APPENDIX

Notes for FOMC Meeting

August 17, 1993

Joan E. Lovett

Desk operations remained geared toward maintaining reserve conditions associated with Federal funds trading in the area of 3 percent. As you know, we are now approaching a one-year anniversary of doing so. The borrowing allowance was boosted by $50 million, in two steps, to reflect increases in the seasonal component normal at this time of year.

Reserve needs were substantial early and again late in the intermeeting interval amid seasonally high levels of currency and required reserves. Temporary declines in these factors following the Independence Day holiday left a more modest need to be filled in the middle of the interval. With the reserve need uneven from period to period, we made heavy use of temporary operations of assorted types and maturities, arranging eighteen altogether. We used multiday fixed-term RPs on a half dozen occasions to help meet the largest reserve shortages. These operations prevented the need to replace the collateral withdrawals that would otherwise be expected when rates dipped, which is not unusual early in maintenance periods and ahead of weekends, even in periods marked by substantial shortages. Customer RP operations were used to keep pace with the more modest needs seen in midperiod. A mix of overnight and multiday withdrawable RPs satisfied the balance of needs.

In view of large reserve shortages later in the interval and beyond, we also began purchasing securities on an outright basis from foreign accounts, buying about $2 billion altogether.

The funds rate moved in a fairly narrow range around the 3 percent level, tending to trade a bit higher over the final days of each maintenance period. It averaged 3.04 percent overall. Meanwhile, adjustment borrowing remained at extremely low levels. Apart from one day when a computer problem at a money center bank caused it to borrow $850 million from the window over a weekend, adjustment borrowing averaged just $10 million. It was $75 million including that episode.

In the securities markets, yields on the Treasury's long bond have fallen an additional 25-30 basis points since your last meeting. At that time, participants were questioning whether the 6-1/2 percent level could be reached on the bond, and the same question is now being asked about 6-1/4 percent and even lower given that the bond is close to it this morning—about 6.28 percent. With little net change elsewhere, the yield curve is flatter by about 20 basis points. The shape of the yield curve remains a focus of market attention with most participants expecting further flattening, but with some debate about how it will be achieved. As has been the case over recent months, the gains in the long end have often been more grudging than enthusiastic as many market participants appear uncomfortable with these modern yield lows and keep looking over their shoulders for a reversal. The unusual nature of the economic expansion this time around is probably a factor in the uncertainty.

The Chairman's Humphrey-Hawkins testimony gave the market food for thought but also prompted a backup in short- and intermediate-term rates as it was widely

seen as reaffirming the Committee's bias toward a less accommodative monetary policy. Just a few days later, when the second-quarter GDP release looked benign, the backup in yields began to unwind. Against a background of additional data showing an economy moving ahead unevenly, the prospect of a Fed firming has been pushed off into the future.

Passage of a budget bill had been pretty well discounted by the market, but there was still some price improvement on the news. Following the Senate passage, the bond broke through the 6-1/2 percent resistance level. Market analysts generally see the program exerting modest fiscal drag over the next year. A number of other factors also supported the market during the period. Extension trades predominated in the search for duration and yield. Municipal defeasance remained strong in the intermediate maturity range, and heavy demand for longer maturities came from efforts to compensate for duration lost by mortgage prepayments and bond calls. The demand for duration in a curve-flattening regime also led to heavy buying of Treasury strips which put a downward pull on rates as well. Rumors of Brazilian demand for Brady bond collateral were fairly common in recent weeks though unsupported by hard evidence. The perception of impending shortages of 30-year bonds now that the Treasury has moved to a semiannual auction schedule has added a scarcity bid to that sector. There is some feeling that an eventual lack of liquidity in this maturity will reduce the value of its yield as an economic or expectational barometer.

In the setting described, the 10- and 30-year issues were expected to be well sought after in the last week's quarterly refunding operation which just settled yesterday. In fact, the 3- and 10-year notes drew strong bidding, but the market rally in

progress during the financing apparently brought the bond yield too low, too quickly: the WI level of 6.31 percent proved too rich at the time, and that auction was the lackluster one.

Data on inflation released last week showed a favorable performance for July, following upon good news for the PPI and CPI for June as well. Given the Fed's stated views, the market is now focused more heavily on these data. Some believe that the recent numbers may be understating the underlying rate of inflation much as the data earlier in the year had overstated it. Nonetheless, the general view seems to be that, even if bottoming out, signs of acceleration are not on the horizon. The market sees the Fed as ready to move toward less accommodation as soon as conditions warrant, but the timing of such a move has again been deferred. Current market thinking places it some months away.

