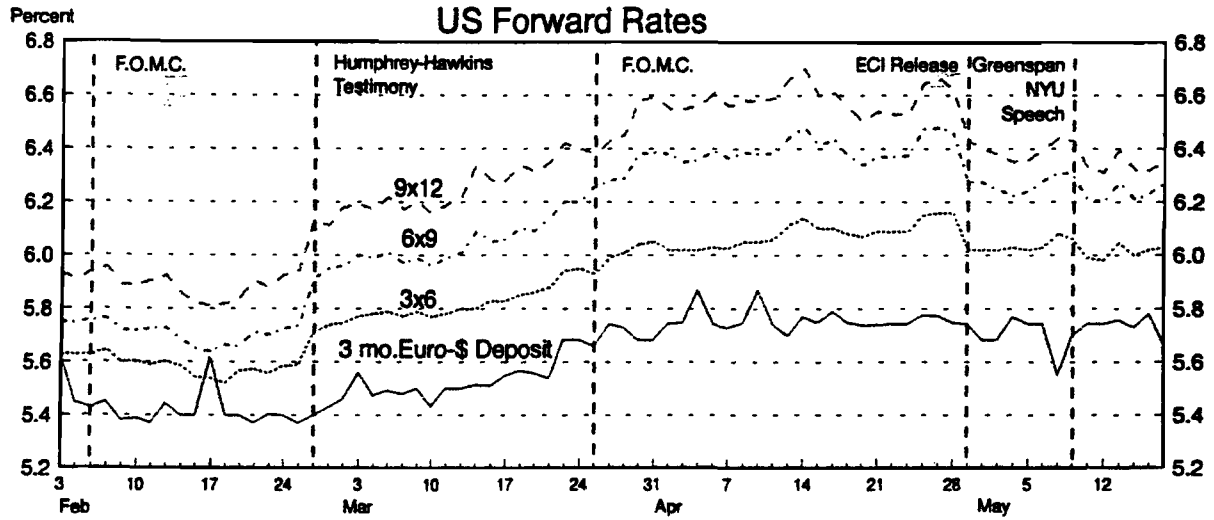
The final page of charts, presents the same two periods of funds market trading, depicting daily funds market trading ranges as expressed in a single, standard deviation around the effective rate.

This, in effect, simply presents a more muted version of the range chart, reflecting the relatively limited trading volume at the highest (and lowest) funds rates, and underscoring the banking system's ability to operate with low reserve balances.

We had no foreign exchange intervention operations during the period.

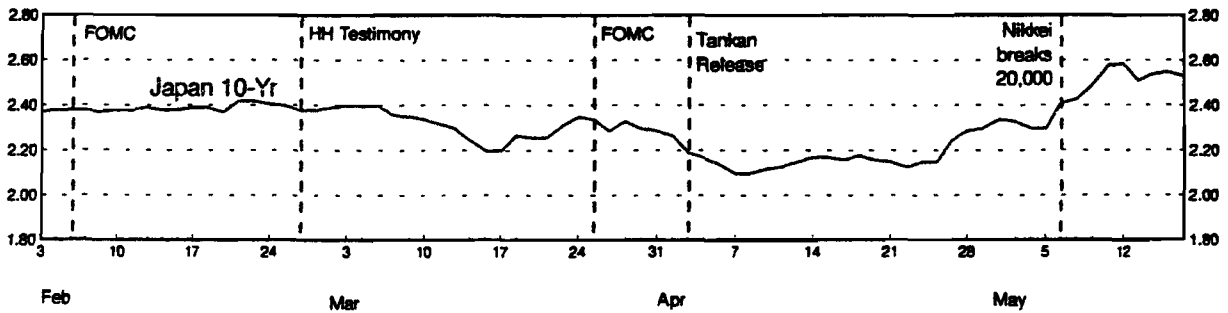
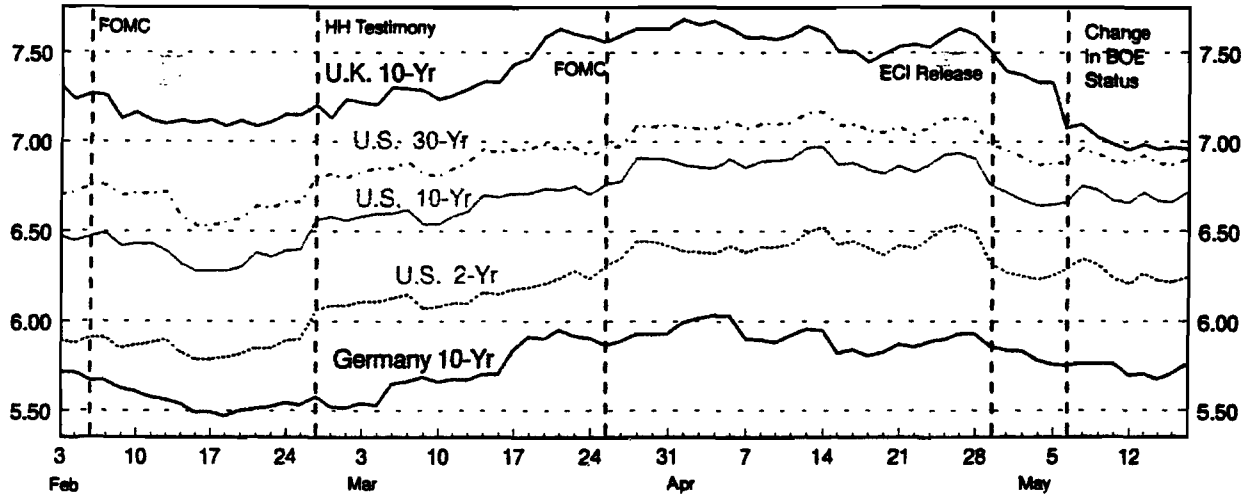
I will need the Committee's ratification of our domestic operations during the period.

I would be happy to answer any questions about my report, or my note to the Committee members on my intention to accelerate our runoff of agency securities.



