APPENDIX

FOMC Notes -- Peter Fisher
May 17, 1994

Since the Committee's conference call on April 18th, the desk intervened on two days for the accounts of the ESF and the System.

From mid-April onward, the dollar steadily declined against the mark. Following the G-7 meetings the weekend of April 23rd and 24th, with market disappointment over lack of official comments on exchange rates, the dollar began to move down quickly against the yen as well as the mark. Then in one hour on Friday morning, April 29th, the dollar lost two pfennigs against the mark in disturbed market conditions.

On the 29th, the Desk purchased 500 million dollars against marks and 200 million dollars against yen, divided equally between the ESF and the System.

On Wednesday, May 4th, the Desk purchased 750 million dollars against marks and 500 million against yen, evenly split between the ESF and the System, as well as dollars against yen as agent for the Bank of Japan. The Bundesbank purchased dollars against marks and 16 other central banks purchased dollars against either marks or their own currencies. In total, central banks purchased dollars on May 4th.

I will try to describe, first, the pivotal reasons for the dollar's weakness in April and, second, how I view the two operations.

Analytically, it is easy to observe that we have had too many, rather than too few, explanations for the dollar's decline. But from a market perspective, there are no brownie points for intellectual tidiness: the fact that there are a number of quite different reasons to sell the dollar only increased the momentum of negative market sentiment and of the dollar's decline.

I would draw the Committee's attention to three points.

First, to many market participants,

increased the risk of yen strength against the dollar in both the short-run and the longer-run. In the short-run, this reduced the prospects for progress in bilateral trade talks with the U.S. and, thus, increased the risk of political pressure on the exchange rate. For the longer-run, continued political haggling within Japan reduced the prospect for government measures to stimulate the economy and, thus, reduced the likelihood that domestic demand might increase sufficiently to stimulate imports.

Second, by the middle of April, the Bundesbank had successfully squeezed out of the market expectations for further interest rate reductions and, from this point on, the mark began to strengthen against both the dollar and the yen. Thus, despite the reversal and then the widening of expected, short-term differentials in favor of the dollar over the mark (as indicated in Euro-futures prices) during the last two weeks of April the relatively high rates at the short-end of the German yield curve seemed to offer a safe resting place compared with the U.S. and Japan.

Third, putting these points in a technical perspective, in the three-way race with the mark and the yen, in April the dollar dropped into last place. The dollar can only move in opposite directions against the yen and the mark with an adjustment in the mark-yen exchange rate. With the mark finding very solid support against the yen at 60 yen per mark, and the market preoccupied with the risk that the dollar might drop from 103 to 95 yen or lower, it was very difficult to see what upward potential the dollar could have against the mark.

The strengthening of the mark and the yen against the dollar accelerated during the week of April 25th. During the week, the foreign exchange market increasingly focused on weakness in the U.S. government bond market as both cause and effect of the dollar's weakness. To some, the dollar's weakness against the yen could be used as a guide for selling the bond and, to others, weak bond prices were a reason to get out of the dollar.

The details of the two operations are described in my written report. In assessing their impact, I view intervention as an effort to communicate with at least two audiences: first, there are the interbank traders themselves and their current positions and, second, there is a broader audience composed of the traders' superiors in bank management, institutional investors and market analysts.

On neither occasion was the overall market short dollars and, thus, in contrast to last August, we did not have a very forceful communication directly with traders, in the sense of causing a sharp adjustment in positions during and immediately after the operation.

However, on both April 29th and May 4th, I think the combination of the operations and official statements, particularly by Secretary Bensten, did get through to the second, broader audience and, thus, contributed to an improvement in the market's view of U.S. exchange rate policy and to a healthier mix of views on the dollar's prospects.

On May 4th, market participants -- quite skeptical as to whether any form of international cooperation existed -- were impressed to see 19 central banks put an exclamation point behind Secretary Bentsen's statement that movements in exchange markets had "gone beyond what is justified by economic fundamentals."

Thus, while we did not get a rapid adjustment in exchange rates on either day, perhaps more importantly, the dollar did gain in the four trading days following May 4th, as several large, short-dollar positions were covered and as other market participants began to accumulate dollars.