Michael J. Prell
May 18, 1993

FOMC Briefing

Having asked the Committee to endure a very long presentation last month, I shall be quite brief this morning.

The discerning reader of the Greenbook will have detected some reluctance on our part in pinpointing the growth rate of the economy in the current quarter. We tried, instead, to emphasize our basic sense that activity has been increasing moderately on average for some time now, and that the prospect seems to be for more of the same--as lower interest rates and easing credit supplies offset fiscal restraint and the effects of weak foreign growth.

Our reticence regarding the current quarter reflected not only the limited supply of nonfinancial data covering the period since June, but also the added uncertainties introduced by the seemingly inconsistent movements of employment and output growth over the past few quarters.

The annual revisions to the national income accounts due out at the end of this month may resolve the tensions in the recent figures. For the time being, we've in effect assumed that there was indeed a significant drop-back in productivity over the first half of this year--perhaps a smaller one than now reported, but still large enough to make a near-term snapback likely. Viewed from this perspective, the recent evidence of sustained employment growth is consistent with a moderate gain in output this quarter. Attempting to translate that into a concrete point estimate, we settled on 2-1/4 percent for real GDP--with an allowance for estimated crop losses.

Having committed that number to paper last Wednesday, we awaited the subsequent economic data for further evidence. Thursday's

retail sales report was widely characterized in the press as weak, with total sales up just 1/10 of a percent in July. But the so-called "retail control" component was more upbeat, showing a nominal gain of 4/10 of a percent on the heels of upward-revised increases of 2/10 and 4/10 for May and June, respectively. The initial, "advance" estimate is notoriously unreliable; however, taken at face value, these are not bad numbers at all when goods prices are flat.

Next out were the figures on sales of domestic light motor vehicles for early August. They showed a further weakening on the heels of the July decline. The floods and short supplies of popular models may still have been a factor, but the breather we anticipated after the spring surge in sales is now coming to look like a considerable drop-off. Moreover, vehicle assemblies appear to have fallen farther short of the announced schedules than we expected, wiping out much of the contribution to GDP growth we'd anticipated.

Finally, this morning, we received data on housing construction in July. It was a mixed report, with starts down 3 percent and permits up 3 percent. Taken together, the figures appear to substantiate our view that low mortgage rates have yet to generate more than a mild uptrend in building activity.

All told, we read the additional information we've received as essentially a wash in terms of any possible revision of our third-quarter GDP projection. But it really hasn't narrowed the confidence interval around that forecast by very much, either.

As regards the prospects for inflation, the major pieces of news received prior to the Greenbook were the June CPI and Employment Cost Index figures and the anecdotal reports of crop damage. The June CPI was consistent with our expectations of better price numbers after the bulge earlier in the year; the Employment Cost Indexes were a shade

disappointing, in that they did not show any sign of slowing; and we thought it likely that many of the estimates of crop loss being bandied about were probably too high.

Right after the Greenbook was completed, we received the results of the Agriculture Department's August crop survey, and the projected crop volumes were remarkably close to our expectations; after the figures were released, futures prices for soybeans and corn declined. And then we got the July PPI and CPI numbers; the increase of just 0.1 percent in the CPI ex food and energy brought the 12-month change in that subindex to 3.2 percent--a smidgen below the range of the past year. These numbers certainly make us more comfortable with our forecast of a slight downtrend in core inflation, but that's about as far as I'd want to go in interpreting their significance for the outlook.

My remarks obviously have been less than comprehensive. Hopefully the Greenbook covered most of the issues, but I'll be happy to try to answer your questions. First, though, Charlie Siegman has a few remarks on the foreign outlook.

August 17, 1993

FOMC PRESENTATION
Charles J. Siegman

Following the upheaval of the ERM, there was considerable public commentary that the resultant widening of the ERM bands would permit greater monetary policy flexibility to countries such as France that had felt constrained because of the ERM to maintain interest rates near high German levels. Some observers argued that these countries with lower interest rates now are poised to follow a dash-for-growth policy, similar to what the United Kingdom did last year. The view that lower interest rates would boost growth substantially relative to previous expectations was echoed in bond and stock markets in continental Europe.

The staff's current outlook for foreign economies and for U.S. real net exports, however, shows only little change from the June Greenbook. After a nearly flat first half, we project growth in the major industrial countries to rise at a 2 percent rate in the second half of the year and to accelerate to a 2-3/4 percent rate during 1994. For the major European industrial countries our current forecast shows only a slightly stronger growth picture than in June.