Percent

Government Bond Yields*

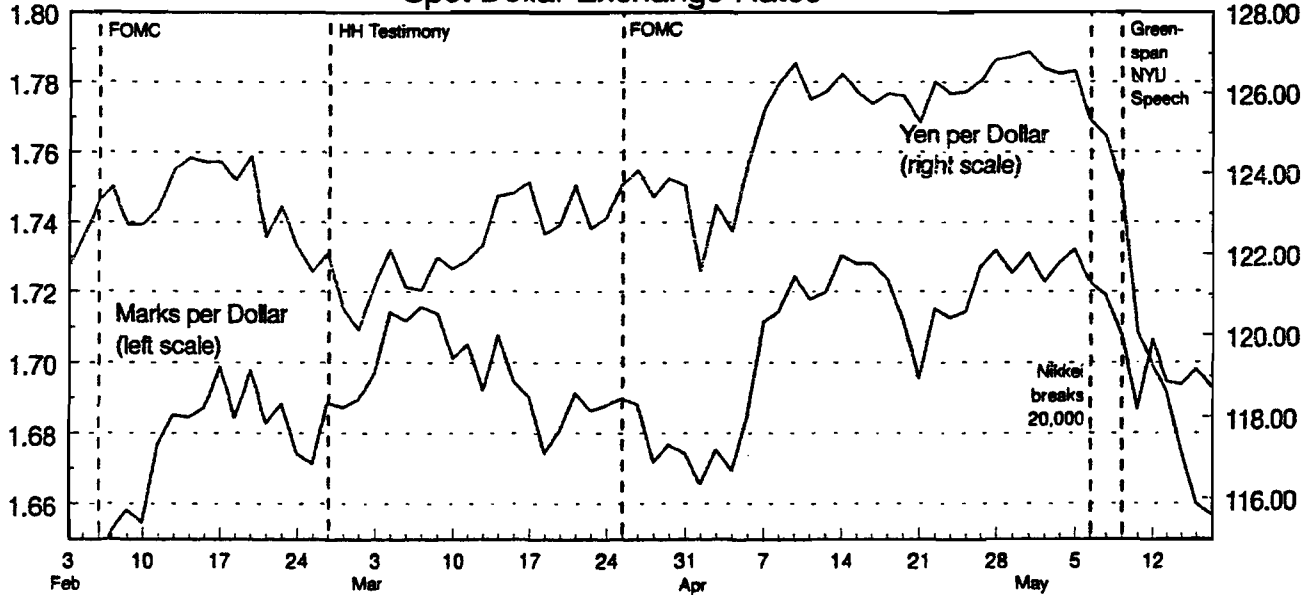


Source: Bloomberg
 *German yields are based on annual coupon payments.

