

APPENDIX

FOMC BRIEFING - P.R. FISHER

NOVEMBER 15, 1995

Mr. Chairman:

Given the number of topics I need to cover this morning, my report will be broken into four parts -- as indicated on the agenda and on the detailed outline of my report which you should find in front of you. I will also answer any questions you may have and request the relevant votes of the Committee after each of the first three agenda items.

**A. Report on foreign exchange market developments and Desk operations**

On balance, the dollar is little changed against the mark and the yen. As you can see on the first page of charts behind my outline, the dollar began to come off against the mark in late October as the mark appreciated within Europe. The dollar then recovered as the mark unwound its gains against other European currencies and as the dollar moved up a bit against the yen.

At the end of October, the dollar was bid up against the yen in anticipation of outward investment from Japanese institutional accounts and on a brief surge of demand for dollars from Japanese banks in both the spot and the FX swap market as an alternative vehicle for dollar funding.

Sentiment toward the dollar became quite positive at the start of November. But this positive outlook began to dissipate as the widely anticipated outflows from Japan did not appear to materialize, as some began to take profits on the dollar's quick run-up and as the confrontation over U.S. fiscal policy loomed larger.

By the end of last week, the dollar traded limply against both the mark and yen, with market participants blaming its condition on both heightened rhetoric over fiscal policy and the weakness of the Mexican peso. On Monday, the dollar got a bit of a boost as short positions were covered following the Treasury's auction announcement, but overnight it has come off again.

As you can see on the second page of charts, following the narrow defeat of the Quebec referendum, the Canadian dollar recovered the losses it suffered just prior to the vote, even as the Bank of Canada promptly lowered its target range for call money by 25 basis points to a range of 5 and three quarters to 6 and a quarter percent.

The Mexican peso has been under consistent pressure since the end of September and has weakened sharply, in volatile trading over the last three weeks.

Last week, Mexican markets became increasingly volatile and the peso weakened abruptly as anxiety built up in anticipation of the events of this week, which include: the weekend elections, the presentation of the 1996 budget, the release of 3rd quarter GDP, and the maturity of the single largest remaining tranche of tesobonos. As the perception developed that the authorities would take no direct steps to halt the currency's slide, the peso's jerky, downward movements appeared to reflect both thinning markets, in which many participants were choosing simply to stand aside, as well as speculative pressures.

Last Thursday, after the peso had weakened abruptly to around 8.20, the Bank of Mexico intervened for the first time since May, selling \_\_\_\_\_ for pesos, bringing the peso to close Thursday and Friday at 7.50. Consistent with these operations, the Bank of Mexico left their money market quite short on Thursday and over the weekend, prompting overnight rates to rise from 54 percent last Wednesday to highs of over 80 percent yesterday morning. While initially the tightness in their money market was supportive of the peso, the high rates reached yesterday caused chaotic conditions in the markets, appearing to threaten the slim prospects for growth. As the peso weakened yesterday above 8, the Bank of Mexico again intervened, selling \_\_\_\_\_ and the peso closed around 7.80. The Bank of Mexico also acted yesterday to ease pressures in their money market. Subsequently, in the primary auction for 28-day Cetes rates came in at a surprisingly low 60 percent.

We received a \$350 dollar payment from the Mexican authorities on the System's short-term swap, as did the Treasury on theirs, and on October 30th we rolled over the remaining \$650 million outstanding for, what was agreed with the Treasury, will be the last of the 90-day extensions of the outstanding amount on our swap with the Bank of Mexico.

Mr. Chairman, I would be happy to answer any questions on this part of my report. I will need the Committee's ratification of the Desk's foreign operations.

## **B. Annual renewal of reciprocal currency arrangements**

Mr. Chairman, as you can see on the schedule which is the last page attached to my outline, the System's reciprocal currency arrangements come up for renewal at this time of year, with the one exception of our swap with the Bank of Mexico which is up for renewal at the end of January. I will bring the

Mexican swap line up for the Committee's discussion at your meeting on December 19th. I need the Committee's authorization at this time to begin the process of communicating with the other central banks about the renewals before year-end. I have no change in the terms and conditions to recommend and I request that the Committee approve their renewal without change.

**C. Report on domestic market developments and Desk open market operations**

Mr. Chairman, before turning to domestic markets and operations, I would like to give the Committee a bit more background on the Desk's cooperation with the Japanese monetary authorities in managing the liquidity of their portfolio of U.S. government securities, as part of their broader efforts to aid the dollar liquidity of the Japanese banks.

Several years ago, when Bill McDonough had this job, the New York Bank began a dialogue with the Bank of Japan aimed at improving the dollar funding practices of the Japanese banks in New York. This resulted in our working together to encourage sounder practices by the Japanese banks. It also resulted in conversations in which we tried to discourage the Bank of Japan from thinking of our Discount Window as the appropriate first step in emergency liquidity support for the Japanese banks.

As described in Don's and my note to the Committee of October 17th, this past July, Governor Matsushita approached Chairman Greenspan and Vice Chairman McDonough about possible sources of emergency dollar liquidity support for the Japanese banks during the time of day when Tokyo is closed. As a result of this conversation, the Desk was asked to work with the Japanese authorities to help manage the liquidity of their portfolio and to stand ready, in extremis, to be able to purchase outright a large amount of the Japanese authorities' holdings late in the New York business day and possibly outside our normal operating hours.

