APPENDIX

FOMC NOTES - PRF
March 25, 1997

Mr. Chairman:

I will be referring to the package of color charts distributed at the table.

Since your last meeting, market expectations have shifted:

-- Here in the U.S., the economy is perceived to be stronger and there are pronounced expectations for an increase in rates by the Committee;

-- In Germany, there is a sense that the economy is less weak than previously feared,and lingering expectations for an ease in rates by the Bundesbank have been unwound;

-- In Japan, despite the current pace of economic activity, the dominant presumption among market participants continues to be that the economy will slow in the months ahead.

Looking at the first page of charts, you can see that U.S. short-term forward rates have been moving higher since mid-February, punctuated by the Chairman's Humphrey-Hawkins testimony and the retail sales figures.

German forward rates rose more gradually, as data releases pointed toward a moderate recovery and increasing confidence in forecasts of 2 percent plus growth for the year.

Japanese forward rates rose off their very low levels toward the end of the period. This shift -- which was much more pronounced in the Euro-Yen futures contract -- may only reflect year-end noise or could reflect a more significant questioning of the entrenched assumption that the Japanese economy will slow.

At the top of the second page: you can see that U.S. and German long-term rates have been backing up.

Despite rising yields in most bond markets, Japanese 10-year rates declined during the period -- reaching a new historic low of 2.19 percent on March 17th -- but now just recently backed-up off these lows.

-- Although there has been the strong presumption that the Japanese economy will slow in the months ahead, as a consequence of the increased consumption tax and decreased government outlays in the new fiscal year,

there is at least some possibility that -- as the authorities keep saying -- the forces of the autonomous recovery will be sustained.

-- The recent strong data, coupled with the Bank of Japan's apparent willingness to let the call money rate drift up above the Discount Rate in recent days are putting at least something of a risk in the market that the economy may indeed sustain its momentum into the new fiscal year and that a BoJ rate increase might not be too far off.

-- This morning the Bank of Japan, through inaction, left the market in surplus, but call is still trading above the ODR.

-- Last summer, you may recall, it was widely assumed that the Bank of Japan would follow any increase in rates by the Federal Reserve.

-- Thus, year-end, window-dressing demand for JGB's may be obscuring the risks of a rising rate environment that are creeping at the short-end.

At the bottom of the page, you can see that the dollar came off its highs against both the mark and the yen.

-- The yen showed more of a direct reaction to Secretary Rubin's changed rhetoric and the G-7 statement, as the market braced itself for intervention. The expectation of heavy repatriation flows also helped strengthen the yen a bit. But these flows did not materialize -- at least to the extent feared -- and as this became apparent and as the threat of intervention faded, the yen has been gently weakening during March.

-- Dollar-mark showed hardly any response to the G-7 statement. The moderation of the dollar's rise against the mark reflected the somewhat improved German outlook as well as the unwinding of short-mark positions into other European markets, as the probabilities of an on-time EMU declined.

-- It is worth pausing to note the two-pronged nature of the markets' assessment: the German economy may be somewhat stronger than previously thought, but it does not -- at least at present -- appear to be strong enough to enable Germany's fiscal performance to encourage much optimism that EMU can occur on target and on schedule.

Turning to the third page: you can see what I think are noteworthy differences in asset market behavior.

-- In the top panel, you can see four U.S. equity indices: the Dow Jones Industrial Average, the S&P 500, the Russell 2000 and the NASDAQ composite and, for perspective, the German DAX and Japanese Nikkei -- all re-indexed to January 1st, as they traded through last Friday.

-- While the Dow and the S&P 500 -- depicted in the darker green lines -- have retreated from the peaks they reached after your last meeting, they are still trading well above where they started the year.

-- Other segments of the market, however, represented by the Russell 2000 and the NASDAQ, have lost all of the gains they registered in January and are now in negative territory on the year.

In the bottom panel you can see:

-- Three indices of corporate debt, and Canadian 10-year government bonds, expressed in terms of the basis point changes in their spreads to comparable U.S. Treasury yields since the start of the year.

(In the box you can also see the absolute level of these spreads at the start of the year, at your last meeting, and last Friday.)

-- It surprised me to see that these spreads all narrowed in March, at the very time that market participants were increasingly expecting a firming in policy by the Committee and Treasury yields were backing up.

    -- To a great extent, the narrowing in these spreads reflects the back-up in Treasury yields and the resilience in corporate issues and the Canadian bond.

    -- While some lag in the adjustment of corporate yields to Treasuries is not uncommon, the extent of their resilience is being noted in the markets.

-- There are some indications that the brokerage houses are encouraging investors to move into corporate debt as a "safer" alternative to the stock market -- reaching for yield by placing a heavier weight on corporate debt.

-- Such strategies are frequently linked to the widespread view that, if the Committee raises rates today, it is unlikely that this would begin a tightening sequence of more than 50 or 75 basis points.

-- Thus, there are many who see the anticipated degree of tightening as being unlikely to induce a recession and, therefore, unlikely to erode significantly the profitability of major corporations or to trigger a deterioration in the quality of corporate credit.

-- The divergent performance of the major stock indices and of the small cap indices could also reflect a defensive positioning on the part of investment managers, favoring the more-liquid, lower risk, blue chips.

  -- Yesterday's simultaneous rally in the Dow and decline in the NASDAQ appears to be consistent with such a pattern.

-- Also consistent with the pattern of fixed-income market trading, 10-year Canadian government bond spreads have rallied since the start of the year, and have been trading below the 10-year Treasury since your last meeting -- reversing their more typical spread <u>over</u> Treasuries.

Turning to domestic operations: We completed 6 billion in coupon purchases in five separate passes between February 14th and March 12th, addressing some of the building reserve needs.

-- Spreading these purchases out over several weeks, and announcing the quantities purchased after the conclusion of each operation, has done as much as I had hoped to reduce the sometimes-disturbing impact of our outright purchases on the market.

On many days during the period, the funds market traded on the soft side.

-- You can see this on page 4, where the top panel shows the daily range, and the bottom panel the standard deviation around the daily effective, from the start of the year. In between you can see the period average effective rates.