\$/Mark

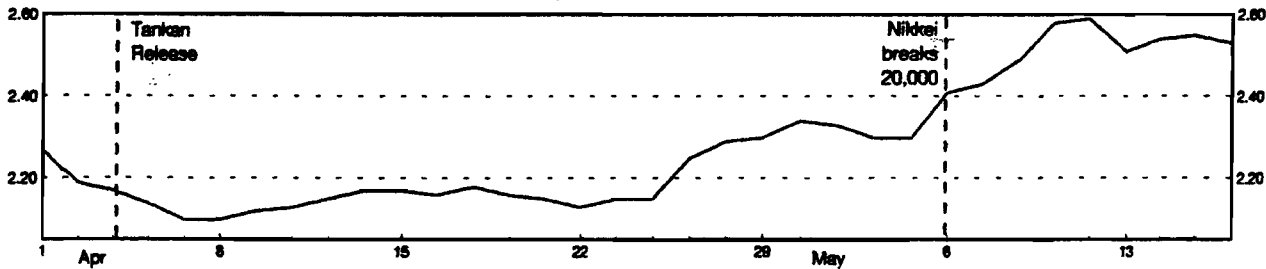
Spot Dollar Exchange Rates

\$/Yen



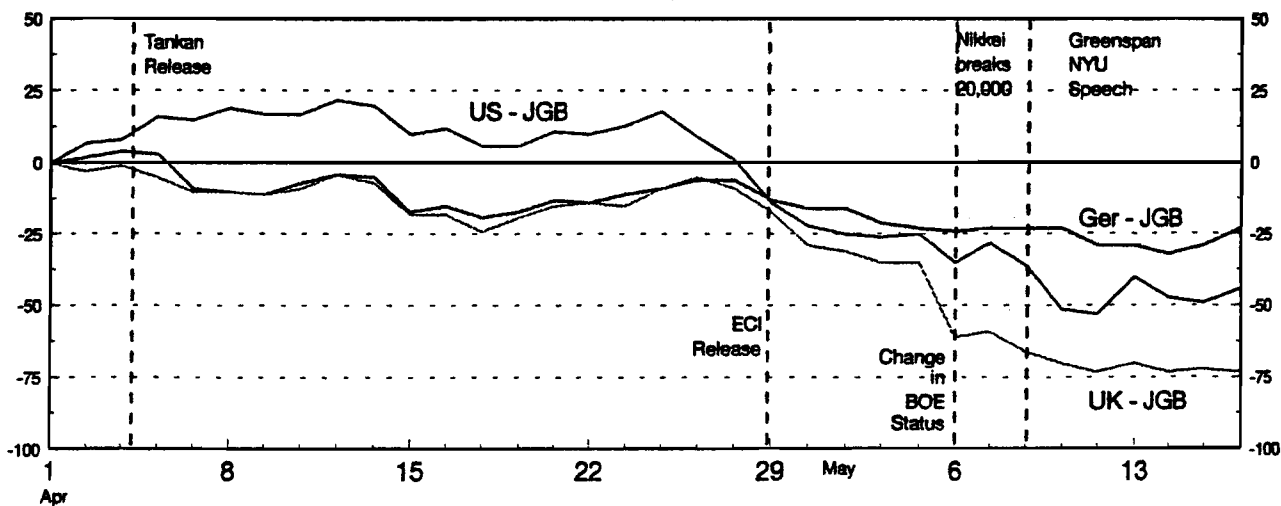
Markets Group: FRBNY
 Lillian Gu

Percent Benchmark 10-Year Japanese Government Bond Yield



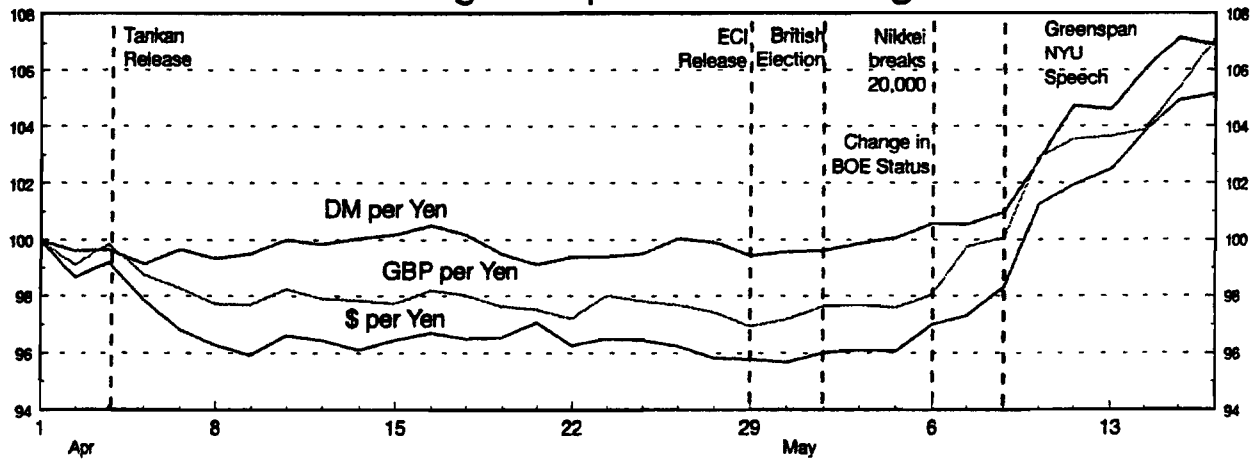
Selected 10-Yr JGB Yield Spreads (Basis Point Change Since 4/1/97)