Subsequently, the market has seen the Bundesbank lower official rates by 50 basis points and the Bank of Japan has modestly eased the call money rate.

The move by the Bundesbank reflects a concern that continued mark strength and flows into short-term deposits are only compounding their problem with M3. It also reflects a belief that, in order to deal with the high growth in M3, a steeper German yield curve is needed to encourage capital formation.

Mr. Chairman, I will need the Committee's ratification for our operations during the inter-meeting period. These include:

First, the intervention operations I have described on behalf of the System in which we sold 625 million dollars worth of German marks and 350 million dollars worth of Japanese yen over the two days, April 29th and May 4th; and

Second, the completion of our sales of the System's non-mark and non-yen foreign currency reserves: During the period, we sold 286 million, 785 thousand, 644 dollars worth of five different currencies, more than 210 million of which was in Swiss francs.

The Desk has also now liquidated the remaining non-mark and non-yen balances of the ESF and, therefore, both the System and the ESF now exclusively hold marks and yen.

I would like to inform the Committee that, beginning with my quarterly report for the February-April period, I will be publishing the quarterly, period-end, dollar-equivalent mark and yen balances of the ESF and the System. The System's currency breakdown has not been previously released and the ESF currency breakdown was released only with a six-month lag. I believe that the publication of existing balances with a modest (one-month) lag is an appropriate level of disclosure and that the disposition of the non-mark and non-yen reserves provides a good opportunity to start and the Treasury has agreed.

Mr. Chairman, I would be pleased to answer questions on my report, on the intervention operations, on our reserve sales, and on my plan to release currency balances.

Notes for FOMC Meeting

May 17, 1994

Joan E. Lovett

Desk operations were initially geared toward maintaining the slight firming of reserve conditions adopted at your meeting of March 22, consistent with Federal funds trading around 3-1/2 percent. After reserve pressures were firmed again on April 18, funds were expected to trade around 3-3/4 percent. Associated with each of these moves, the allowance for adjustment and seasonal borrowing was increased by $25 million. The borrowing allowance was increased by a similar amount on two other occasions as well to reflect rising seasonal borrowing. Thus the allowance was raised by a total of $100 million, and it now stands at $175 million. Actual borrowing in the period rose more or less in line with the increases in the allowance.

We anticipated that the intermeeting period would be marked by large and growing reserve shortages, stemming primarily from seasonal movements in currency and in the Treasury's account at the Fed. The reserve need was expected to peak in early May when tax inflows into the Treasury's account topped out, and then to narrow somewhat as the Treasury balances returned to normal levels. As it turned out, the deepest projected reserve shortages never materialized. Cumulative individual income tax receipts for the April tax date fell well short of expectations, while the capacity of the tax and loan accounts to hold Treasury deposits proved to be unexpectedly high. Both developments limited the buildup in the Treasury's Fed account. The shortfall in taxes is somewhat puzzling, and we won't know the full story for some months. Judging by market commentary, however, we were not alone in our misestimates here.

Even with lower Treasury balances, the steady growth in currency left substantial reserve deficiencies to be filled, which we did with a combination of outright and temporary operations. We purchased just over $5 billion of coupon securities in the market on April 12 and were also frequent buyers of bills from foreign accounts, acquiring another $1.6 billion through this channel. These purchases were suspended in mid-April, and plans for another outright market purchase were tabled after it became clear that reserve needs would not reach the proportions first envisioned. Thus, we did not use the expanded leeway you made available to us for the period and, in fact, had an unused cushion on the normal limit.

Treasury operations were used to address the balance of reserve needs. The largest operations came in the first half of the period when the reserve shortages were greatest. Widespread market expectations in early May that a firming in policy might be imminent kept funds on the high side on a few mornings, and our market entries then were designed in part to avoid appearing to confirm this speculation. For the period up until April 18, the effective Federal funds rate averaged 3.51 percent. After the slight rise in reserve pressures, it averaged 3.71 percent.

In the securities markets, the upward surge in interest rates continued, conditions were often turbulent, and seat belts became standard issue in the marketplace. Treasury coupon yields were up a net of 60 to 100 basis points during the period. Yields were up fairly uniformly across the maturity spectrum over the first half of the period, but since mid-April the yield curve has flattened modestly. Measured from just before the February 4 meeting, rates are up a net 150 to 180 basis points, with the bond yield about 120 basis points higher.