-- The softness since the end of January appears to be a by-product of the high excess holdings banks acquired early in the maintenance periods since your last meeting, as we provided additional reserves to deal with heavy payment-flow days which happened to fall at the start of these periods.

-- This soft tendency pretty much disappeared beginning with the March 17th corporate tax payment date a week ago Monday.

  -- On that date, the Treasury account came in 2 and half billion higher than our estimates, but the pressure on the funds market was minimal.

  -- On the following day, however, we had an impressive 6 billion dollar miss in the Treasury balance, as tax payments exceeded our forecasts. This miss left only 12.4 billion in operating balances -- a new record low, well surpassing the previous low of 15.3 billion.

    -- Only late in the day did this significant shortfall exert upward pressure on the market, bringing the funds rate up to a high of 10 percent and leading to adjustment borrowing at the window of about 1 billion.

    -- As we often observe, the impact of firm conditions on one day lingered, and the funds rate traded with a firm tone following these misses.

  -- In the last few days, the funds rates has come under some upward pressure from widespread expectations of an increase in rates at this meeting.

Looking forward, I would like to request that the Committee again approve an increase in our intermeeting leeway from 8 to 12 billion for the same reasons I mentioned at your last meeting.

-- We have allowed needs to grow and we find ourselves comfortable working with these larger needs. But with another extended inter-meeting period of almost two months, the risks that the future will not conform to our forecasts could cause needs to grow larger yet.

-- I think it likely that we would undertake a bill pass early in the period for between 4 and 6 billion and I would like the additional 6 billion in leeway to provide room for:

  -- the possibility of additional outright operations to meet the large remaining needs;

  -- the risks that needs grow even more than expected; and

  -- the risk that

On a separate topic, members of the Committee have received copies of our annual reports on open market and foreign currency operations and I hope you have also received a copy of my memorandum.

As I mentioned, I would like to include in the public version of the Desk's annual report on open market operations the appendix which contains the detailed listing of the System's holdings of each issue of securities.

-- I hope that doing this will help market participants better understand the publicly-available amounts of each issue and further remove any lingering mystery from our outright operations.

-- I had been under the impression that this had never been done; however, Norm recalled that the Board's annual report had included a listing of coupon issues until 1981, but we have been unable to ascertain why this was discontinued.

Mr. Chairman, we had no foreign exchange interventions during the period.

Thus, I will need two votes from the Committee:

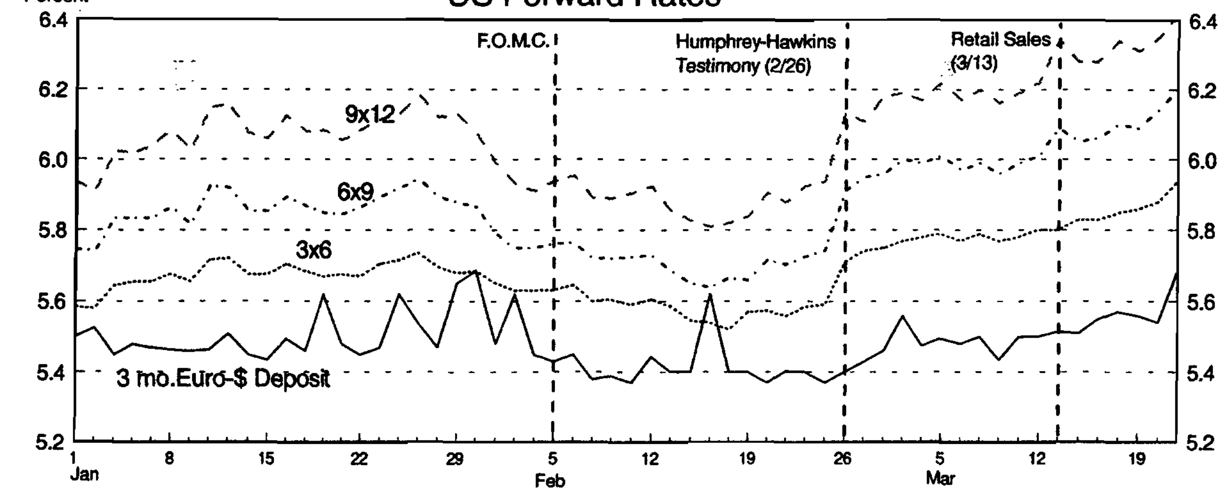
-- One for approval to increase the intermeeting leeway to 12 billion; and

-- One to ratify the Desk's domestic operations.

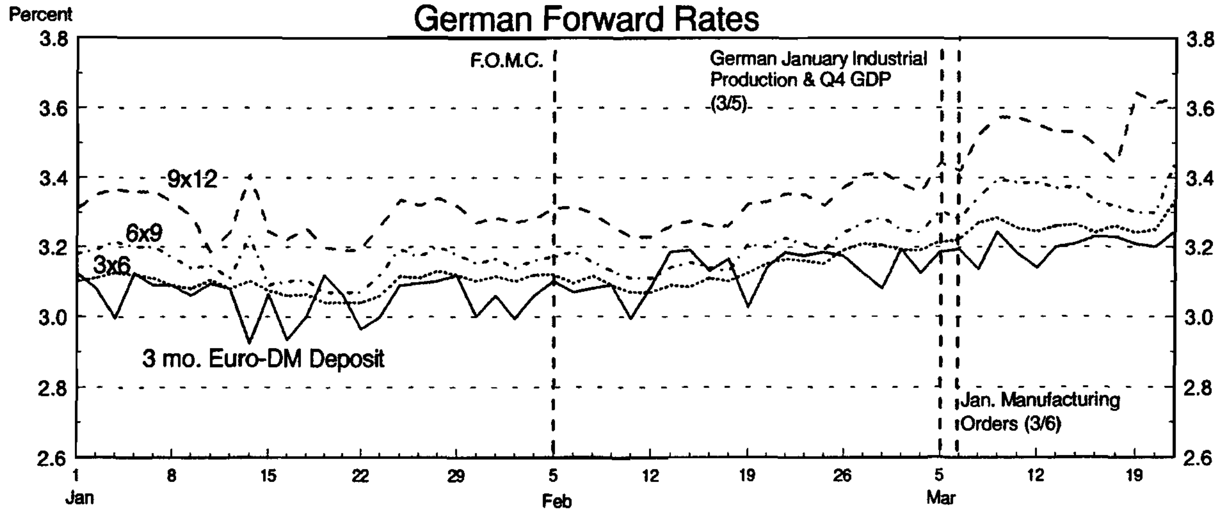
I also hope the members of the Committee will not object to my proposal that we re-establish the tradition of publishing a end-of-year snap-shot of SOMA's securities holdings, despite a 16-year hiatus.