I have viewed our task as helping the Japanese authorities do what THEY need to do to manage the Japanese banks' liquidity. It was made quite clear to the Japanese authorities that the Desk does not currently have the authority from the Committee to engage in repo transactions with foreign accounts -- that is, we could not LEND them money against their collateral. We also made clear that our outright operations are subject to the intermeeting leeway limit of 8 billion dollars, but that, in a crisis, additional authority could be sought. To provide an initial liquidity buffer, immediately available with no liquidations costs, we invited the Ministry of Finance to increase its balances invested with us in the overnight RP pool.

In part, as a result of our gentle prodding and, in part, as a result of the increasing pressure on the Japanese banks, the Japanese authorities began to inject dollars into the Japanese banks in September to help them over their fiscal half-year-end. We have helped them by selling \_\_\_\_\_ of their holdings of Treasury bills into the market, by purchasing \_\_\_\_\_ of bills from them for the System Account, and by managing the flow of more than \_\_\_\_\_ of their funds into the RP pool and \_\_\_\_\_ out of the pool.

Throughout, I have viewed this as a working arrangement -- albeit a special one with the Japanese authorities -- in the nature of central bank cooperation.

While there appears to have been a lull in the dollar funding activities of the Japanese banks in the past 2 weeks and some narrowing of the spreads, I should note that pressures remain and that we are just coming into the period when the Japanese banks must complete their efforts to fund for the turn of the year.

In domestic interest rate markets, expectations for an ease in policy by the Committee have been postponed to December, but such expectations are held with increasing conviction. The bill curve -- from 3 months to a year -- began to flatten in late October as market participants came to perceive the economy as softening and as they increasingly came to expect both significant fiscal consolidation and the Committee to respond to a Federal budget package with an easing in policy. At this point, the bill curve has inverted, perhaps reflecting the abundant supply at the very short end. But even so, both one-year and two-year yields are currently around 30 basis points below the Funds rate.

At the end of October, as concern over the debt ceiling grew, we began to hear about portfolio managers and investors interested in swapping out of Treasury issues that paid coupons or principal this week and about dealers reluctant to take these issues from customers. Last Wednesday the bond market rallied, with the long bond closing the day with a yield of 6.24 percent. On Thursday morning, when the PPI came in around expectations, a number of market participants began taking profits on their positions just as the extreme rhetoric from each side of the fiscal confrontation began hitting the wires. Correlation became causation as the market lost all of its previous day's gains and as attention shifted squarely to Washington. Thursday afternoon and Friday, Treasury securities with principal payments on November 15th and 16th began to trade at discernibly cheaper prices than similar issues.

The bond market was under pressure early Monday morning, but the Treasury's announcement of a definitive auction calendar removed the immediate risk to default and the market rallied back again. Even so, investors now concerned about the possibility of default continue to shy away from Treasury securities maturing in 1995.

In domestic operations, reserve needs were mostly in a range around \$4 billion. The Funds rate was firm for several days around the end of the third quarter, as well as on most maintenance period settlement days. The effective average rate for the period was 5.78 percent.

Required reserves have fallen slightly since your last meeting, as sweep activity continues to depress growth in M1. Reserve shortages are forecast to deepen substantially beginning with the current maintenance period, as currency grows with the holiday season. However, currency growth appears a bit weaker than expected and already the daily numbers in this maintenance period have brought us to revise our forecasts lower.

We addressed most of the reserve needs with temporary operations. Our bill pass, of \$3.8 billion on November 8th, was timed to coincide with the deepening of the reserve shortage in the current period. Our purchase of these bills, as well as others from foreign accounts, had the effect of shortening the maturity of the portfolio by a few days, but this will be more than offset when we roll into the new 3- and 10-year issues on November 24th.

I would like to inform the Committee of changes that I plan to make in the scope and frequency of our bill and coupon pass operations in order to reduce the time it takes us to complete these operations.

The Desk has continued to be frustrated by the fact that it takes 40 minutes to an hour for us to respond to the dealers' propositions, despite our investment in automation. This situation imposes risks on the dealers and cannot be helping us in the prices we receive.

It has become apparent to Sandy and me that the best means of improving our turnaround time is to minimize the number of issues considered on any one occasion. In the recent bill pass, it was relatively easy for us to impose an internal discipline, by looking exclusively at the propositions in a set number of bills in which our holdings were particularly low. This permitted us to get back to the dealers within 20 minutes, less than half the time of other recent, similar operations.

With over 250 coupon issues outstanding, selecting and promptly responding to propositions in a coupon pass poses a much greater challenge, without some pre-selection. To improve the situation, I plan to meet our normal needs for outright purchases of coupons through a short series of smaller operations, each one focused on different parts of the yield curve -- rather than our current practice of trying to digest the entire curve all at one time. For example, instead of a single \$5 billion pass on a single day, we would carry out 3 or 4 smaller operations over the course of a week or so. We plan to explain this approach to the dealers in advance, in order to avoid confusion or the mistaken attribution of significance to that portion of the curve selected for any single operation.

Over time, as the dealers come to appreciate the faster turnaround, this change should benefit the portfolio in the prices we receive and benefit the market by not forcing it into a lull while dealers first price their propositions and then wait for our responses.

Mr. Chairman, reserve needs are now projected to grow to about \$7 and a half billion by late December, but between the expansion of sweep accounts and the relative weakness of currency demand, the risk of revisions to the forecast reserve shortage is on the downside. Thus, it does not appear that, in the normal course of business, we will need an increase in the intermeeting leeway of \$8 billion.

I would be pleased to answer any questions on this part of my report and I request the Committee's ratification of the Desk's domestic operations during the period.