The market's inability to find an anchor for itself is certainly a factor in the heightened volatility that has characterized trading over recent months. Views on the strength of the economy seem unusually wide, the assessment of policy "neutrality" is a fluid one, and there are some worries that "neutrality" may not be enough. Thus uncertainty premiums have certainly risen. The two nonfarm payroll employment reports released during the period--for March and April--were both much stronger than generally anticipated and acted as catalysts for a major part of the move up in interest rates. In between these releases, rates also spurted higher after the slight firming in reserve pressures in mid-April; the timing of this move caught most participants off guard.

The employment reports indicated to many analysts that inflationary pressures might be building some momentum, and rates across the curve adjusted to expectations that policy would need to move away from accommodation more vigorously than previously supposed. Some other reports on economic activity reinforced these views. However, the price statistics showed no acceleration in current inflation, and this helped to bring yields off their highest levels.

A sagging dollar reinforced the trend toward higher yields for a time, although this pressure has abated since the recent coordinated response of central banks. We also continued to hear periodically of heavy selling of intermediate-dated Treasury securities by investors hedging their exposure in other declining markets, especially holders of mortgage-backed securities seeking to offset extension risk. A lot of portfolio adjustments appear to have been made, however, so this activity may have played itself out for now. At the same time though, experience of the last two months has left participants very wary about more esoteric mortgage-backed instruments, and apprehension remains that some large trading losses in these products have yet to come to light.

Against this background, the market coped with new supply with mixed results. The Treasury paid down a small amount of bills on balance, but it still raised a net of $21 billion in coupons, despite the absence of a bond at the latest refunding auctions. Dealers often had difficulty gauging interest in fast-moving markets, and the release of some unexpected auction results triggered abrupt market adjustments. In other sectors, some would-be borrowers were warded off by the inhospitable climate, and the corporate and municipal calendars were relatively light.

Right now, most analysts seem confident that the economy will retain at least a moderate degree of forward momentum over the remainder of this year. But there remains a considerable diversity of views about how rapidly the expansion will proceed, what the implications are for inflation, and the appropriate degree of policy restraint. Indicative of this, we have heard current quarter estimates for real GDP ranging from 2-1/2 to 6+ percent, with the central point in a 4 to 5 percent range.

One thing that is believed with near unanimity is that some firming step will be taken at today's meeting. The debate is one of size. Just after the last employment release, a 50 basis point hike in the funds rate was probably about fully priced into yields. In the wake of the more recent price and sales data, some of that has been backed out as participants now see the possibility of a smaller move. Thus the market is currently priced somewhere between the two.

Each option has its proponents and detractors and it is sometimes hard to sort out what the markets think the Fed will do versus what they think it should do relative to their own economic forecasts. A 25 basis point hike would undoubtedly disappoint those who think the Fed is already at risk of falling behind the need to reign in gathering inflationary pressures. Reflecting these worries, longer-term rates could react negatively unless incoming data show an economy clearly losing steam. Many participants have suggested that a larger move could lead to a further flattening of the yield curve, since yields have already come to incorporate expectations of a series of policy tightening steps ahead. However, the experience of the past three months cautions against completely dismissing the possibility that longer-term yields would rise in lock step. A 50 basis point hike would be seen as bringing the funds rate into the range most frequently judged to be "neutral," although in the lower end. The market would thus probably continue to expect further moves ahead but maybe not for a while. I should note that expectations of a move on the discount rate are also fairly widespread.

May 17, 1994
E. M. Truman

FOMC Presentation -- International Developments

The basic thrust of the staff forecast for the external sector at this meeting is little changed from what we have presented for several meetings: recovery in the foreign industrial countries, in the context of slowing U.S. economic growth, should combine to produce a less negative effect of the external sector on U.S. aggregate demand as we progress through the forecast period. While the modifications in this basic projection introduced in the May Greenbook were minor, I believe that several issues in the outlook merit comment.