I would be happy to answer questions you may have about this proposal or any other aspect of my report.

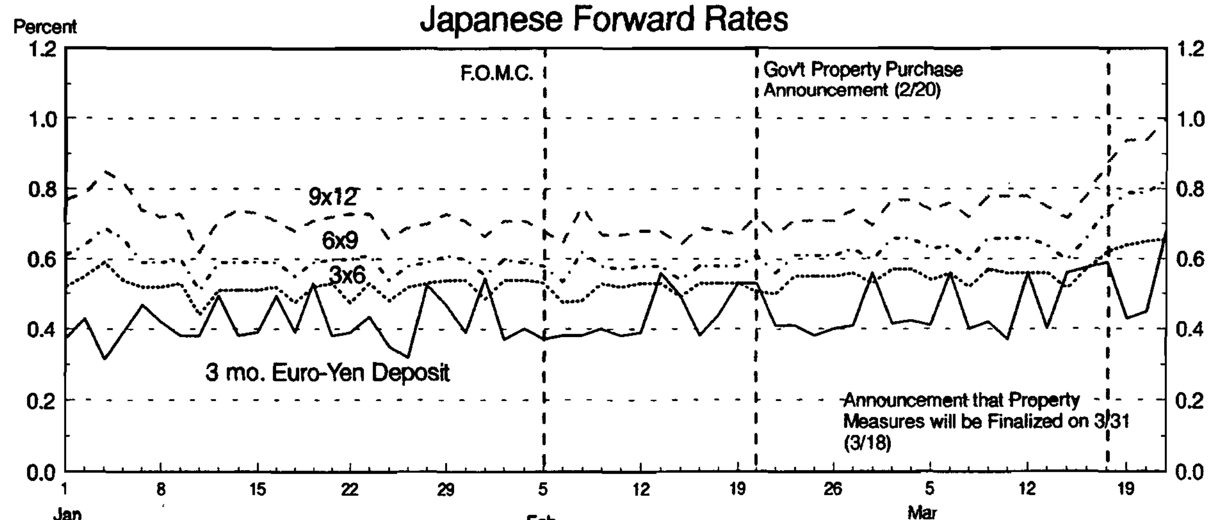
US Forward Rates



German Forward Rates

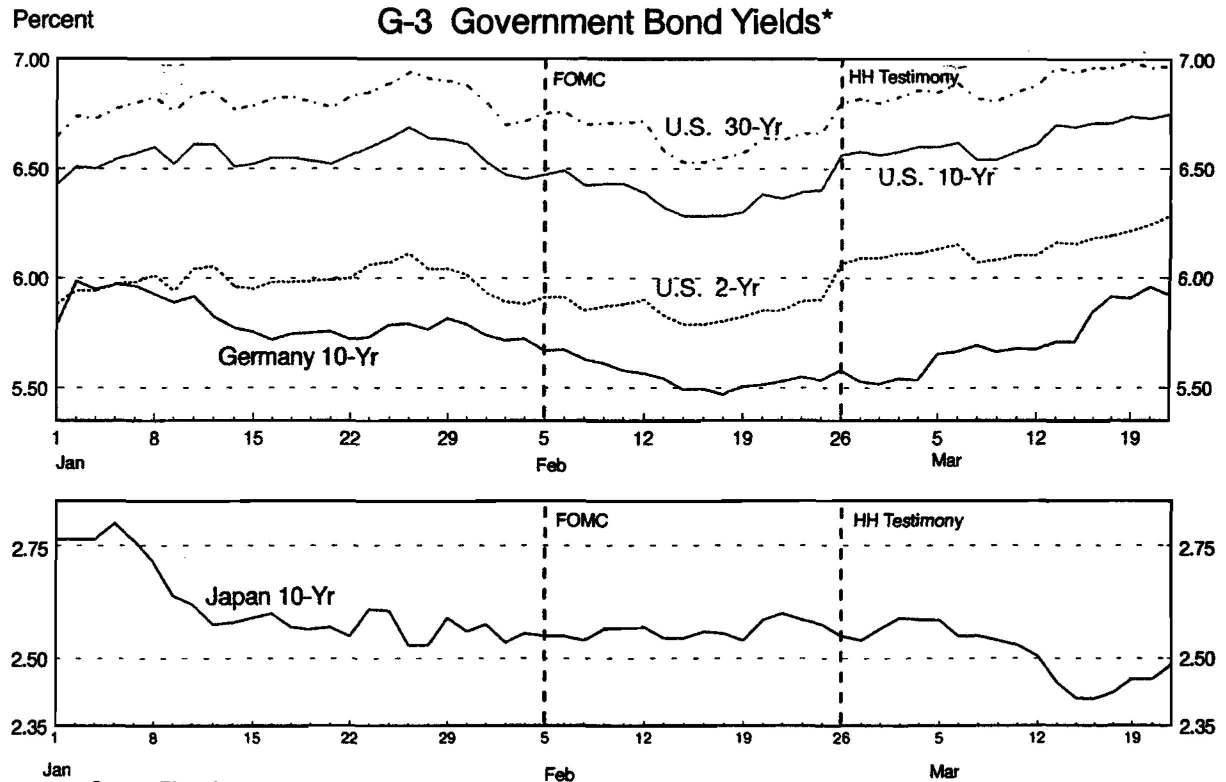


Japanese Forward Rates