**D. Report on issues relating to domestic Desk operations in the event of a Treasury default**

Over recent weeks, we have given some thought to the issues the Desk might confront in the event of a default by the Treasury. In such circumstances, the Desk's goal will be to maintain the cost of overnight funds consistent with the Committee's directive, while taking steps, within our power, to help maintain the market mechanism on which the Desk principally relies: the financing market for government securities -- the RP market.

Because of our concerns, we have tried to impress our colleagues at the Treasury with the importance of ensuring that securities which had missed either a principal or interest payment would continue to be transferable over the book-entry wire. Assuming this would be the case, it would be helpful if the Desk could make clear to the primary dealers that such

securities would be accepted as collateral in Desk operations. The Desk would also seek to establish a pricing convention for the valuation of collateral which reflected any guidance the Treasury could give on the appropriate rate for the continued accrual of interest. In the absence of guidance from the Treasury, the Desk would seek to establish a convention with the dealers.

In our current operating regime, the allowance for borrowing and our estimates of demand for excess reserves are the two most judgmental factors, but ones which we do seem to be able to work with fairly well. In the event of default, both borrowing and demand for excess would be expected to increase sharply but I would be kidding you if I suggested that we had any idea by how much.

For example, had a default occurred this week and had the decision been made to pend the payment of interest to the holder of record on the night prior to the payment dates -- as opposed to having the unpaid coupon trade with the securities and ultimately be paid to the holder at the time that the Treasury cured its default -- the roughly \$25 billion worth of anticipated interest payments to the public would, in effect, have been frozen out of the expected payment flows in the market, representing an amount roughly equal to the entire banking system's current operating balances.

Clearly, we would aim to be generous in our temporary operations. But given the disruption of normal payment flows, as well as the potential demand for discount window borrowing, we would have to be prepared to be on both sides of the market -- adding and draining reserves in short order -- to maintain the funds rate.

The Bluebook raises the possibility of the Desk buying defaulted securities outright from the market. I think that this is a particularly risky idea and I strongly recommend that the Committee NOT consider such operations BEFORE there is convincing evidence that the other actions undertaken by the Desk and the Reserve Bank discount windows had been demonstrated to be inadequate to deal with a crisis situation.

While the initial market reaction might well be positive -- in that holders of defaulted securities would likely be only too pleased to swap out into other issues, I think that prompt action on the part of the Desk to buy up these securities, in the initial days of a default, could well have a decidedly negative impact on the market as reflecting official panic and implying a greater duration to the crisis than the market would otherwise first assume. Moreover, by establishing a pricing convention for the accrual of post-default interest and by accepting these



securities as collateral in temporary operations, the Desk would have already gone a long way to stabilize the RP market and the prices of these securities.

By using the considerable powers of the central bank to immunize the holders of specific Treasury securities against loss, while other government creditors and beneficiaries go empty handed, the Committee would be taking the single most effective step to enhance and perpetuate the image of the Federal Reserve as a bondholders' protection society -- an image which I think is not accurate, not appropriate and certainly not helpful in enhancing the credibility of monetary policy. Having just seen the Congressional response to the Administration's extraordinary use of the Exchange Stabilization Fund to assist Mexico -- in circumstances initially supported by the Congressional leadership, before going any further down this road, the Committee may want to consider the very real risk of subsequent legislation constraining the Committee's discretion in the future.