Despite the dramatic ERM developments, the staff's current foreign outlook shows little change because of two reasons. First, the June forecast already had incorporated significant interest rate reductions for the European economies. The moderate recovery over the projection period, in fact, was dependent on the easing of monetary policy in these countries, including Germany. The principal effect of the wider ERM bands on the staff's latest foreign activity outlook has been on the timing, rather than on the magnitude of these projected

interest rate reductions. Whereas prior to the ERM turmoil the other ERM countries were assumed to be restrained to follow the Bundesbank, with the widening of the ERM bands these countries (except the Netherlands) now have more leeway to accelerate a lowering of their interest rates in advance of anticipated German rate reductions.

However, while ERM constraints have eased for France and for a few smaller ERM countries, the authorities in these countries continue to act as if they have some ERM constraints because they are eager to return to narrow ERM fluctuation bands. Consequently they may not ease interest rates too aggressively. On the other hand, to the extent that the ERM changes result in a stronger mark, which will help to reduce inflationary pressures in Germany, the Bundesbank -- under Mr. Tietmeyer's new management -- may feel freer to lower interest rates, giving other ERM countries greater scope to move their interest rates. The net effect of this greater monetary policy flexibility in ERM countries, combined with an effective realignment of EC exchange rates, is only a slightly stronger outlook for France and for some of the smaller EC countries.

A second reason why the ERM restructuring has not altered significantly the staff's outlook for foreign economies and for U.S. real net exports is that the ERM developments are affecting the outlook for only a number of European countries. Given the small direct weight of these countries in U.S. exports -- and the small spillover from these EC countries in world trade -- the effect of their somewhat stronger growth prospects for the United States is negligible.

August 17, 1993

FOMC BRIEFING
Donald L. Kohn

The role of real interest rates in the policy process seems to be a subject of some interest of late, and I thought I would start my briefing with some thoughts on this topic, using it to lead into a discussion of current policy options.

Real interest rates probably have become a greater focus for policy discussions for two reasons. First, the perennial problem facing the Committee--how to judge when the federal funds rate needs to be changed--has gotten a little more difficult as one set of information variables bearing on this decision--the monetary aggregates--has become less reliable. The hope is that real rates can be helpful in making these judgments. And second, in that context, most measures of real rates are lower than they have been for many years, raising questions about the stance of policy.

In theory, an assessment of where real interest rates are relative to where they need to be to have the economy operating at its potential should be useful in formulating policy. Real rates are a key element in the transmission of policy to the economy, and, as such, can have a more forward-looking flavor than a number of other information variables--for example, recent data on output or prices. Some attention to these rates probably would help to limit policy errors, particularly of the more egregious type that result in long periods of escalating inflation or declining employment.

But there are a multitude of problems in relying very heavily on real rates in policy. For one, taken by themselves, real interest rates, even when set at equilibrium levels, are not a sufficient

policy guide because they can be consistent with any level of inflation. Real rates can be manipulated to help achieve inflation objectives, but they do need to be supplemented by such objectives or by nominal financial variables that tie down price levels or inflation rates.

Second, judging the thrust of policy with real rates is difficult because equilibrium rate levels may shift. Over very long periods, these rates are determined mostly by the technology embodied in capital and the preferences of households for spending now versus later, not only here in the U.S. but, with free capital movements, around the world. Whatever the monetary policy followed, real long-term rates tend to gravitate to their equilibrium levels. But, especially in the short-or intermediate-terms, the rates that would allow the economy to produce at potential are subject to such influences on the demand side as fiscal policy, changes in private spending propensities, and frictions in the financial system, and to forces, like labor force demographics, that affect the supply side of the economy. Moreover, deviations of intermediate-run equilibrium rates from long-run levels can be substantial. Monetary authorities can accentuate swings in output and prices if inertia in their decisions causes them to resist changes in real rates made necessary by such factors. Even if equilibrium rates don't change much, when economies are shocked away from potential, authorities may want deliberately to keep real rates away from their equilibriums temporarily to speed the adjustment process.

Third, intermediate- and long-term real rates probably have the most relevance for spending and inflation, and the Federal Reserve has only indirect influence over these rates, even in the short run. Our control over the nominal funds rate gives us fairly close control

over short-term real rates, given the sluggish adjustment of inflation expectations. Longer-term real rates are influenced primarily by the actual and expected future levels of short-term rates, taking into account not only notions of long-term equilibrium, but also the path the central bank likely will take toward that equilibrium. Thus, by themselves, our actions do not determine long-term real rates, but they do influence those rates over the business cycle.

Finally, measurements of actual and estimates of equilibrium real rates are complicated by the lack of reliable information on inflation expectations.