Markets Group: FRBNY
Gina Lukaszewicz

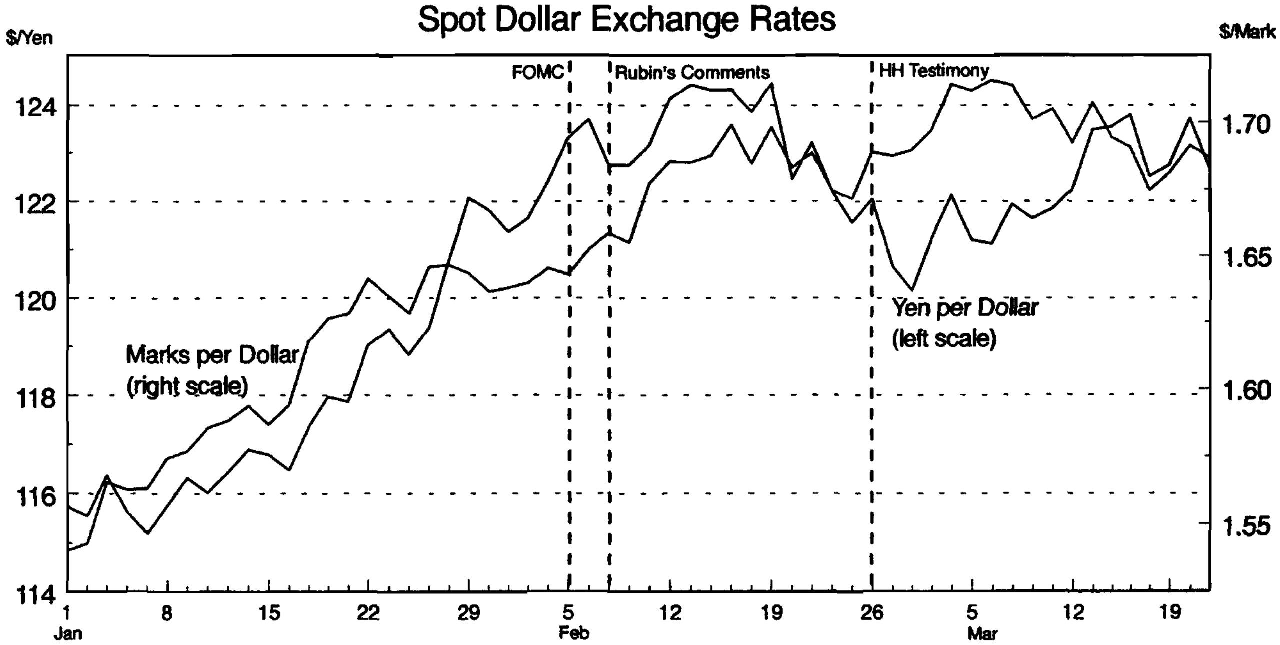
G-3 Government Bond Yields*



Source: Bloomberg

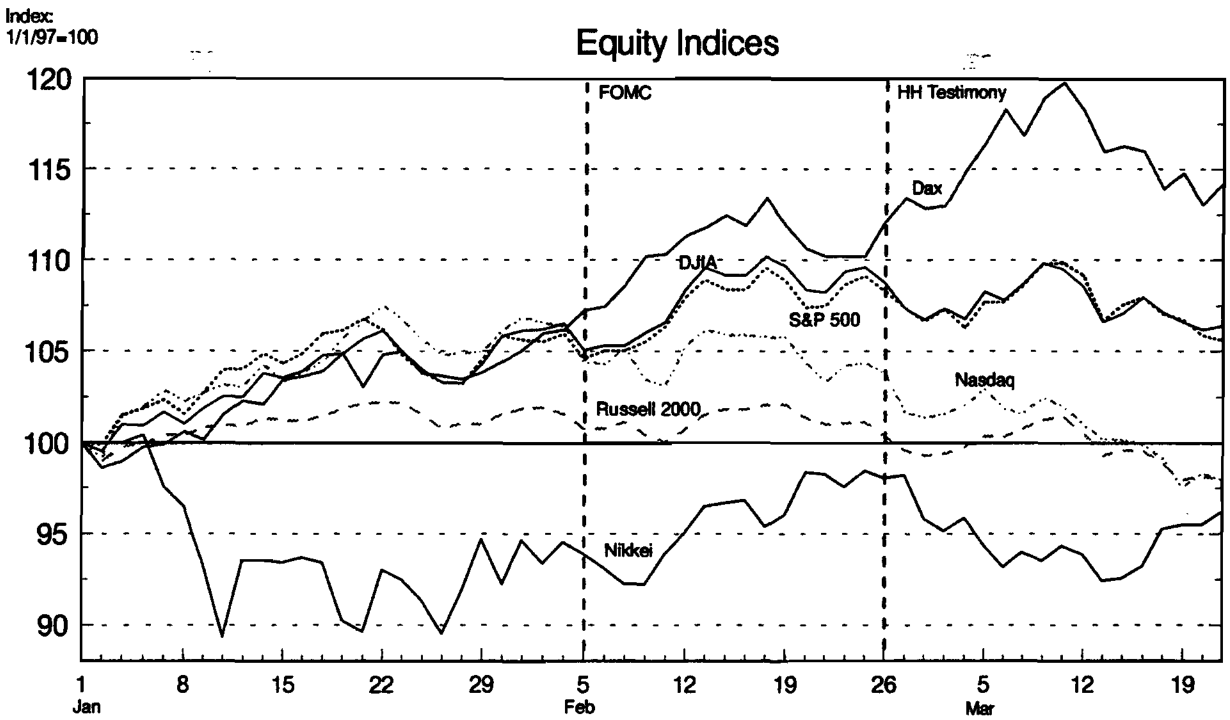
*Data represents constant maturity yields. German yields are based on annual coupon payments.