Basis Points

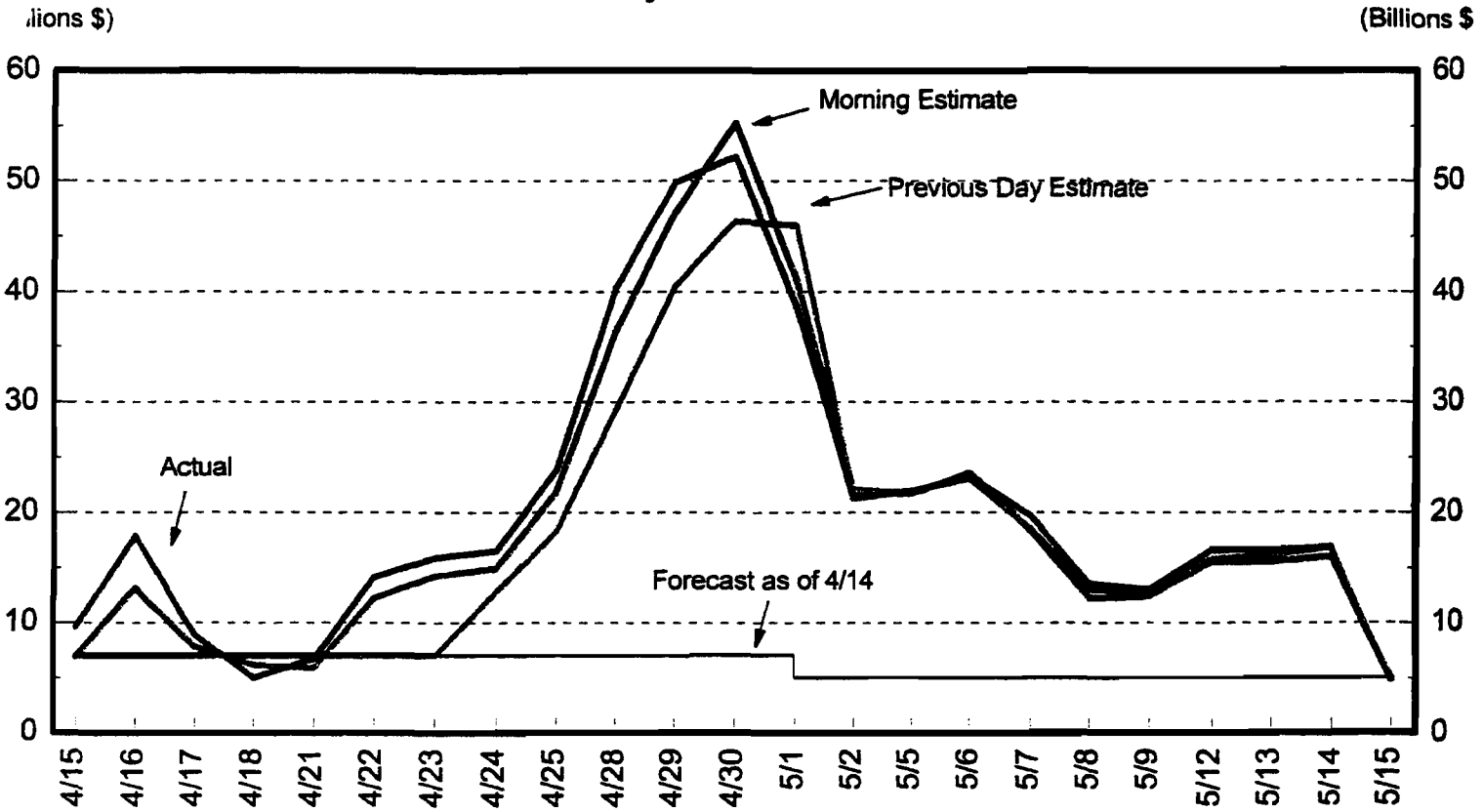


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4/1/97=100

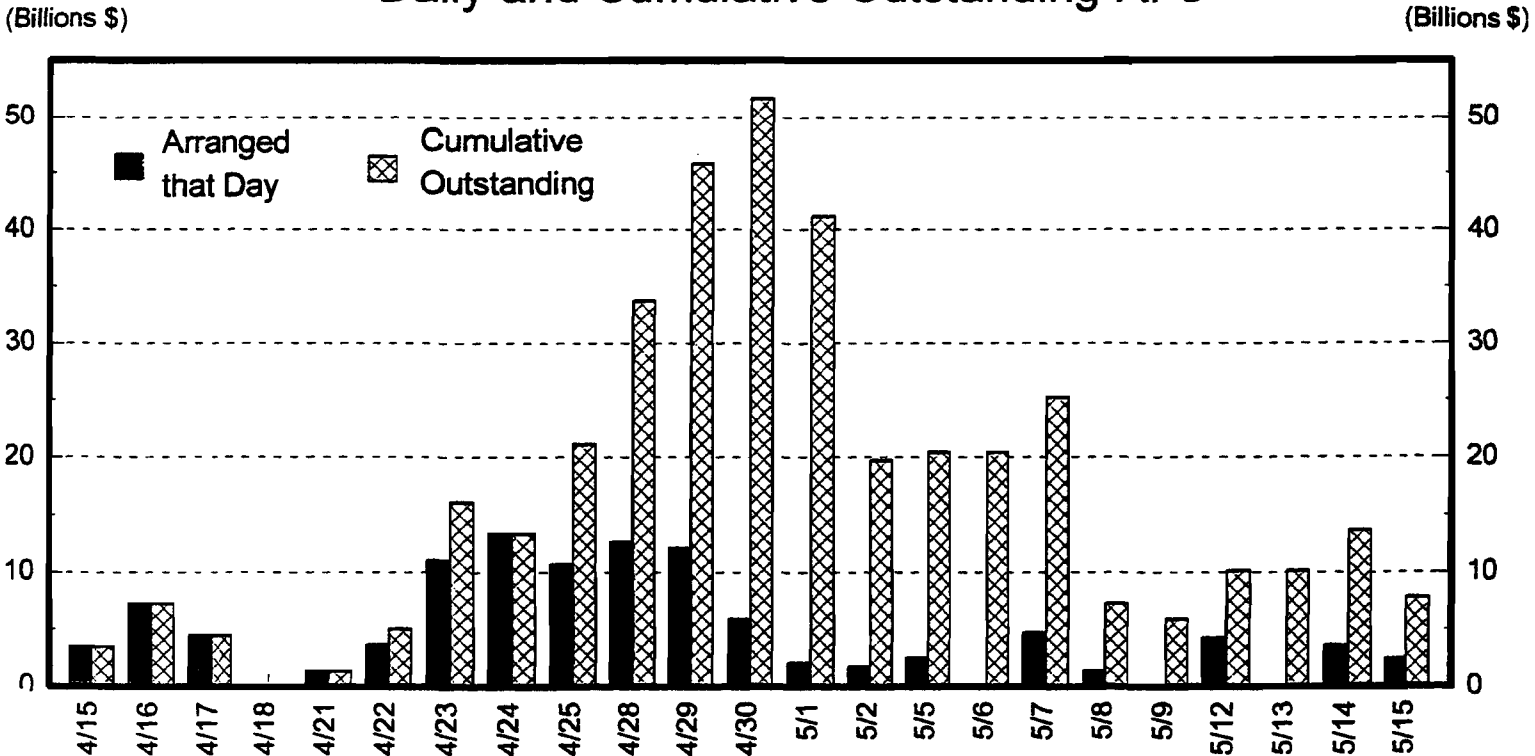
Percent Change in Spot Yen Exchange Rates