First, how are we doing on the projected recovery in the foreign industrial countries? We believe the recovery is on course; if anything, it is slightly stronger than we had earlier expected. Indeed, since late last year [November], the average level of economic activity in the foreign industrial countries projected for the end of our forecast period -- Q4 1995 -- has been raised almost half of a percentage point; a downward adjustment in our forecast for Japan has been more than offset by positive adjustments to our outlooks for the continental European countries. As an aside, I would note that we have scaled back modestly our projection for the developing countries in light of weaker prospects for Mexico and China and in response to higher long-term interest rates in the industrial countries.

This brings me to my second issue: How has the global increase in long-term interest rates influenced our thinking?

First a few facts: Since the end of 1993 [December average], foreign [G-10] ten-year interest rates have risen about 100 basis points on average, while U.S. rates have risen about 150 basis points; increases in individual foreign countries have ranged from less than 50 basis points (Italy) to more than 175 basis points (United Kingdom and Canada). Over the same period, foreign three-month rates have declined 25 basis points on average, while U.S. rates have risen almost 150 basis points; changes in short rates abroad have ranged from a reduction of 175 basis points in Belgium and 100 basis points in Germany to no change in the United Kingdom and Sweden and an increase of more than 250 basis points in Canada -- quite a diverse experience at the short end.

Our interpretation of these developments is tentative; it combines elements general to all countries and many specific to individual countries. Focusing on the general elements, we believe that there has been a substantial improvement in confidence about prospects for economic activity in most foreign industrial countries; this can be seen in the modest upward revision in our own outlook even with the rise in long-term rates. However, the increase in foreign rates seems larger than can be explained alone by better prospects for aggregate demand. We believe some of the increase is a temporary phenomenon sparked by the rise in dollar interest rates and by an overcorrection following the bond-market rallies of late last year.

Against this background, we anticipate a reduction in long-term rates abroad by about 50 basis points on average --

about the same adjustment as Mike has assumed for U.S. long rates, but the foreign adjustment is assumed to occur mostly before the end of this year. Meanwhile short rates abroad are assumed to edge off about another 25 basis points on average.

This brings me to my third issue: the dollar! Why has it not risen? As I noted, while U.S. dollar interest rates (short and long) have risen, foreign long rates have moved up as well; long-term interest differentials tend to have a stronger statistical relationship with exchange rates than do short-term differentials. The more restrained rise of the long-term differential may explain why the dollar has not risen as much as might otherwise have been expected, but it does not explain why the dollar has depreciated. As Peter has noted, we do not lack explanations for the dollar's depreciation: trade tensions between the United States and Japan, an increase in relative inflation expectations, a failure of short-term dollar interest rates to rise as rapidly as expected, and expanding U.S external deficits are only four plausible candidates. However, none of the individual stories nor their sum is particularly satisfying.

Thus, when it came to constructing an exchange rate projection to use in our forecast, we were confronted with additional uncertainty on top of our usual humility. We chose to lower the path of the dollar that had been incorporated in our past several forecasts by about 3 percent; the reduction is about in line with the decline of the dollar over the past several months, and we are projecting no further change from that lower level. As was explained in the Greenbook, this is a mugwump projection that can be thought of as an average of two scenarios. In one scenario, the rise in U.S. short-term interest rates assumed in our basic forecast, combined with the modest continued decline in rates abroad and some unwinding of the other influences behind the dollar's recent decline, convinces the market that the dollar should appreciate over the next couple of years -- this would be consistent with many forecasts of exchange rates. In the alternative scenario, interest rates also behave as the staff assumes. However, the rise in dollar interest rates is substantially less than the market expects, and this disappointment, along with other economic, financial and political developments, contributes to further downward pressure on the dollar. Take your pick!

This brings me to my last issue, what difference does our projection for a lower dollar make in our forecast? At the margin, the three-percent downward adjustment in the path for the dollar contributes to a somewhat less negative external sector. For example, our projection of real net exports of goods and services in the fourth quarter of 1995 is about $10 billion stronger than in the January Greenbook. At the same time, higher import prices and a diminished drag from the external sector contribute to potential inflation.

If the U.S. economy were not as close as it is to capacity, a downward adjustment in our forecast for the dollar would not have very profound implications for the overall staff forecast. However, we now are in a situation in which if a few elements of our forecast break the same way, the consequences would be not only somewhat stronger economic activity in the short run, but a pronounced pick-up in inflation pressures in the period beyond.