Spot Dollar Exchange Rates



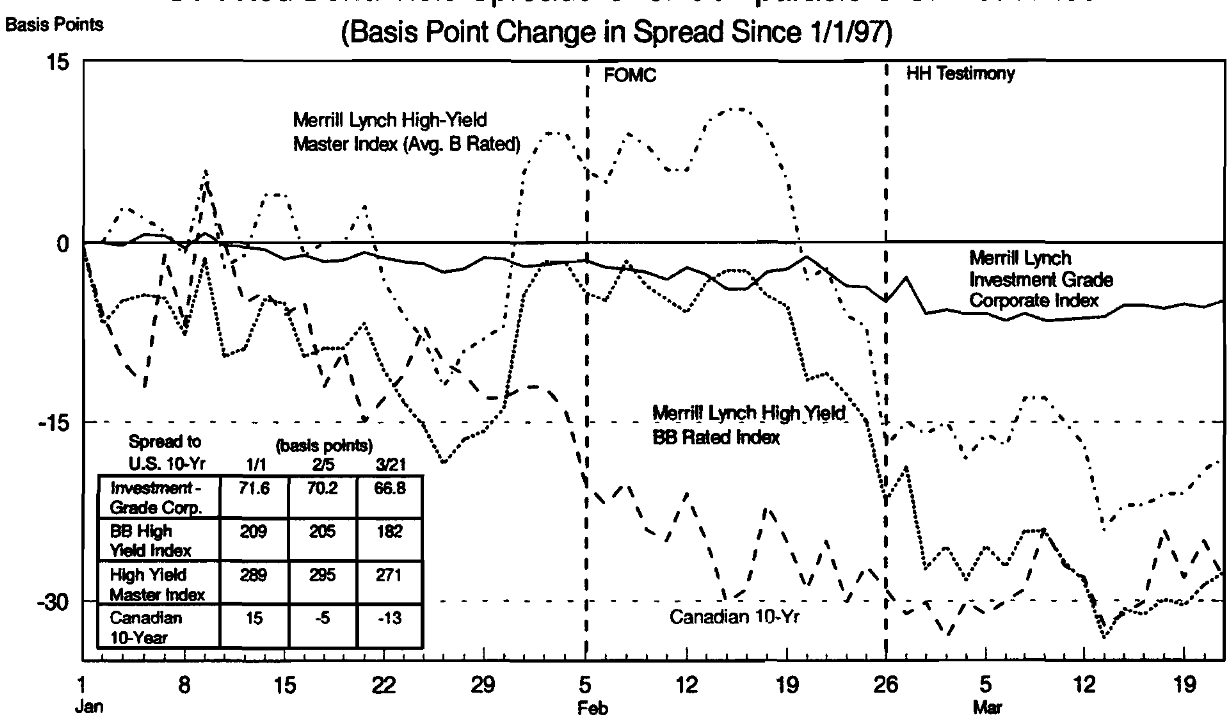
Markets Group: FRBNY
Gina Lukaszewicz

Equity Indices



Selected Bond Yield Spreads Over Comparable U.S. Treasuries

(Basis Point Change in Spread Since 1/1/97)

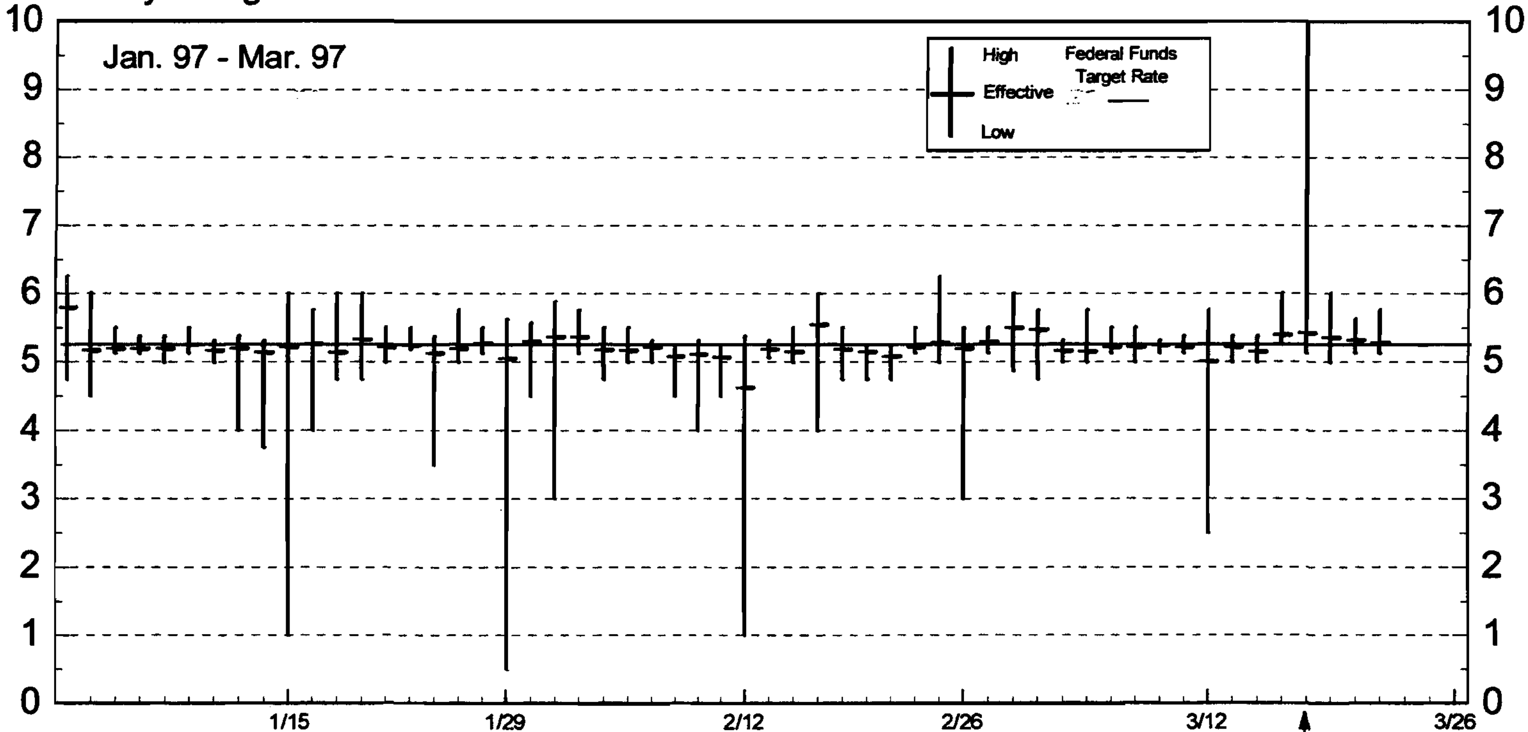


Spread to U.S. 10-Yr	(basis points) 1/1	2/5	3/21
Investment-Grade Corp.	71.6	70.2	66.8
BB High Yield Index	209	205	182
High Yield Master Index	289	295	271
Canadian 10-Year	15	-5	-13