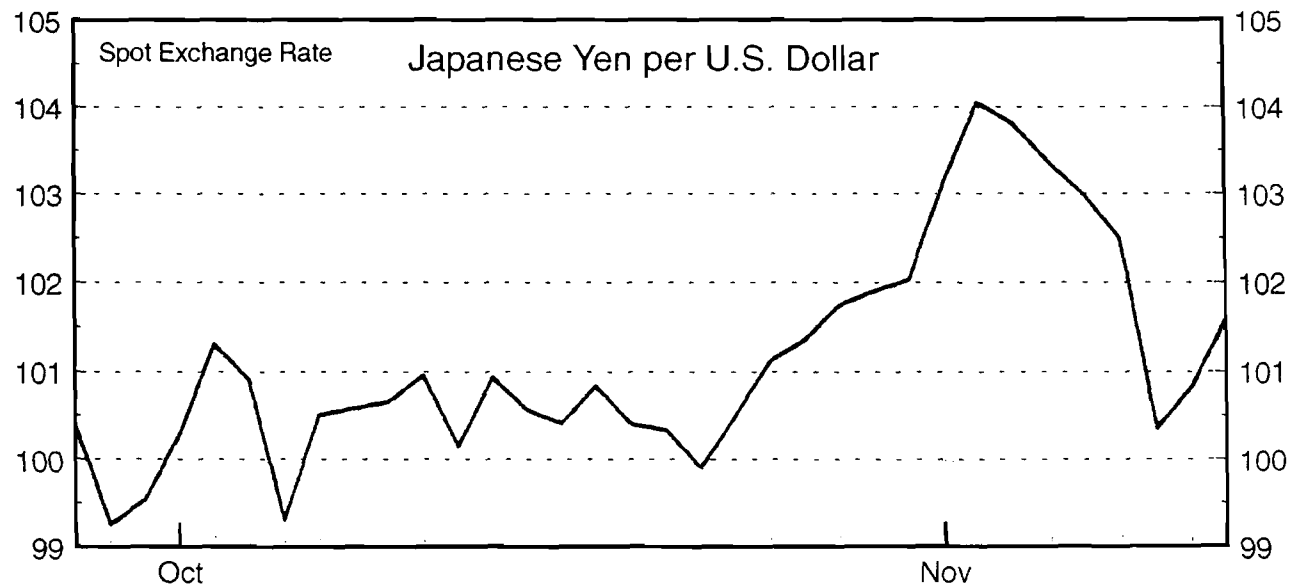
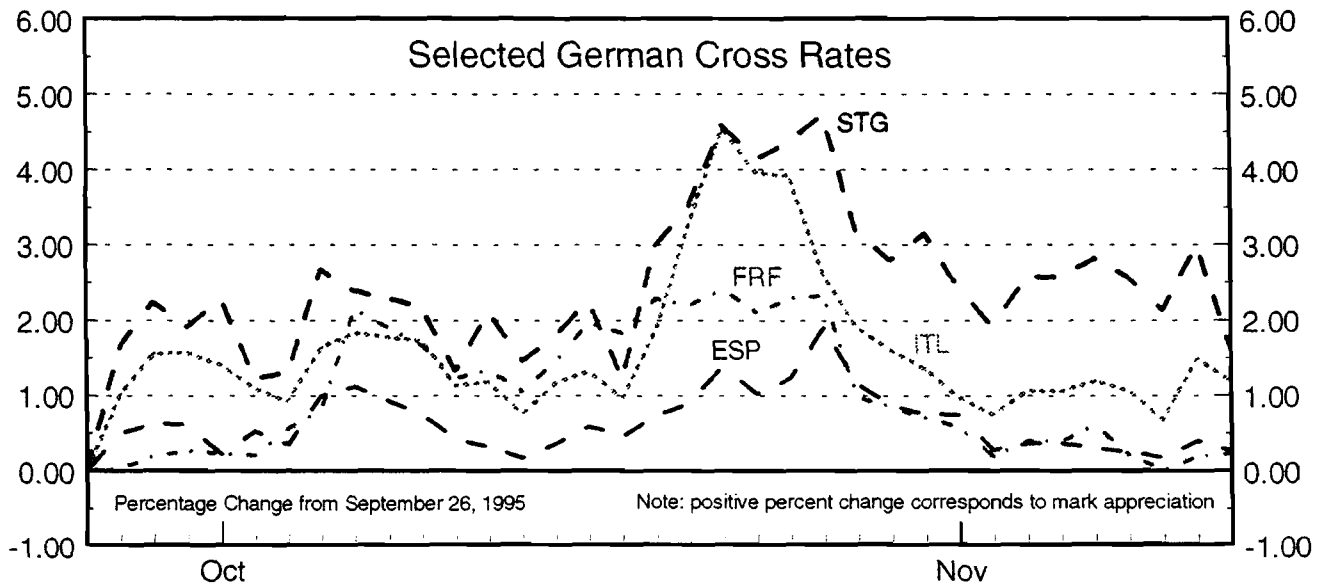
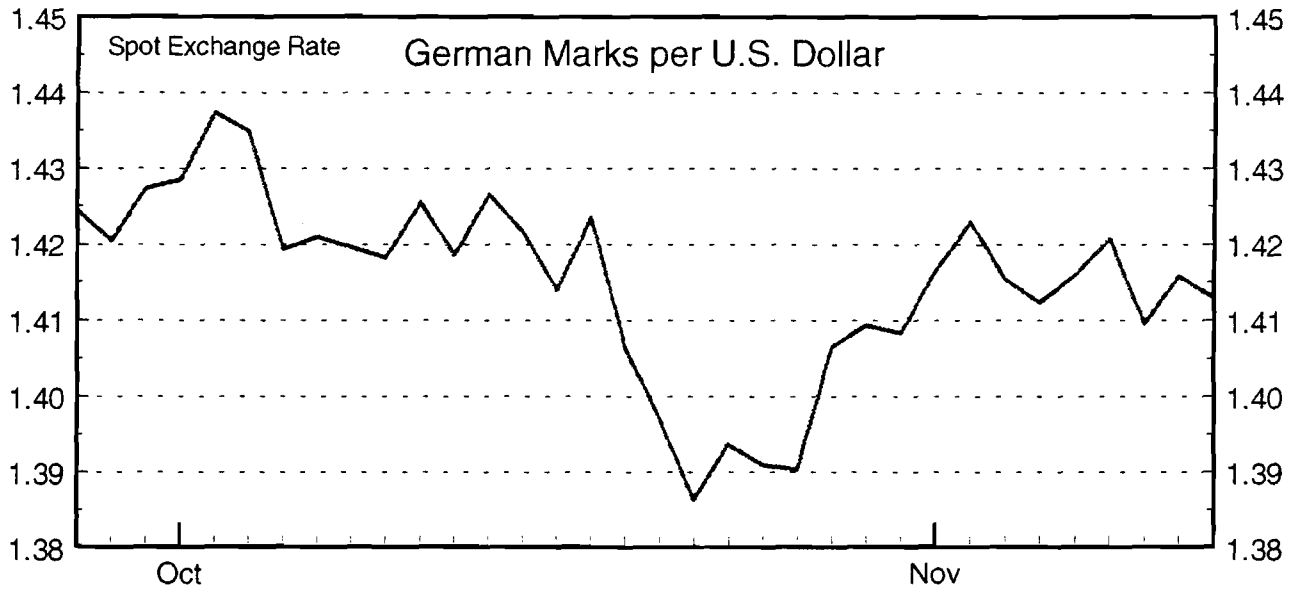
There may be circumstances in which taking these risks would be justified, but as the Bluebook suggests, such a decision should only be considered in relation to the overall judgment of the appropriate response of monetary policy to a prolonged crisis of macro-economic consequence.