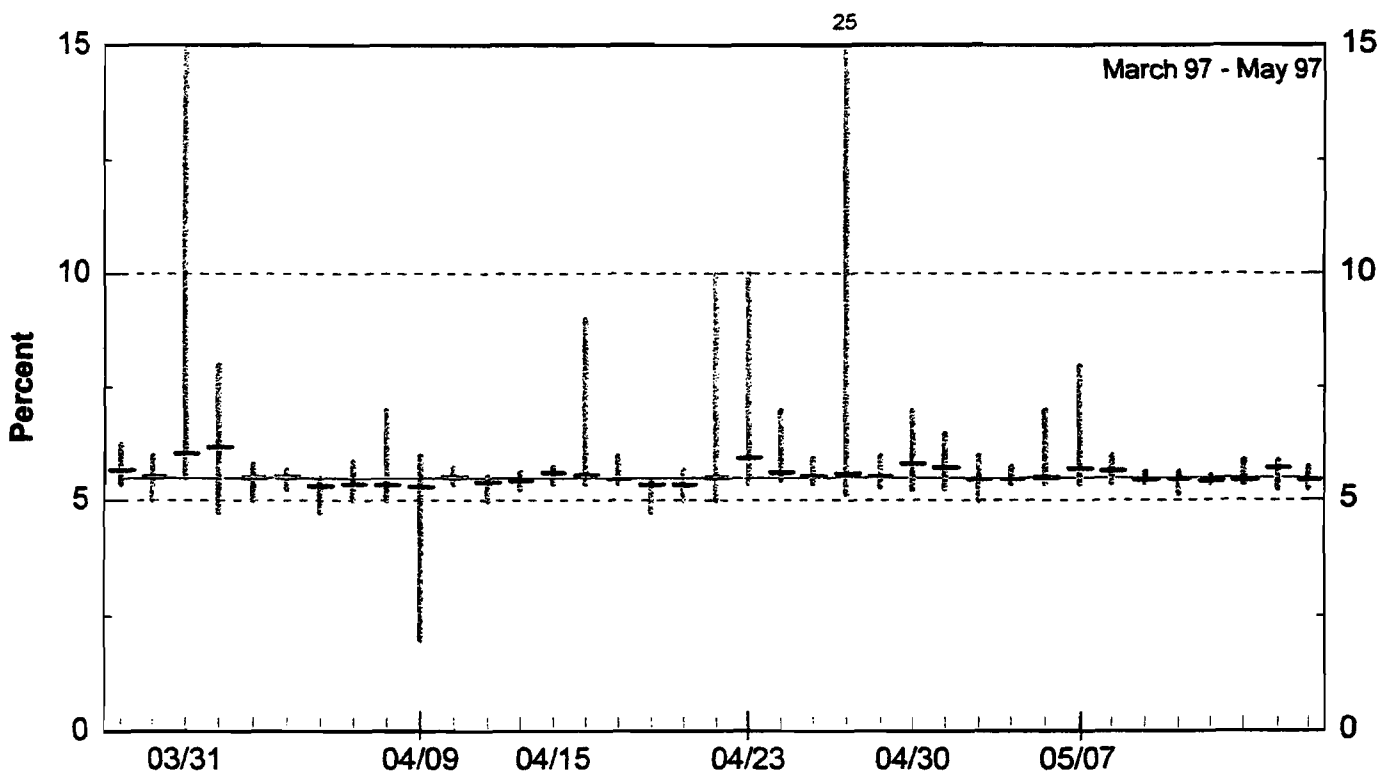
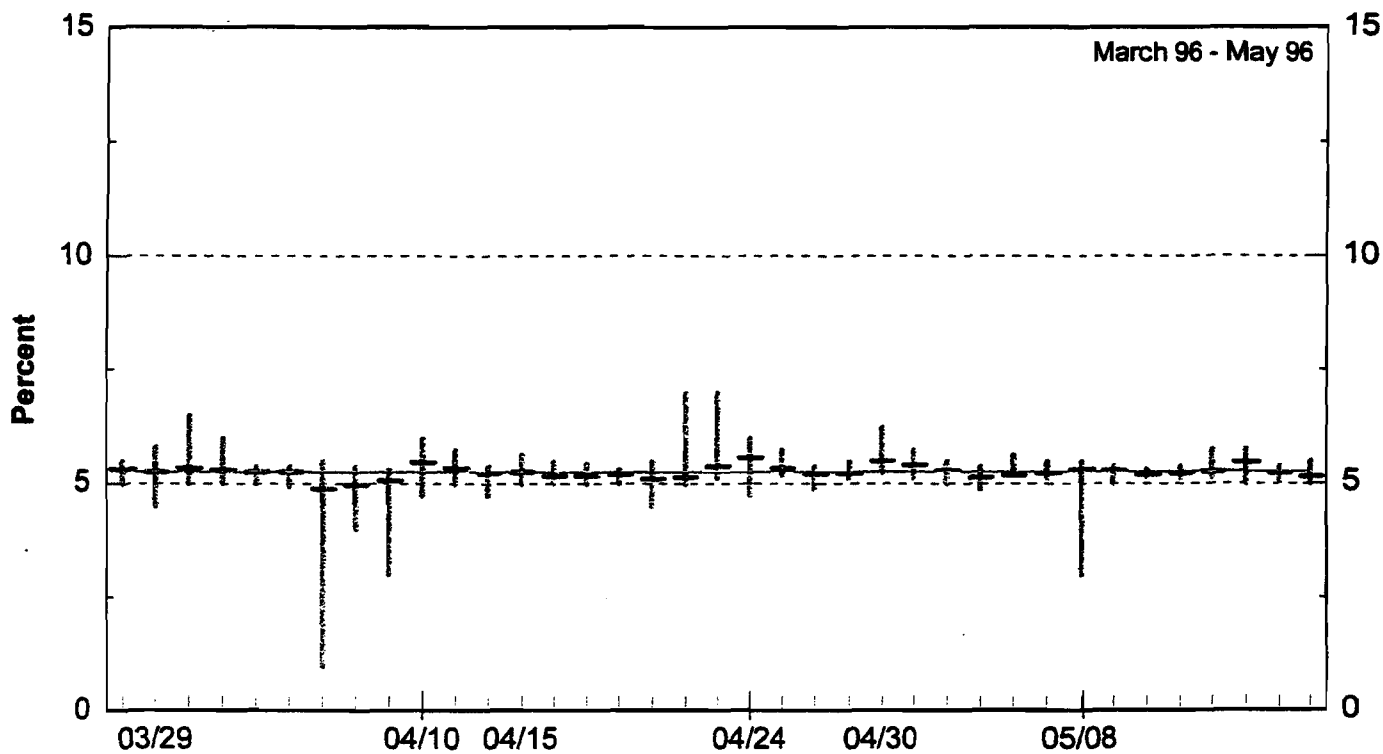
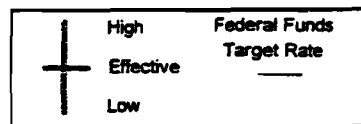
Treasury Balance at Fed