Markets Group: FRBNY
Gina Lukaszewicz

Federal Funds

Daily Range and Effective Federal Funds Rate

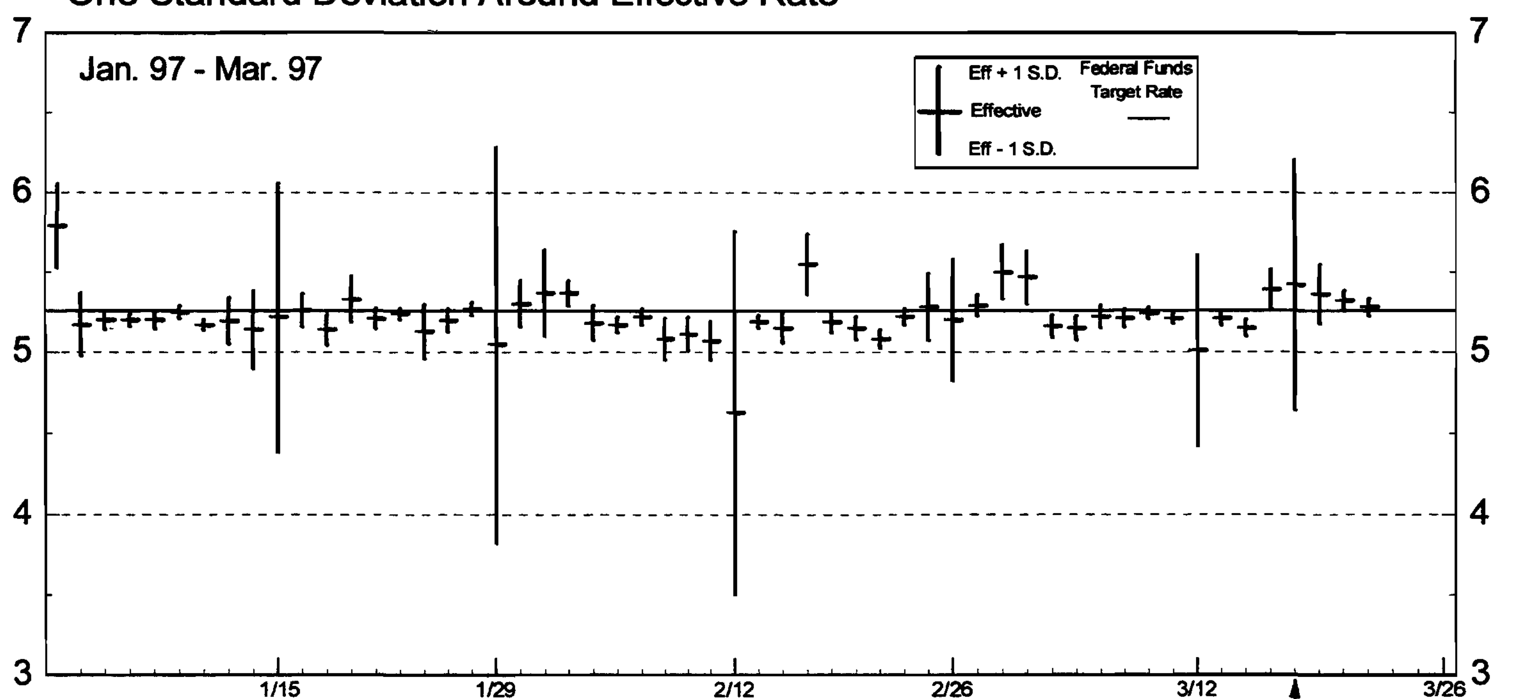


Period Average Effective Rate:

5.24%	5.19%	5.18%	5.19%	5.27%	5.27%

1/15 1/29 2/12 2/26 3/12 3/26

One Standard Deviation Around Effective Rate



Daily Operating Balance: 12.4 Bln

Drew T. Matus, Markets Group, FRBNY

FOMC Briefing
Michael J. Prell
March 25, 1997

I thought I might begin by recounting an interesting experience I had last week. At a dinner for new Reserve Bank directors, I found myself sitting between a small-town banker and a big city industrialist. They were carrying on a debate that captured nicely some of the issues before you today.

The banker started by saying that the businesses he'd been talking with were reporting that labor markets had gotten really tight and that they were granting bigger pay increases and intended to pass their higher costs along in price hikes. He thought that a Fed tightening step now would reduce the risks of greater pain later. The industrialist then proceeded to recount how his firm was requiring suppliers to trim prices year after year and was telling workers that, if they didn't like taking lump sum payments in lieu of base-pay increases, the company would just move operations to Utah or Mexico; in his view, there was no risk of a pickup in inflation in this new, open economy where the Internet gives firms and customers instant information about the best prices--and even what is tantamount to an electronic auction market. From his perspective, real interest rates are already high and an increase would needlessly sacrifice opportunities for real growth.

I suppose that one would have to characterize our Greenbook forecast as being more aligned with the banker's traditional view than with the industrialist's "new age" view. We take that position with some nervousness, but I must emphasize that our nervousness isn't one-sided. For, while we grant that the industrialist has a point, we also see grounds for worrying that we may be entering a more inflationary boom than is described in our baseline scenario.

On the latter score, it's clear that the economy has been quite strong thus far this year. Moreover, one is hard-pressed to identify any imminent threats to at least moderate growth in coming quarters. To be sure, the January trade figures, which came out after the Greenbook was completed, were quite weak--but that was basically confirmation of our projection for the sector. Meanwhile, there's no inventory overhang to damp production in the near term. The recent surge in consumer demand appears to have been supported mainly by rapid increases in jobs and labor income; people have not had to drain their savings accounts and, instead, wealth has continued to accumulate.