Thus, I thought it might be useful to remind the Committee how we calibrate the risks to our forecasts that might be associated with a considerably weaker dollar. Based upon staff econometric models, an additional 10-percent depreciation of the dollar in the second half of this year, with U.S. short-term interest rates unchanged from our baseline, would add about one percent to the level of real GDP in the fourth quarter of 1995 and an equal amount to the price level. The unemployment rate would be about 1/2 percent lower.

Mike Prell will continue our presentation.

Michael J. Prell
May 17, 1994

FOMC BRIEFING

As Joan noted, a bit more diversity has recently begun to creep into private economic forecasts. To some extent, the emerging differences reflect uncertainty about Fed policy; but they also reflect differing opinions about the underlying strength of the economy, about the likely response of demand to higher interest rates, and about what circumstances might precipitate a significant pickup in inflation. I'm going to address these three issues.

First, on the underlying strength of activity, there was a rash of comments last week from Wall Street types to the effect that the economy might not be quite so robust as had been contemplated in the prior consensus forecast. The seeds of doubt probably were sowed a couple of weeks earlier by the surprising, low GDP figure in BEA's initial first-quarter report, which also showed final demand flagging and inventories surging. Then, last Thursday, that doubt was reinforced when the advance estimate of April retail sales showed a considerable decline.

On the other side, though, are the advocates of the strong growth view, who are saying that the economy is in the midst of a powerful capital spending boom, and that consumers are feeling better and will be spending freely. Some of the more ebullient forecasters are looking for GDP growth this quarter of 5 percent or more, also as Joan noted.

We probably fall somewhat above the median with respect to the current pace of activity. Recent data indicate that the increase in inventories in the first quarter was much smaller than BEA assumed, and stock-building probably will be a plus in the near term. And, from our perspective, it is more sensible to view the April softness in retail sales as a minor pause after two whopping monthly increases.

But the most compelling evidence that the economy is still doing well is the labor market data. The average monthly increase in payroll employment thus far this year has exceeded the earlier pace, and the workweek has lengthened. Even allowing for the likelihood of a marked slowing of productivity growth in the wake of the late '93 surge, the strong increase in aggregate hours would seem to support our projection of better than 3 percent GDP growth over the first half.

Is stronger growth possible this half? Sure it is. But we think that we've already built in a healthy rebound in construction after the winter dip. We are anticipating a strong gain in outlays for business equipment. We are looking for a firming in federal purchases and a smaller decline in net exports. And we expect to see a decent increase in consumer spending, despite some inhibition to auto sales from the limited supply of popular domestic models. I should underscore that last point about autos, for it seems to us that a key argument against a still bigger increase in GDP this quarter is the likely 1-1/2 percentage point drag from the decline, on a seasonally adjusted basis, in motor vehicle production.

This morning, we received one more piece of information on how the economy is doing: the April data on housing. Total starts fell 2-1/2 percent. Most important, single-family starts dropped 4-1/2 percent, to 1.21 million units. That rate is appreciably above the first-quarter pace, as we expected in light of the winter delays, but it is also well below the fourth-quarter average. This is consistent with our view that higher mortgage rates already have begun to put a damper on residential investment.

This brings me to the broader issue of the response of economic activity to past and prospective increases in interest rates. As I'm sure you are aware, the range of interest rate forecasts is very wide right now. At the low end are the bond market bulls who, though perhaps abandoning their earlier call of "5 by '95" for the 30-year Treasury bond yield, are still predicting a steep decline in rates by year-end. From their viewpoint, the run-up in long-term rates is unjustified by fundamentals and reflects a combination of unwarranted inflation fears, temporary selling pressure exerted by weak holders such as hedge funds and naive mutual fund investors, and an added risk premium related to temporary market volatility and illiquidity.

At the other end of the spectrum are those who believe that, before the Fed has reined in the cyclical forces in the economy, short rates will have risen several more percentage points and the yield on the long bond may approach double-digits. On the bearish side, one will find many people who adhere to the view that aggregate demand is extremely interest-inelastic when the economy has gotten up a head of steam, and that monetary restraint only becomes effective when banks and other lenders are not only raising their rates but also are closing their windows to potential borrowers. In the bear camp one will, of course, also find those who are pessimistic about the longer-range prospects for inflation, because they think that the Fed lacks either the will or the skill to achieve its stated objective.