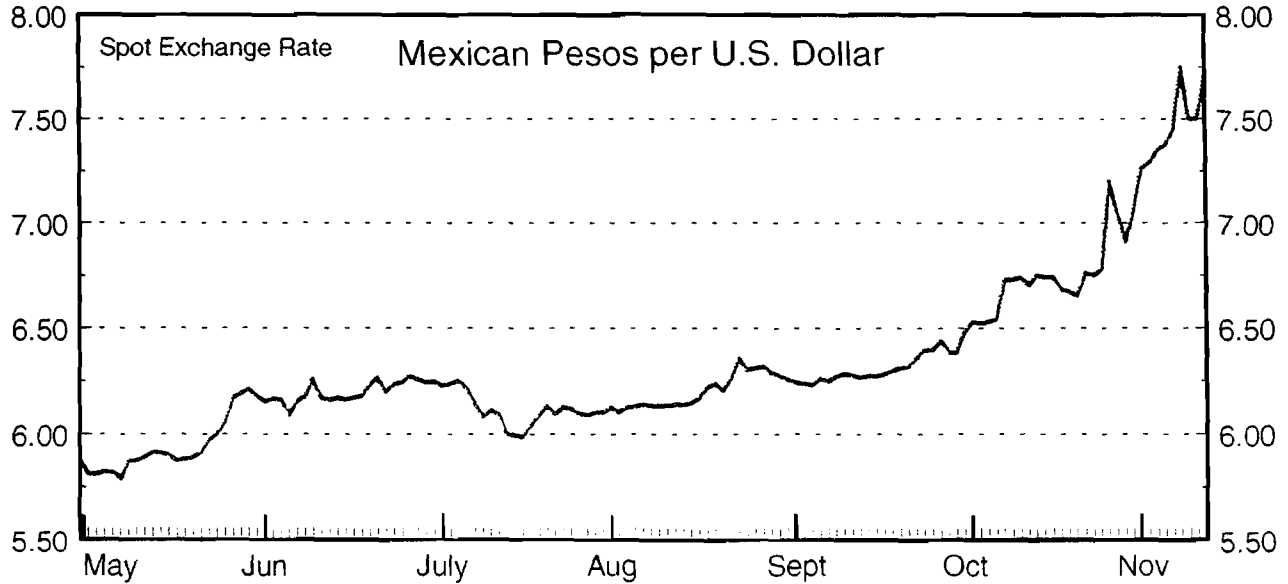
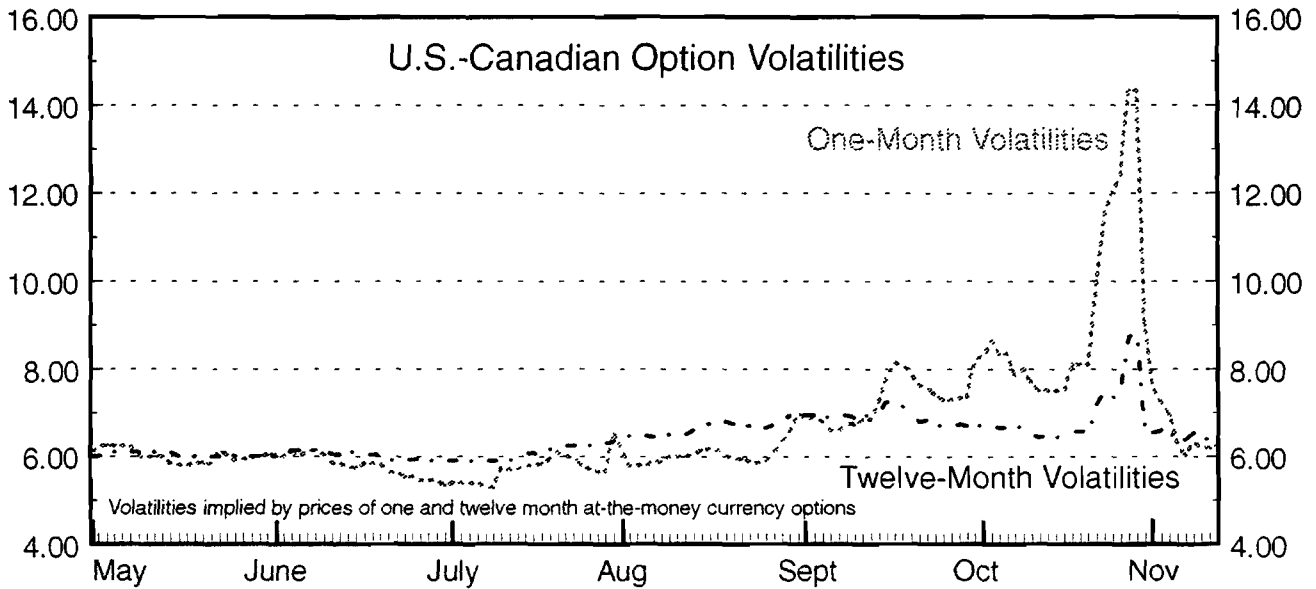
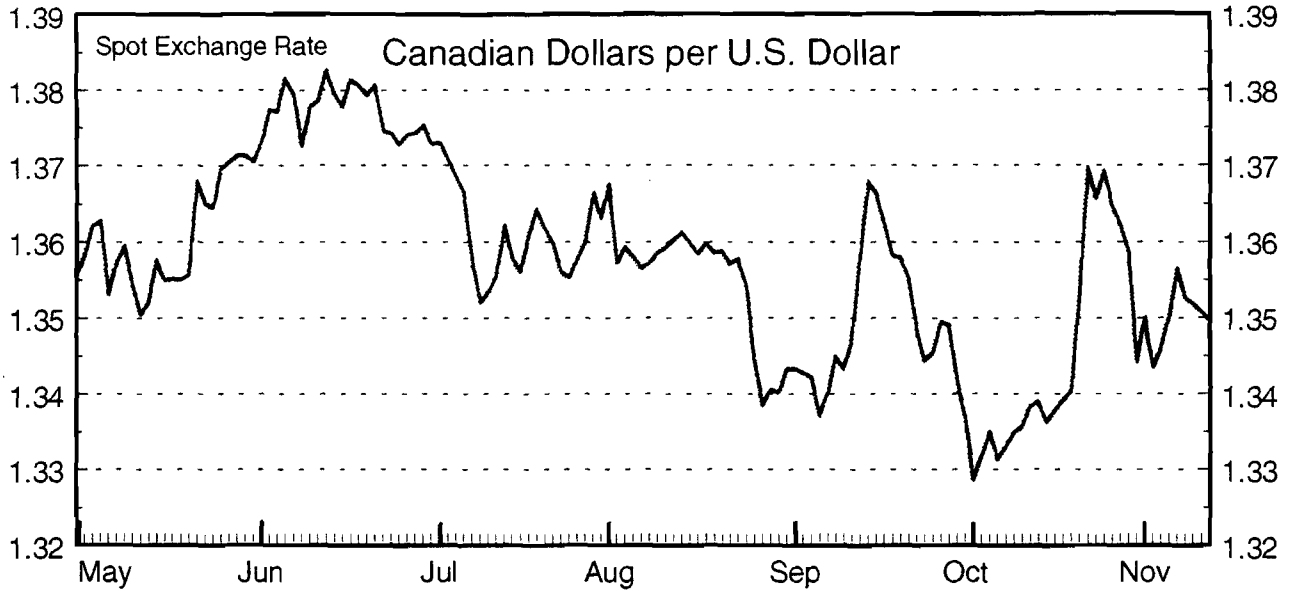
Mr. Chairman, I would be happy to answer any questions members of the Committee may have on this final part of my report, but then again, I won't mind if you all are tired of listening to my voice.