It doesn't take much of a stretch of the imagination to transmute these comments regarding the limited risks of a major shortfall in growth into a description of a meaningful economic boom. Although the stock market has been wavering of late, we wouldn't rule out the possibility that share prices might move appreciably higher; there's still a lot of liquidity, as the commentators say. And, while we're not uncomfortable with the notion that people will tend to keep their capital gains tucked away for future college tuitions or retirement, it's not hard to envision their opening their purses a bit wider for current consumption or to buy a bigger residence or a vacation home. Stronger household spending would in turn have accelerator effects on business fixed investment--which might, in any event, be driven to higher levels than we've forecast by the rapid obsolescence of existing equipment and the incipient wave of enthusiasm in office and hotel construction. And, of course, any greater strength in final demand is likely to generate pressures to build inventories more substantially.

All things considered, then, we think that it's quite reasonable for you to factor into your thinking the notion that it probably will require at least some tightening of financial conditions to rein in aggregate demand and prevent resource utilization rates--particularly labor utilization--from moving appreciably higher. But that leads to the other key question for policy: Need one be concerned about higher utilization, or should one stay on the sidelines and applaud it?

As you know, we're projecting only a mild further acceleration of compensation over the course of 1997 and '98. And we have the core CPI accelerating but a smidge this year and then only to 3-1/4 percent in 1998. Still, this _is_ a change in the direction of the underlying trend, and it implies the risk of a building inflationary momentum over time that might necessitate a more wrenching correction to halt.

It's certainly _possible_ that we're being too pessimistic about inflation, but we don't see it as _probable_ that we're way off the mark in the broad sweep of our assessment. Perhaps even in a tighter labor market, workers would be sufficiently intimidated by the risk of jobs being moved that they wouldn't seek a bigger piece of the pie. That hypothesis seems difficult to maintain, however, in the face of indications that wages have in fact been accelerating. And there are only so many people in Utah willing to work at the currently prevailing wage. Although a strong dollar might make substitution of foreign workers or suppliers a more attractive alternative than we've anticipated, one wonders how far that process can go before the international financial markets become uneasy about mounting U.S. trade deficits; indeed, we have built in some downward pressures on the dollar on these grounds.

If one discounts that story, then, stable inflation with tighter labor markets would appear to require either that firms give up some of their profits to workers or that they accelerate their productivity improvements. There may be hints of a squeeze on profitability in the occasional anecdote, but on the whole, to date, there is not much to suggest that this phenomenon has taken on macro-significance. Nonetheless, our forecast does anticipate that the erosion of margins will become important in damping the transmission of rising unit labor costs to prices.

More interesting, perhaps, is the latter possibility--that is, that productivity gains can be enlarged. One might think that the opportunities in this regard would diminish cyclically, but there is some hint in the recent behavior of wages, prices, and profits that firms may have found ways of stepping up their pace of productivity improvement. Perhaps this is a sign that firms are now reaping the benefits of technology investments that seemed to be eluding them earlier. Optimism in this regard has not proven particularly wise in the past, but we have in a sense made a small allowance for a productivity boost by forecasting increases in output per hour in 1997-98 that considerably exceed the measured average of the past several years--a pattern that runs counter to what might be expected on the basis of cyclical norms.

In short, we may be in a new age, but we don't yet find compelling evidence that we should toss into the wastebasket our fundamental framework of analysis. We've made adjustments over the past year--for example, by lowering our NAIRU assumption and by discounting the published weak productivity figures--to take what we hope is judicious account of the surprises we've been experiencing in the behavior of inflation. Thus, we feel our forecast presents a reasonably balanced picture of the prospects for inflation, should growth follow the course we've predicted.

The bottom line is that, if you're feeling uncomfortably uncertain, we're definitely sharing your pain. Nonetheless, we do believe that the Greenbook is on pretty solid ground in suggesting that policy tightening is likely to be needed at some point to avert an upturn in inflation.

March 25, 1997

FOMC Briefing
Donald L. Kohn

As Mike noted at the end of his briefing, under the staff forecast the Committee will have to tighten at some point. The question for today's meeting is has that point arrived? Put another way--you've had an asymmetrical directive for about nine months, is it time to deliver?

One approach to this question is to ask what is different now than at the last few meetings that might tip the scales to tightening. That is, do the data in hand now suggest a sufficiently greater risk of inflation to justify an immediate tightening, or, do recent developments still look ambiguous enough to justify retaining a wait and see posture. In broad terms, a key difference now is that economic growth has unexpectedly exceeded the estimated growth of potential in recent quarters, and quite possibly may continue to do so. At the same time, however, high output growth has not raised actual resource utilization rates, and price increases have remained subdued, with remarkably few early signs of potential price acceleration.

The case for standing pat rests importantly on these latter observations. First, the unemployment and capacity utilization rates held steady over the second half of 1996 and early 1997 in the face of even more rapid economic growth than the staff projects for the quarters ahead. To be sure, this resulted from a substantial and unexpected increase in labor force participation and possibly a pickup in productivity growth, which are always difficult to predict. It's possible that, with economic growth expected to slow, further such gains, even if more moderate, could continue to hold down resource utilization for some time.

Second, at relatively low unemployment rates, there has been little evident increase in inflationary pressures. In labor markets, compensation did not accelerate much in the second half of the year; by some measures, it slowed. And core inflation actually declined. Because of the low inflation, the Taylor rule suggests that policy now is roughly in line with your past responses to realized output gaps and inflation rates--responses that have been reasonably successful in damping output cycles and reducing inflation.

The unexpectedly favorable inflation outcomes suggest continuing uncertainties about the level and rate of change in the economy's potential, and about the interaction of that potential with prices. Under these conditions, before it tightened the Committee might wish to see more definitive indications that inflation is likely to pick up absent such a tightening. Such indications might include a further decline in the unemployment rate or a rise in capacity utilization to confirm that growth is, in fact, unsustainable. Presumably the Committee would also be looking for evidence that tight labor or product markets were leading to higher inflation. A further acceleration of compensation, especially if it were squeezing profit margins, would fit in this latter category, as would lengthening lead times or increases in prices at earlier stages of production. In financial markets, money and credit growth at--or certainly above--recent rates might be viewed as confirmation that monetary policy was too accommodative to check the growth of spending.