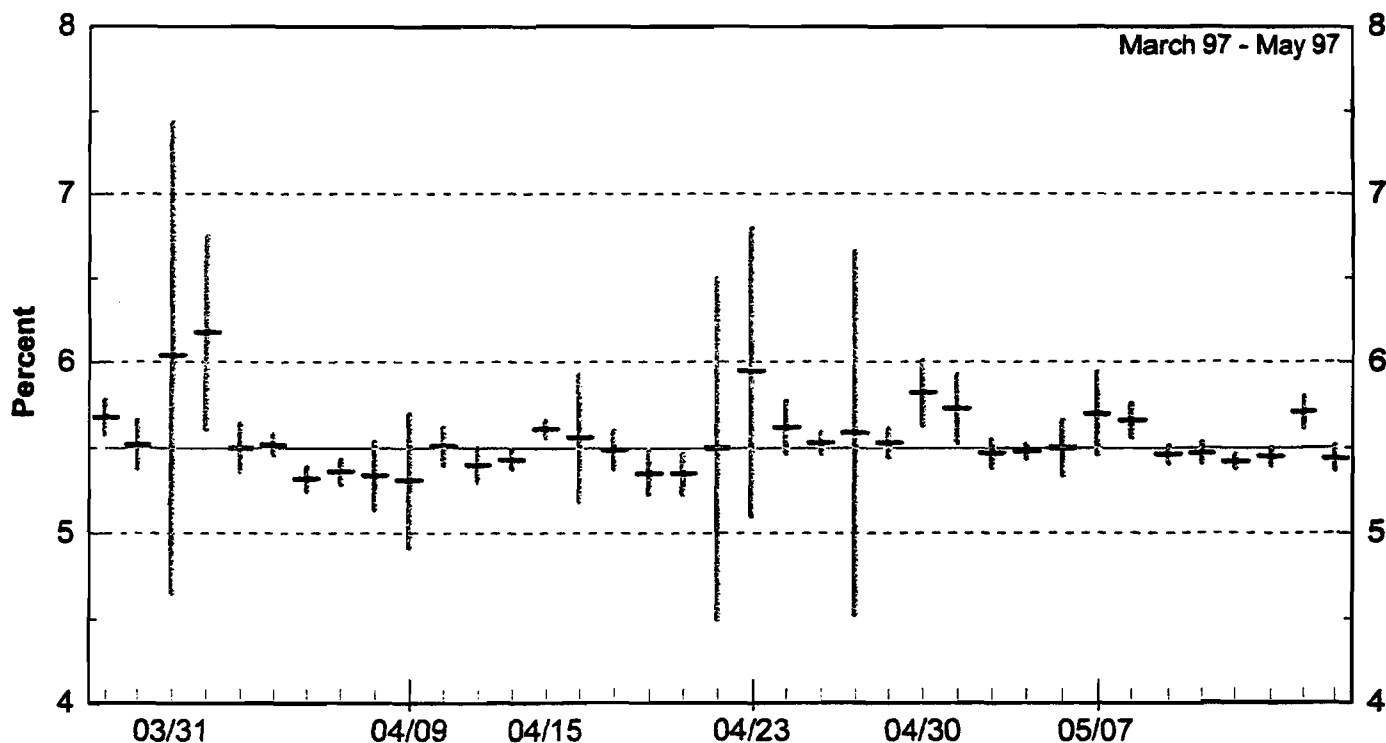
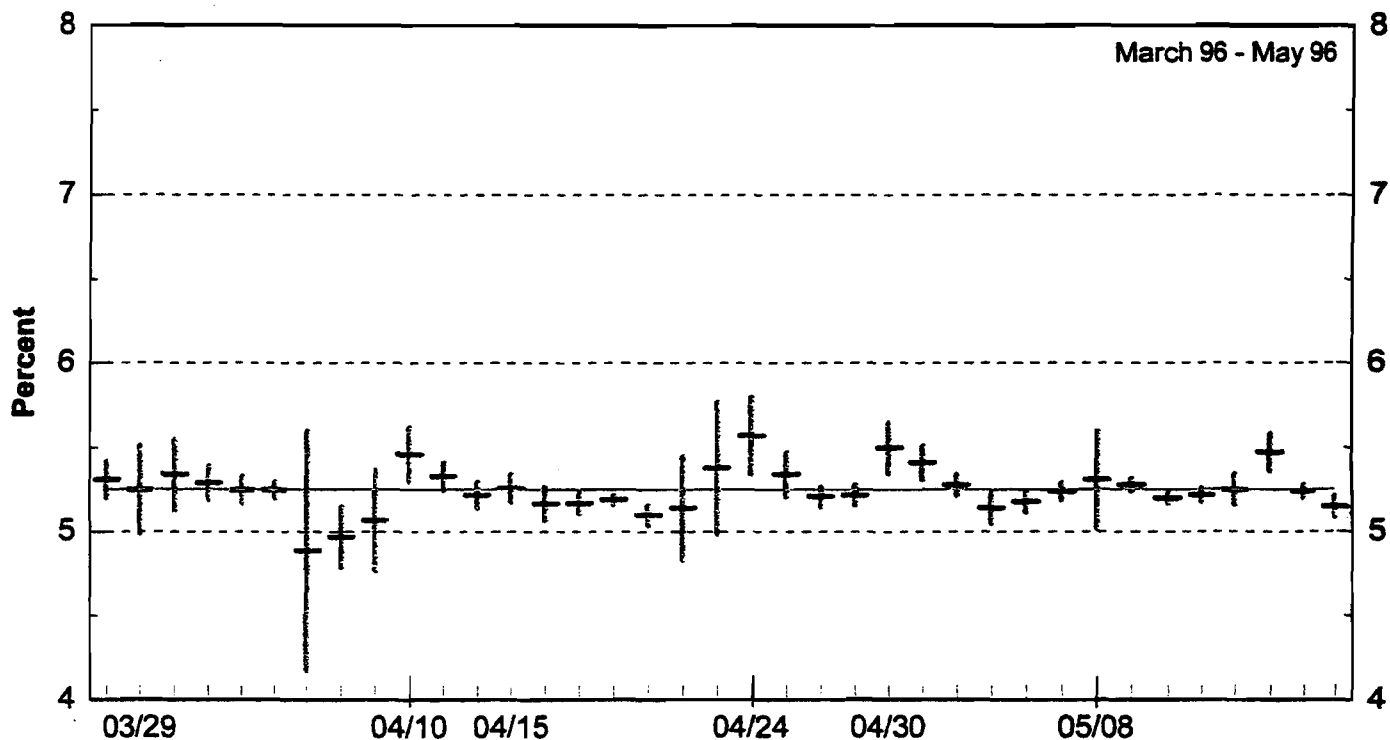
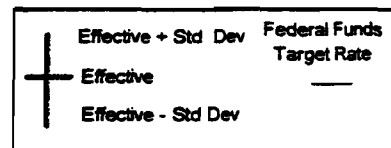
Daily and Cumulative Outstanding RPs



Federal Funds Daily Range and Effective



Federal Funds Plus and Minus One Standard Deviation and Effective



Michael J. Prell
May 20, 1997

FOMC BRIEFING

The Greenbook lays out what is, in many respects, a fairly attractive baseline scenario. Economic growth slows sharply from the first-quarter pace, but it remains strong enough to hold the unemployment rate below 5 percent. Although the underlying direction of inflation is up from here, the rise is gradual. Indeed, thanks to favorable developments in the food and energy sectors, and with a little help from technical changes to the index, headline CPI inflation only nudges the 3 percent mark next year.

To be sure, we're still saying that you'll probably need to raise interest rates further if you wish to keep inflation in check. But, according to our forecast, you could delay action for some time without fearing that events would seriously undermine what currently seems to be considerable public confidence that inflation will remain moderate well into the future.

On the other hand, we've also warned that, if our forecast is wrong, the greater risk is that aggregate demand will prove more buoyant and produce more troublesome inflationary pressures. There are two components to this assessment. The first relates to the prospects for aggregate demand itself, the second to how stronger demand might translate into greater inflation.

In the interest of conserving time, I won't dwell on the second issue. In a nutshell, we believe a tight labor market already has generated an upturn in compensation inflation--and that, were it not for the appreciation of the dollar, we would have seen a slight increase in core consumer inflation. With the dollar presumed to have topped out, that external influence is about to turn less favorable.