Given the problems in assessing actual and equilibrium real rates, can we say anything useful about the current levels of these rates and the policy choices facing the Committee? Although estimates vary widely, by most measures short-term real rates are around zero; long-term rates are appreciably higher, but both short- and long-term rates are near the lower ends of their ranges since the late 1970s. Gauging how those long-term rates compare to their equilibrium levels is even more difficult. It is quite likely that structural adjustments in commercial real estate, government taxes and spending, and the financial sector here in the U.S. as well as depressed demand abroad have reduced equilibrium levels relative to much of the last 15 years. Consequently, current long-term real rates even at their relatively low levels, might be in the neighborhood of their equilibriums, perhaps even a little to the high side. This judgment is implicit in the staff forecast, with its persistent slack in the economy and modest deceleration of inflation in 1993 and beyond associated with little change in long-term rates.

But, short-term rates are still unusually low relative to long-term rates in real as well as nominal terms. If short-term rates

are sustained at these low levels, market expectations with respect to the timing and extent of an increase may well get revised, putting downward pressure on long-term real rates. Although equilibrium rate levels probably are relatively depressed now, and could remain so for some time if fiscal policy restrains spending significantly, it seems reasonable to expect that at some point real short-term rates will need to rise if longer-term real rates are to avoid becoming excessively expansive.

Of course, an increase in real short-term rates can come about through declining inflation and inflation expectations. Given the modest level of slack in the economy, though, it seems more likely that real short-term rates will have to be raised by moving up nominal short-term rates. The policy questions are when and by how much.

The current asymmetrical directive signalled not only the Committee's view that nominal short-term rates were likely to have to rise at some point, but also that, in light of the incoming information on prices and costs, that point might be fairly close at hand. At least the data available at the May and July meetings were seen as arguing very strongly against any easing of policy over the intermeeting periods involved, and as signalling a need to consider promptly a move toward firmer conditions should further adverse inflation information come to light.

Data since those meetings might be seen as reducing the possible need to be ready to firm very quickly. The information on prices has suggested that the higher inflation of earlier this year, whatever its origin, was temporary. Moreover, the economy has seemed to be on a track unlikely to put pressure on resources soon enough to require prompt action to head off possible incipient inflation pressures.

These readings have been supported by much of the information on flows in financial markets. The broad money aggregates over the intermeeting period have been a touch weaker in an underlying sense than even the anemic growth paths previously projected--though we still expect about 1 percent M2 for the year associated with Greenbook GDP. M1 remained strong, but a portion was accounted for by deposits associated with a heightened level of mortgage prepayments and likely also by currency shipments abroad. Bank credit, abstracting from special factors, slowed in July, with a decrease in business loans, and overall credit growth remains on a quite moderate track. Running the other way have been developments on the supply side of the credit market, reflected in declines in price and nonprice terms to borrowers. Not only have long-term rates dropped appreciably, but spreads in securities markets are quite narrow. In addition, in our most recent survey, noticeably higher percentages of banks reported easing credit standards and loan terms and conditions than previously.

Although the more recent information might alleviate some of the sense of urgency about considering rate increases, the Committee may still wish to maintain the asymmetrical directive to underline its views that stability in the economy and prices ultimately will probably require higher nominal federal funds rates. Such a directive need not imply that the FOMC expected rates to go up over the intermeeting period, or that it wanted to react rapidly to an occasional disappointing price number or indication of strong real growth. But it would suggest that it wanted to keep some tilt in considering its responses to incoming data, given its expectations of where nominal rates will need to be down the road. When published, the asymmetry

would connote that the Committee had not changed its longer run perspective on rate movements, and in that context was continuing to emphasize its ultimate focus on restraining inflation.

On the other hand, a shift back to a symmetrical directive need not imply a change in longer-term perspective. If there were serious questions about the strength of the expansion over the next few quarters, arising for example from uncertainties about the response to the budget package, the Committee might not want to bias its reactions to incoming data over coming months. As in the staff forecast, fiscal policy and other factors could be seen as putting downward pressure on equilibrium real rates for some time, offsetting the effect of more generous credit supplies and suggesting that the need to tighten might be well off in the future. Arguments in the direction of moving to symmetry might be reinforced by a sense that recent information on prices suggested reduced danger of persistent increases in inflation expectations. In these circumstances, the Committee might see the odds on its next action as being fairly evenly balanced between easing and tightening, even though it suspected that eventually it would need to firm reserve conditions. If so, an unbiased directive would seem to convey better the Committee's thinking about its near-term policy intentions, with the minutes perhaps making clear its continuing longer-term priorities.