With policy unchanged, the economy will be allowed to produce marginally more than if the funds rate is raised, and that output might be consistent with sustainable growth. Even if it is not--if it turns out that policy does need to tighten--waiting may not do much lasting damage to inflation, provided that the Committee responds promptly to rising resource utilization or accelerating costs and that inflation expectations do not increase appreciably. Some comfort in that regard may be taken from the fact that inflation expectations of households and businesses seem firmly anchored, and, in the near-term, the expected decline in overall CPI inflation this year should help to keep them from rising very much. And increasing costs may be at least partly absorbed for a while in narrowing profit margins.

In sum, the case for policy remaining unchanged is based importantly on looking at how growth, resource utilization, and inflation have interacted in the immediate past and awaiting new information indicating that this pattern will not persist. By contrast, the case for tightening is built on projected increases in resource utilization and rising inflation pressures under a forecast of continuing strong aggregate demand, combined with the presumption that, based on experience over a longer run, some of the unusually favorable elements that have elevated aggregate supply and restrained inflation in the immediate past are not likely to be carried forward for very long into the future. Even if Committee members do not anticipate a major pickup in inflation under unchanged policy, they may see the higher possibility of persistently strong demand as materially raising the risk of accelerating prices.

One reason demand might be expected to remain quite strong, absent a tightening in policy, is that, in many respects, the financial conditions that produced the above-trend growth of the last few quarters remain in place. For example, the recent rise in long-term interest rates has carried them only to levels that are equal to or even below those that prevailed through much of last spring and summer. Moreover, part of the rise has been predicated on an expected tightening of policy, and real rates would decline if policy remained unchanged. The dollar has been strong, and this is an important reason for the forecasted slowing of economic growth, but on the other side, the stock market also is higher than it was through 1996.

Moreover, credit supply conditions remain quite accommodative. To be sure, there are a few signs that investors have begun to think more seriously about risks: the prices of technology and small capitalization stocks have fallen substantially, inflows to junk bond mutual funds are way off in recent weeks, the yields on securities of emerging market economies have backed up relative to the United States, and spreads of rates on large business loans at banks may have ticked up from very low levels. Nonetheless, exuberance and complacency do not seem to be washing out of the markets to a degree that would raise the effective cost of finance significantly and work to slow spending. Risk spreads in most markets remain unusually low, as Peter showed, price-earnings multiples are still high, and flows of money and credit fairly strong. Bank credit, in particular, has picked up in recent quarters and is feeding through to faster M3 growth. M2 also has grown fairly rapidly on average in recent months. Some outside observers have been putting considerable weight on the recent behavior of money as a signal that the Committee needs to tighten. I'd hesitate to give it quite that degree of emphasis, especially with M2 growth moderating a bit this year. But the recent growth of money does seem more consistent with the 6 percent growth of nominal GDP estimated for the fourth and first quarters than with the under 5 percent growth in the Committee members' forecasts for 1997. More broadly, ample flows of money and credit do tend to confirm the absence of developing liquidity and credit constraints on spending.

If tightening is needed, the longer it is delayed--that is, the longer the economy operates beyond its sustainable potential--the more substantial the offsetting correction in economic activity required if the Committee is to keep inflation from ratcheting higher. To the extent the Committee wishes to focus on its longer-term goal of reducing inflation further, the arguments for tightening would seem to be strengthened. Even if the Committee is not seeking additional disinflation in the near term, or is not sure how low it would like eventually to see inflation fall, so long as the longer-term inflation objective is below the current rate, the Committee would probably view an increase in inflation as more costly than a decrease. In this context, the notion of getting some added assurance that inflation would not rise would be all the more justified.

The financial market reaction to a 25 basis point tightening should be subdued. As Peter noted, it is largely built into the yield curve. Indeed, not tightening could unsettle financial markets as participants reassessed their reading of the signals coming out of the Federal Reserve. A

25 basis point firming may induce markets to extrapolate further such actions, especially as it would represent a shift in direction. This tendency should be limited in the current circumstances, however, because the recent minutes and testimonies have reported your view that policy is probably not greatly out of alignment and because the last string of downward moves was only 75 basis points.

In the past, Committee members have considered whether larger steps would reduce the unsettling effects on markets of waiting for the next shoe to drop. If the Committee were reasonably confident that at least 50 basis points of tightening will ultimately be needed, it might consider the larger step. It would get the desired degree of restraint into the markets more quickly, and it would likely leave the market expecting the Federal Reserve to be on hold for a while, damping market reactions to incoming data over the next few months. At the same time, however, it also would surprise markets and could be read as a message that the Committee is quite concerned about the inflationary potential in the current situation, leading market participants to raise their estimates of the cumulative tightening that may be forthcoming.

A staff study distributed to the Committee in late 1994 found that 25 basis point tightenings did tend on average to have a little more impact on longer rates <u>rela</u>-

tive to the size of the tightening than did larger tightenings, perhaps because of the uncertainty created. That is, a 50 basis point tightening would have slightly less than twice the effect of a 25 point move. Although it is difficult to generalize because of the wide range of experience, it does seem likely that in current circumstances the total market reaction to 50 basis points would be substantially larger than to 25. If the Committee were concerned about the strength of the market response and the possibility that sharp corrections in stock and bond markets could engender their own self-reinforcing dynamic for a while, 25 basis points would seem to be a safer approach, even if more were thought eventually to be needed, accepting the strong possibility that before long markets would begin building in another near-term tightening.

Finally, if the Committee tightens, it needs to consider whether it should retain the asymmetry in the current directive or shift to a symmetric directive. Retaining the asymmetry would seem to imply the Committee had a strong conviction that even after tightening a substantial risk of rising inflation remained and more tightening would be needed. Asymmetry would also seem to mean that the Committee saw that risk as still large enough to trigger further action soon--that the Committee envisioned a fairly steep trajectory for firming. Going to a symmetrical directive might suggest a more cautious approach to further action, perhaps in light of the continued good inflation performance.