Again, we find ourselves somewhere between the extremes, acknowledging sympathies with bits of both these analyses. As you know, we've changed our own interest rate forecast a good deal since the September meeting, which was just before the bond market started to weaken. Long rates currently are about 1-3/4 percentage points higher now than we anticipated at that time, and our projected levels in the latter part of 1995 are about a point higher. The upward revision reflects not only the fact of what has happened to rates in the interim, including a Fed tightening that we had not assumed, but also our interpretation of the incoming economic news. The surge in GDP late last year, and the apparently sustained momentum thus far in 1994, has persuaded us that the underlying strength of aggregate demand at given interest rate levels is greater than we had anticipated.

Our projection of a downward movement in bond yields by next year does share some common ground with the bullish view I portrayed a moment ago; we do think that rates will tend to fall as some calm returns to the markets and inflation fears are proven excessive. And we can easily conceive of long rates coming down more over time than we've projected. But we also think that, if a major rally were to occur in the near term, it might result in inadequate financial restraint to produce the slowing of GDP growth we've projected. While we think that the recent behavior of housing, for example, demonstrates that the economy does respond to higher interest rates, we agree that the interest-elasticity of demand overall is not great in the short run. And we recognize that, far from closing their windows, banks have been moving toward more aggressive lending postures. I might offer, parenthetically, a conjecture in that regard, however: If rates were to continue rising, and bank securities portfolios were to suffer further capital losses, the combination of market-value accounting and the new regulatory penalties for weakened capital ratios might impose some constraints on the lending capacity of at least some institutions.

Having wandered a bit, let me sum up our bottom line on the interest rate issue: first, we think that recent long rates should be high enough to slow the expansion appreciably; second, a further rise in short rates would buttress the restraint by raising the cost of short-term credit, and it likely will be needed to maintain the present level of long rates when the extra term premiums associated with recent market turbulence shrink; and third, we think the risks may be tilted toward having to do more tightening of money market conditions than we've assumed, rather than less.

Now, all of this analysis has taken as given that a deceleration of activity on the order of what we've projected is needed to at least hold the line on inflation through 1995. I don't think this would be questioned by the majority of private forecasters, who generally see inflation rising noticeably above 3 percent by next year, with real GDP growth just fractionally faster than we've projected and an unemployment rate declining further. But there is a counterview in some circles that, either because there is still a good deal of slack in the economy or because the way the world works has changed, there is no looming inflationary risk. Let me just offer a few observations that seem to me to caution against relying on the more optimistic view.

First, as you know, sensitive industrial materials prices have been rising for a while now. And, in the case of consumer prices, the core CPI has risen at a 3.0 percent rate over the past six months, versus 2.5 percent in the prior six. We do not think that the inflation trend has turned upward, and these data are somewhat reminiscent of last year's scare; but it is also true that, when a turn does occur, it could well start with numbers just like these.

Moreover, these price data are not inconsistent with a variety of signals--statistical and anecdotal--that also are sounding a cautionary note. On the statistical side, resource utilization has increased substantially of late, and, by our reckoning, the economy has at least neared the point where wage and price pressures might be expected to mount. Certainly, they did when similar levels of resource use were reached in 1987-88, though the circumstances differ in some important respects. Notably, back then, oil prices had recently rebounded, the dollar had depreciated, and poor crops were pushing up food prices. We at least hope that these events will not repeat themselves in a significant way.

On the anecdotal side, I've recently heard a number of industrial economists speak of their companies' booming sales, growing backlogs, and customers on allocation; while they said that competition is fierce, and that management is still stressing cost-reduction and reluctant to undermine customer relationships by raising prices, they also spoke of renewed "pricing leverage" and "pricing flexibility," and admitted that price increases had been taken or scheduled. They then said, "But, Mike, don't get worried, because these are just relative price changes," or "normal cyclical developments." I gather many of you have heard similar remarks from Reserve Bank directors. The point I'm making is that there has been a change in tone from what we've witnessed heretofore in this expansion. I don't think that we've had a shift yet to pervasive inflationary psychology. But, these anecdotes are compatible with our view that the economy has used up much of its room for above-trend growth.