Outline of Manager's Report

November 15, 1995

- A. Report on foreign exchange market developments and Desk operations:
  - Dollar little changed;
  - Canadian dollar volatility;
  - Mexican peso weakness and the first intervention by the Bank of Mexico since May;
  - No U.S. intervention operations;
  - Received \$350 million payment on swap with Bank of Mexico and on October 30 rolled over remaining \$650 million for final 90-days.
  
- B. Annual renewal of reciprocal currency arrangements expiring before December 31, 1995
  
- C. Report on domestic market developments and Desk open market operations:
  - Desk's assistance to the Japanese monetary authorities;
  - Market expectations of an ease in policy;
  - Domestic operations during the period;
  - Planned changes to improve the timeliness of the Desk's outright operations.
  
- D. Report on issues related to domestic Desk operations in the event of a Treasury default.





## Reciprocal Currency Arrangements Renewal Schedule

### System reciprocal arrangements for renewal in 1995:

<u>G-10 Countries</u>	<u>Dollar Amount (millions)</u>	<u>Expiration Date</u>
Bank of Japan	5,000	December 4, 1995
Bank of England	3,000	December 4, 1995
Swiss National Bank	4,000	December 4, 1995
Bank of Sweden	300	December 4, 1995
Bank of Canada	2,000	December 15, 1995
National Bank of Belgium	1,000	December 18, 1995
Netherlands Bank	500	December 28, 1995
Deutsche Bundesbank	6,000	December 28, 1995
Bank of France	2,000	December 28, 1995
Bank of Italy	3,000	December 28, 1995

### Non G-10 Countries

Austrian National Bank	250	December 4, 1995
Bank of Norway	250	December 4, 1995
BIS (Swiss francs)	600	December 4, 1995
BIS (other)	1,250	December 4, 1995
National Bank of Denmark	250	December 28, 1995

### System reciprocal arrangements for renewal in 1996:

Bank of Mexico	3,000	January 31, 1996
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### Treasury arrangements:

Bank of Mexico	3,000	December 15, 1995
Deutsche Bundesbank	1,000	January 4, 1996

Michael J. Prell  
November 15, 1995

FOMC BRIEFING

As you know, it's common for key statistics to come out in the period between Greenbook day and the FOMC meeting. I'm sure that you can appreciate that this is more than a little discomfoting for us: Although we know that our forecasts are imperfect, it would be nice to have at least a decent spell of blissful ignorance of our errors before we face the inevitable humiliation. Last week, our anxiety level was even higher than usual because of the exceptional ambiguity of the indicators available to us as we finished our forecast.

In any event, it's now time to face the facts--or at least the early estimates of those facts. An important set is the retail sales data that were released yesterday. The updated figures for August and September indicate that consumer spending was stronger than the Commerce Department gauged for the third quarter, by perhaps four-tenths of a percentage point on real PCE growth. But, on the other hand, the advance estimate of sales in October was weak, and would suggest the wisdom of lowering our forecast of fourth-quarter PCE growth somewhat. The Greenbook showed 3-1/2 percent; something in the 2-1/2 to 3 percent range might be more reasonable, given what we know now.

Indeed, even to get to that pace, we'd need some combination of upward revisions to the sales figures for the past couple of months or strong gains over the remainder of the year. As we see it, though, either of these outcomes is quite plausible, in light of some favorable fundamentals. I have in mind the continuing solid growth of income, suggested by the October labor market figures, and the huge increase in wealth that the household sector has enjoyed this year.