Within our analytical framework, one could paint a more sanguine inflation outlook by postulating some positive supply shocks. For example, the economy could be on the verge of the long-awaited productivity payoff from the investments in information technology. Or the dollar could resume its uptrend and continue to make it cheaper to tap foreign sources. But, we also could readily postulate unfavorable developments, such as crop shortfalls or disruptions of Middle Eastern oil supplies.

What I'd like to do is put aside for now this set of questions relating to the supply side of the equation and return to the matter of aggregate demand. In particular, I want to talk about the prospects for output growth and why we believe that the distribution of risks surrounding our baseline forecast continues to be skewed to the upside.

This is getting to be an excessively familiar refrain. We've been saying the same thing for a good many months now, and, frankly, I don't get a lot of gratification from getting only the errors right. So, in framing our latest projection, we certainly tried to assure ourselves that what we were writing down is the most likely outcome under the assumed monetary policy.

What we are forecasting is that growth of real GDP, which has been 4.1 percent over the past four quarters, will slow to 2.2 percent over the ensuing four. More than half of this deceleration is accounted for by a swing in inventory investment, which contributed heavily to output growth in the year ended in the first quarter, and is projected to retard growth appreciably in the coming year. The remainder of the slowing is attributable to various components of

final sales, none of which individually makes an especially remarkable contribution.

Now, given the dynamics of the economy, one can't look at inventories and final demand separately in assessing the plausibility of the forecast. As we indicated in the Greenbook, it would seem unreasonable to expect that firms will continue indefinitely to accumulate stocks at the 5 percent annual rate of the first quarter. But, if final demand were to fail to decelerate as we've forecast, then inventory investment certainly could run close to that pace for a year without pushing stock-sales ratios to burdensome levels. Indeed, such strong demand growth could well lead to circumstances in which supply channels were strained and firms raised their target inventory ratios to insure against stock-outs--if not as a hedge against rising costs.

So, it all would seem to come down to whether it is reasonable to forecast, as we have, that final sales will grow 2-1/2 percent over the coming year, instead of 3-1/4 percent as in the last. There are a number of elements of the economic and financial picture that lead us to think that demand will slow to this moderate degree. One is that we have seen hefty growth in real outlays for consumer and producers' durables in the past few years, and the levels of investment already are sufficient to allow stocks to grow at a good clip. Similarly, in the housing market, building is widely viewed as having run for a while now at a pace somewhat above what one might expect to be sustained, given demographic trends. Nominal interest rates, which had dropped during 1995, generally rose from late 1995 to early 1997--and real rates probably rose still more, judging by surveys of inflation expectations, especially longer-term

expectations. And the dollar rose considerably over the past year, which should weigh on net exports in coming quarters.

We think these are, cumulatively, reasonably persuasive arguments for expecting growth of final demand to slow. Of course, one might have told some of these same stories prior to the surge of the past couple of quarters. In fact, we did! But, in the interim, the stocks of real assets have only grown larger, and much of the dollar's run-up has occurred just since last fall.

What gives us pause, however, and causes us to continue emphasizing the upside risks to aggregate demand, is some of the other developments that have occurred in the interim. Business sentiment appears to have improved. And indexes of consumer sentiment have skyrocketed--to an unprecedented level in the case of last Friday's preliminary Michigan SRC survey for May. Perhaps reflecting those moods, or contributing to them, the stock market has soared to new heights, adding to household wealth and lowering the cost of equity capital for corporations; indeed, last week, we saw some hints that the IPO market, which has been in a lull, might be starting to revive. Banks, though becoming more chary of lending to marginal consumers, have become still more aggressive in seeking business loans. The commercial real estate market is showing ever more signs of booming.

A number of these factors are in the nature of "animal spirits." Their force is hard to gauge, and they could also prove fragile and ephemeral. But they are there now, and we would be more concerned that we haven't made adequate allowance for them in our baseline forecast than that we've overestimated their significance. We certainly see the risk of their imparting some extra cyclical momentum to demand as greater than the probability that the economy

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May 20, 1997
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will go flat in the near term. And, if that upside risk were to materialize, it likely would take a pretty sharp policy move to avoid a significant deterioration of the inflation outlook.

**Contributions to Real GDP Growth
(Percentage Points)**

	1996:Q1– 1997:Q1	1997:Q1– 1998:Q1	Deceleration
GDP	4.1	2.2	1.9
Inventory investment	.8	–.3	1.1
Final Sales	3.3	2.5	.8
PCE	2.2	1.9	.3
BFI	1.1	1.0	.1
Residential investment	.1	0	.1
Government	.3	.2	1
Net exports	–.4	–.5	.1

NOTE: Based on staff estimates of 1997:Q1 GDP. Contributions do not sum precisely to the totals owing to rounding and residuals.

May 20, 1997

FOMC Briefing
Donald L. Kohn

Again the Committee is faced with a decision about whether to tighten monetary policy. Data since the last meeting would only seem to have highlighted (1) the strength of aggregate demand, which was cited as reason for tightening in March, and the associated rise in resource utilization; and (2) questions about the relation of growth and resource utilization to inflation.

Items in the first category might be seen as supporting additional near-term firming of policy. Obviously, there's considerable uncertainty about the degree of labor market tightness that can be sustained over time. But, whatever the uncertainties, a falling unemployment rate heightens the risk that the economy is operating beyond its long-run potential, except in the unlikely event that fundamental supply and demand determinants in labor markets are evolving continuously to moderate cost increases.

The Committee would not have to be so concerned with assessing whether the unemployment rate has slipped to below full employment if it were confident that the stance of policy was already sufficiently restrictive to keep the economy close to its potential. In this circumstance, any increase in inflation would be quite limited. In fact, real interest rates are now at, or above, levels that in the past 20 or 30 years have been consistent with containing inflation. Although interest rates

are about unchanged over the intermeeting period, this does not imply that your tightening had no effect on credit markets; most of it had already been priced in. Relative to just before the Chairman's Humphrey-Hawkins testimony, yields still are up about a quarter point or so.

Nonetheless, in the staff forecast they are not high enough and inflation trends higher; stated another way, the "equilibrium" interest rates implied by that forecast are appreciably above historical averages of real rates, and policy is still accommodative. This judgment is consistent with the observation that intermediate- and long-term rates around current levels over the past year have been associated with robust growth over subsequent quarters that, judging from the unemployment rate, has permitted the economy to run above its estimated potential.