May 17, 1994

Policy Briefing
Donald L. Kohn

The issue for the Committee at this meeting would seem to be not whether to tighten policy, but rather by how much. In light of the Committee's announced strategy of moving away from its previous accommodative policy posture, doing nothing would startle markets and raise questions about why tightening had stopped short of common estimates of policy neutrality. Such questions might be especially intense against the background of what is perceived by most analysts to be a robust trend in output and employment, when Committee members have emphasized that little weight should be put on incoming price data because they are lagging indicators.

Either a 25 or 50 basis point increase in the funds rate would be consistent with the staff forecast, which assumes a federal funds rise to the vicinity of 4-1/2 percent by the fourth quarter. In that forecast, such an increase is sufficient to bring the economy in at around its level of potential--the proverbial soft landing--with inflation remaining just below 3 percent, though not decelerating appreciably further.

A quarter-point increase in the funds rate would maintain the recent measured pace of policy tightening. Now that the markets have gone through a period of considerable volatility and portfolio adjustment, there would seem to be much less reason to chose this alternative out of concern about cascading reactions in financial markets to a half-point funds rate increase. Indeed, many market participants expect a 50 basis point move, though not all do. The case for remaining on the gradual path would seem to need to reflect more the Committee's judgment that there was an appreciable risk of aggregate demand falling short of the market's implicit expectations, and perhaps the staff forecast as well, and the Committee therefore wished to await further data to assess whether to tighten past 4 percent.

This year's substantial rise in intermediate- and long-term rates are probably the most important source of such risk. As Mike discussed, the reasons for and consequences of this increase are far from clear. Survey data, though mostly dated, do suggest that a considerable portion of the rise in rates has been in the real component; and if, as we often assume, inflation expectations are based on experience, given recent price data these survey results may not be too badly misleading--at least with regard to the expectations of household and business decisionmakers.

Of course, any increase in real rates could simply be a needed counterweight to much stronger aggregate demand. But if the Committee thought that markets might have over-estimated that strength, or that the effects of skittish investors and additional expected volatility have pushed up liquidity premiums, then long-term rates might be higher than needed to allow the economy to run at potential. To some extent, if this is true, it will be self-correcting--long-term rates will fall as weaker aggregate demand becomes apparent, as the staff has assumed in its forecast. But a downward adjustment in long-term real rates would be speeded and encouraged by a shallower trajectory of tightening than seems to be embedded in the term structure. If the Committee were concerned about possible shortfalls in demands, that might include 25 basis points now, rather than 50, and considerably less additional restraint later than given by the path of forward rates. Ultimately this shallower trajectory would cause market expectations to revise and feed through to lower longer-term rates--in nominal as well as real terms as inflation remained subdued.

A half-point increase in the federal funds rate could seem justified if the Committee saw policy still as appreciably more accommodative than consistent with its inflation objectives. That would be the case if the Committee thought slack was limited, and that aggregate demand was likely to be strong enough at a configuration of rates built on a 4 percent funds rate to erode fairly quickly remaining spare labor and capital capacity. Some of the restraining effects on spending of higher rates in capital markets are being offset by more aggressive loan-seeking behavior by banks and other lenders. In addition, the weaker dollar, whatever its cause, adds to price and output pressure and truncates a source of restraint the Committee might have expected from its previous firming actions. Finally, some of the increase in interest rates does seem to have been related to rising inflation expectations in financial markets, and it would be important to keep these from becoming embedded in wage and price decisions. A more aggressive action than the recent quarter-point increases might be seen as all the more needed if the Committee thought aggregate demand was even stronger than in the staff forecast, or it wanted to keep inflation tilted down in coming years.

As to the effects on bond yields of a 50 basis point increase in the funds rate, the staff can see a number of conflicting influences. On the one hand, increases in short-term rates usually provoke increases in long-term rates, especially, as now, when the full extent of the immediate increase has not been built into the rate structure. And, the pass-through has seemed to be magnified in recent months, though, to be sure, other forces have been at work. Moreover, any pass-through might ordinarily be expected to be amplified by an accompanying discount rate action, which would underline the Federal Reserve's expectation that rates needed to be higher for some time to come.