For what it's worth--and that admittedly may not be a great deal--I might note that the department and chain store reports for the first two weeks of November look strong.

At this point, summing up the surprises in the incoming data since Commerce published its third-quarter GDP estimate, it appears that real final sales grew not 4-1/4 percent but perhaps around 4-3/4 percent. That estimate could change when we receive the September international trade report next week; however, it certainly seems that demand was stronger this summer than we appreciated at the time.

Judging whether this implies that the economy has carried greater positive momentum into the current quarter requires, among other things, an assessment of the inventory picture. Unfortunately, owing to the shutdown of the government, we didn't receive the September release on retail inventories that was due out this morning. That report would have supplied the last significant piece of information on stocks in the third quarter. So we must make do with what we have, and based on the available information, we think it likely that overall inventory investment was less than Commerce estimated. If that is true, it implies that the aggregate ratio of stocks to sales declined in the third quarter.

Even so, we expect that inventory investment will slow further in the near term. However, the drag should not be so great as to stop the economic expansion in its tracks. We think that the most likely outcome this quarter is a return to moderate growth. Given the retail sales data, that means a GDP growth rate closer to 2 percent than to the 2-1/2 percent in the Greenbook.

As you know, we were considerably influenced in our GDP forecast by the October labor report. It indicated that, adjusted for

the Boeing strike, payrolls expanded at a quite decent clip; furthermore, total production worker hours in the private sector were up a percentage point from the third-quarter average. Even discounting the hours figures considerably, these are not the kind of numbers that typically signal a weak economy. The same can be said for the drop in unemployment last month.

Moreover, the latest data on industrial production, which we published just this morning, have a more upbeat tone than we anticipated. Although manufacturing output in October was down 0.2 percent, that was a shade less than we expected in the Greenbook--and the Boeing strike more than accounted for that decline. Also important, there were upward revisions to the factory production estimates for August and, especially, September--enough to push the third-quarter growth rate up  $3/4$  of a point to 3.3 percent and also set the stage arithmetically for a healthier fourth-quarter gain. These figures go at least some way toward narrowing the discomforting gap between the projected second-half growth rates of manufacturing output and GDP.

But, from a policy perspective, the bigger question is where the economy is headed over the next year or so. As you know, we concluded in the Greenbook that GDP growth would continue to run above our prior expectation. The logic behind this is pretty simple. While some bulges in activity carry the seeds of their own reversal, we didn't see much reason to view the recent upside surprise as being of that sort--aside from the third-quarter jump in federal purchases. Rather, we judged that private domestic final sales--that is, consumption plus fixed investment--had not decelerated much to date and that the decline in interest rates and rise in stock prices this



year will be adding fuel to demand in the coming months. In addition, we expect that the decline in real net exports has now essentially come to an end, removing what has been a significant drag on growth over the past few years. Under the circumstances, the fiscal restraint that we've assumed will be implemented doesn't appear great enough to push GDP growth much below trend.

If that is so, then resource utilization rates will remain in the recent range. This brings me to the question of where inflation is headed. This morning, the October CPI report was published by essential employees of the BLS. The total index was up 0.3 percent and so was the core component. The twelve-month change in the core index rose to 3.0 percent, and our projection calls for a continuation of that pace through 1997.

The forecast in the September Greenbook was for a somewhat lower inflation path, but that was in a noticeably softer economic environment. Indeed, we would have presented a less favorable price path this month were it not for our interpretation of the good inflation news that we've been experiencing this year. Despite an unemployment rate that has remained in the 5-1/2 to 5-3/4 percent range, compensation per hour--at least as measured by the Employment Cost Index--has decelerated further, and the core CPI has increased at an essentially stable pace. Furthermore, the anecdotal evidence, such as that reported in the Beige Book, portrays a steady inflation picture. Although some firms are finding labor in short supply, they apparently are not bidding up wages. In light of these patterns, we've stuck our necks out and inched further in the optimistic direction, preparing a forecast that, in effect, takes the NAIRU to be more like 5-3/4 percent.

It is, of course, arguable that the recent data suggest that the economy can operate with unemployment even lower than 5-3/4 percent without an acceleration of prices. We would counsel caution, however, in accepting this inference. One reason is that there is sufficient short-run looseness in the Phillips curve relation--not to mention imprecision in the price measures--that the underlying tendencies don't always show through on the expected schedule. Another reason is that two factors that we think have played a role in holding down inflation could prove less helpful going forward: First, incremental medical cost savings may be harder to come by, and second, sustained low unemployment may diminish feelings of insecurity and embolden workers to push harder for a bigger share of the pie. All things considered, I believe that, given the predicted output path, the risks attending our inflation forecast are reasonably balanced.

November 15, 1995

FOMC Briefing  
Donald L. Kohn

I'd like to begin by discussing a new chart that appears at the end of your "Financial Indicators" package, and use that as a transition into a discussion of the current stance of policy. Not to be outdone by "Business Week" in our analysis of monetary policy, the new chart summarizes several versions of the so-called Taylor rule. That rule prescribes a level of the nominal federal funds rate built up from a real federal funds rate; the real rate, in turn is made to vary around a presumed equilibrium value, with the variations keyed to deviations of inflation from target and output from potential. For example, above-target inflation or output over potential would call for the real funds rate to be above its equilibrium value. In Taylor's own formulation, the results of which are shown in the top panel, the FOMC is modelled as aiming at 2 percent inflation as measured by the implicit GDP deflator, viewing a 2 percent real funds rate as equilibrium, and reacting moderately and equally to resource and inflation gaps.