Mike gave several reasons why current rates may not be providing sufficient restraint; I'll add a few more. One is the persistent strength in profits. This strength suggests an abundance of highly productive investment opportunities. Although such investment increases the economy's potential over an extended period, in the short run the demand for capital goods tends to put pressure on the economy's ability to supply such goods, driving up prices. In effect, the higher marginal product of capital needs to be matched with higher interest rates to keep savings and investment in balance. Another, longer run, reason why equilibrium real rates might creep up over time is the evolution of financial markets. A wider variety of sources of

funds for borrowers implies fewer nonprice constraints on credit, and more pressure on prices--that is, interest rates--to ration scarce savings. This is an ongoing process; a recent example is the securitization of commercial real estate loans, which is reducing dependence on traditional lenders, and helping to finance the recovery in this area.

If you share the staff forecast perspective that the current unemployment rate is probably too low to be consistent with containing inflation and that financial conditions are probably insufficiently restrictive to bring the economy back to a sustainable level, then tightening would seem to be called for before too long. Prompt action, at this meeting might appear justified if you were determined to head off any possible increase in inflation and wanted to lean in the direction of bringing it down over the long run. Immediate firming might also be appealing if you shared Mike's view that the risks were tilted toward higher utilization than in the Greenbook forecast, and you wanted to have greater assurance of avoiding more abrupt and possibly disruptive tightening later.

Tightening would come as some surprise to the markets, but an outsized reaction to a 1/4 point move would be unlikely. Developments over the recent intermeeting period would seem to suggest a considerable--and perhaps not entirely desirable--market resiliency to policy firming. Against the background of the announcement in March together with more rapid first-quarter GDP growth than most had anticipated and a falling unemployment

rate, the markets would see such an action as a logical extension of the Committee's last move. However, because growth is perceived to be slowing, the Committee likely would be interpreted as being especially attentive to the level of the unemployment rate.

Some of the recent data, on the other hand, would seem to lend support to arguments for standing pat now and adopting a cautious approach to any further tightening. The economy does seem to be slowing, holding out the hope that resource utilization rates may stabilize. In this regard, the current circumstances differ from those facing the Committee at its last meeting, when the pace of economic expansion was clearly exceeding the growth of potential. In addition, cost and price increases have remained remarkably restrained, which, as noted, have underlined uncertainties about the inflation process. In the staff forecast, with the output gap constant and inflation damped for a time, costs in terms of higher inflation of waiting for a short while are not large, and the Committee may view the staff as possibly unduly pessimistic about price prospects. Moreover, there are costs to tightening in the form of lower output and employment, if such an action turns out to be unnecessary to contain inflation; in this latter circumstance, though, additional progress toward price stability enhancing longer-term economic efficiency would presumably balance those costs.

One reason the costs of waiting should not be large, even if underlying inflation is about to edge higher, is that inflation

expectations should remain damped on either Wall Street or Main Street. Although most economists working for financial firms believe that tightening is necessary to contain inflation and will be forthcoming, this perception does not seem to pervade markets. The structure of short-term rates indicates only modest odds on a tightening at this meeting. Moreover, the overall slope of the yield curve is close to its historic average, suggesting that little, if any, upward movement of rates is seen as necessary to keep inflation from strengthening over the longer haul. On Main Street, damped increases in broad price indexes, helped by food and energy prices and by the past appreciation in the dollar, should hold down inflation expectations. Perhaps for these reasons, Michigan survey results show slightly lower mean inflation expectations in recent months, though the medians haven't changed much.

Even if the risks are seen to be tilted toward higher inflation, not moving at the current meeting would be consistent with a strategy that dealt with this possibility, but contemplated an especially deliberate pace of tightening. Such a strategy might seem a reasonable approach in a situation in which the Committee has said that it does not view policy as substantially misaligned, and in which evidence of actual cost and price pressures is sparse. Caution might also be engendered by tightening based almost entirely on projected inflation outcomes, when projections of inflation over recent years--including, it now seems likely, those by Committee members last February--have

often turned out to have been too pessimistic. This approach would gradually reduce possible inflation risks while allowing the accretion of additional information that might begin to resolve some of the uncertainties about the underlying inflation process.

One danger with such an approach is that policy becomes too sluggish--that it tends to be immobilized by uncertainties and proceeds so slowly that inflation pressures do in fact build. If the Committee chooses to keep policy unchanged at this meeting, it might want to be especially flexible in reacting to incoming news. In these circumstances, an asymmetrical directive would appear to be appropriate, clarifying the Committee's perception of the risks and signaling its willingness to move promptly should the odds on higher inflation become larger. Under some circumstances, a flexible policy response also may need to be a larger policy response over time. Catching up if inflation pressures become more evident or resource use rises further is likely to involve a larger increase in rates than a successful preemptive policy.

If the Committee adopts alternative B and an asymmetric directive, it might also find it useful to consider what kinds of information it would look for to trigger a tightening--if not before July, then at a scheduled meeting over the next few months. Presumably, the failure of the economy to slow enough to keep resource utilization rates from continuously rising further would signal an unsustainable situation that would prompt action,

whatever the news on costs and prices. This circumstance would be similar to the one the Committee faced in March--but now at a lower unemployment rate.

The more difficult circumstance would be one in which economic growth slows but only to around the rate of potential so labor markets retain their current degree of tautness, but costs, prices, and inflation expectations remain quiescent for a time. The policy decision would involve a weighing of where the Committee saw the risks and how it wished to weigh the potential costs and benefits of possible outcomes. If the Committee thought that the economic environment might have changed sufficiently in recent years to undermine its confidence in estimates of unemployment rate-NAIRU gaps or the inflation consequences of those gaps, it presumably would avoid tightening until it saw more definitive signs that inflation was in the process of picking up. This strategy would enable the economy to enjoy the output fruits of its changing dynamics, and might even be consistent with lower inflation as well, if indeed it is a "new age". On the other hand, if the Committee still had some conviction about the sustainable level of the unemployment rate, and that level was thought to be above the current level, however uncertain the Committee might be about the exact specification, then further, perhaps cautious, tightening might be called for even before higher inflation turned up in the data. Assuming the Committee would not want to countenance a more rapid rate of inflation, delaying action until prices accelerated under these

conditions would result in policy accentuating, rather than damping, the business cycle.