But these have not been ordinary times in financial markets. Our announced intention to move away from accommodation has seemed to interact with incoming data to create considerable uncertainty about the pace and extent of System tightening. It is possible that a half-point increase in the funds rate accompanied by a discount rate increase would produce a sense of closure on the move to "policy neutrality". Depending in part on the wording of a discount rate statement, markets might then expect policy to be on hold for a while, with subsequent tightenings probably to be less rapid than in recent months and keyed to economic developments. Under these circumstances, some of the uncertainty about near-term policy actions might be reduced, and with inflation concerns also assuaged to an extent, investors might find longer-term assets more attractive. Helping to damp inflation expectations under this alternative should be a little stronger tone for the dollar in foreign exchange markets. The effects in those markets might be especially sizable if the tightening were associated with a discount rate increase and were also interpreted as part of a coordinated effort with foreign monetary authorities to bolster the dollar. There are potential costs, however, to allowing a sense of having reached neutrality to become embedded in market thinking. If incoming data seemed to warrant further tightening, but it was thought that the Federal Reserve might be slow to move beyond existing funds rate levels, inflation expectations and market instabilities could revive.

The staff expects slow growth in various measures of the money supply to accompany either of the alternatives. M1 has been particularly weak in recent months, in part reflecting the effects of higher interest rates and opportunity costs. These effects would be amplified, holding down M1 growth, and some special factors, including the depressing effects of declining mortgage refinancing, are expected to continue. Thus, the strengthening of M1 growth under the 50 basis point hike of alternative D is projected to be only to a 3 percent rate over April to September, implying increasing velocity. Since we don't foresee major further increases in long-term interest rates, we are not expecting a continuation of the flight from bond funds that has been boosting M2 despite rising interest rates. We do think that investors will be more cautious about shifting funds to capital market instruments than they were in the environment of persistent capital gains of recent years. But the effects of higher interest rates and opportunity costs also should restrain M2 and boost its velocity, though by less than for M1, And, we expect overall credit growth to remain on a moderate track, albeit more concentrated at banks than it has been for most of the expansion.

Especially if the Committee chooses to raise the funds rate to 4-1/4 percent, it may want to consider its tactics going forward. With this increase, the Committee will have accomplished an upward ratcheting in rates to levels less obviously accommodative. This shift, while not independent of incoming data on the economy, was not keyed to the precise nature of that information. It may take even higher rates to meet the Committee's objective, but the speed and extent of additional tightening may not be as clear as was the need to move away from the stance previously in place. In these circumstances, the Committee might want to return to its previous practice of giving greater weight to incoming data on the economy and financial markets and their effect on the outlook in judging further actions.

The Committee's attitude toward subsequent actions may influence its choice of language governing intermeeting changes in reserve conditions. An asymmetrical directive could be favored on the grounds that the risks are still tilted more toward the need for additional tightening. With the economy probably close to potential, the Committee may see the costs of allowing inflation to accelerate as greater over time--and harder for policy to deal with--than the costs of unexpectedly sluggish growth. An asymmetrical directive also would convey a sense that the Committee did not see itself necessarily as finished with tightening and might help to counter any impression to the contrary conveyed by funds within a broad neutral zone. A symmetrical directive, on the other hand, would be more consistent with a cautious attitude toward any additional actions before the next meeting. With the risks better balanced than before, and given the extent of tightening already undertaken, the Committee might not want to react very quickly to data unless they seemed to suggest a very major deviation from expected conditions.

With regard to implementing either strategy in conjunction with a discount rate increase, the staff has suggested the type of wording for the directive that has been used the last few times when decisions at FOMC meetings and changes approved by the Board in discount rates were coordinated. In those cases, the directive was worded to give the amount of tightening or ease the FOMC wanted to show through to reserve markets, and the discount rate was mentioned in a "taking account of" phrase. The wording may be a bit obscure, but the understandings have been spelled out in the Minutes of the meeting and the role of the Committee could be mentioned in the press release of any discount rate change as well.