The rule raises a number of issues for policymaking, and I'd like to highlight just a few. John Taylor formulated the rule as a normative description of what monetary policy ought to be doing; it turned out to be a

reasonably accurate positive description of the Federal Reserve's behavior since 1987. The rule does illustrate how a central bank can pay attention to the level of output relative to potential, while also achieving reasonable price stability--or any other inflation objective--over the long term. The speed with which the central bank will approach its inflation goal depends on the strength of its reactions to the price and output gaps.

In his discussions of the rule, Taylor stresses the benefits of rule-like or systematic behavior by the central bank. These include disciplining monetary policy and facilitating private sector planning because the central bank is more predictable. A predictable central bank may stand a better chance of fostering behavior in the private sector that helps to achieve monetary policy objectives.

That said, a number of caveats should be noted. As formulated, the rule depends on current and lagged output and prices, and not forecasts of the future. It is anticipatory only in the sense that resource utilization gaps determine future price behavior. The characteristics of the rule and its "middle of the road" coefficients probably would forestall getting too far "behind the curve" or problems of instrument instability. Nonetheless, the performance of monetary policy might be improved by looking at forecasts for these gaps. And its prescription of equal,

moderate responses to output and inflation gaps may not be appropriate to all circumstances. In particular, it may be better suited to supply shocks, where the Committee necessarily is facing conflicts between output and price stability objectives, than it is to demand shocks, where a prompt closing of the output gap will forestall opening up a price gap. I might note that going from mild but deeply embedded inflation to price stability resembles in some ways an economy confronted with the conflicting intermediate-term choices of a supply shock; that is, efforts to whittle down inflation imply opening up an output gap. In this situation, the Taylor rule advises, society's losses are minimized by a gradual transition, as apposed to a more abrupt move to price stability; some may consider this an open question.

Within the Taylor framework, the prescribed funds rate is very sensitive to the specific measures chosen for the output and price gaps. This is illustrated in the middle panel of the chart, which uses the Taylor parameters but several alternative measures of output and inflation. Taylor's use of the implicit GDP deflator is especially important to the result in the top panel that the current funds rate is substantially higher than the rule would suggest. As you can see, the overage of the current funds rate relative to the rule is considerably reduced when other

measures are used. It's also true that using these alternatives, the resulting "envelope" doesn't mimic past Federal Reserve behavior as well.

It wasn't Taylor's original intention, but one use of these types of exercises has been to see whether the current stance of policy is consistent with the past behavior of the Committee. The bottom panel of the chart attempts to improve on the use of the Taylor rule for this purpose by estimating a monetary policy reaction function in the framework of a Taylor-type rule. The specific function used, building on work by John Judd at the Federal Reserve Bank of San Francisco, allows for short-run dynamics in the Committee's adjustment to the steady-state rate prescribed by the rule; it is this steady state that is shown in the chart. Reflecting the influence of the credit crunch period, when the federal funds rate for some time was below the value prescribed from Taylor's specification, the statistical results imply that the Federal Reserve put more weight on closing the resource gap and less weight on bringing inflation down than the Taylor rule. In this formulation, the current funds rate is about in line with your average behavior from 1987 through 1993.

It is important to recall that your policies over this period were associated with a net decline in inflation, so that being "just right" by that guidepost may still mean,

as implied by the upper two panels, that policy remains slightly restrictive, consistent with the emergence of economic slack and further disinflation. Taylor arrived at his estimate of a 2 percent equilibrium real funds rate by looking at history and so, not surprisingly, the notion from these exercises that the current funds rate suggests monetary restraint is similar to the conclusion people have drawn using long-run interest rate averages. The recent behavior of some other financial or related indicators may also be read as suggesting real rates to the high side: For example, industrial commodity prices have been soft, and broad money and credit growth slow by the standards of the past year.

In the staff forecast, real and nominal funds rates at their current levels are seen as consistent with a steady inflation rate, and thus, implicitly, this forecast embodies a somewhat higher equilibrium rate than the Taylor rule or historic averages. The real funds rate is only an index or proxy for a whole host of financial market conditions that influence spending and prices in complex ways. Among other difficulties, the relationship of the funds rate to these other, more important, variables may change over time. For example, one factor behind the staff forecast is the behavior of long-term rates. Real longer-term rates are fairly low. Judging from other charts in the Financial

Indicators package, they are about as low as they have been over the last 15 years, with the exception of 1993. The depressed level of real bond rates has helped to buoy equity prices and hold down the real value of the dollar. And these rates are low relative to the funds rate. The nominal yield curve is somewhat flatter than its average since the mid-1960s, and with inflation still expected to be unchanged to somewhat higher over time, it's likely that the spread of the real yield curve is relatively narrow as well.

A flat yield curve, by itself, might be seen as indicative of restrictive policy. But, the flattening in 1995, as in 1993, has been primarily a result of declining long-term rates, measured in real as well as nominal terms. The drop in long-term rates is noteworthy because it occurred with economic growth strong and resource utilization high. Given the usual lags, the pick up in economic activity in recent months actually is associated with the influence on spending of the much higher real rates of the later half of 1994 and early 1995 than are currently prevailing.

To an important extent, the decrease in real rates has anticipated a shift in the mix of macro policy toward further fiscal consolidation and monetary ease. But, when the financial markets build in fiscal tightening that may not affect government or private spending for some time,



considerable temporary stimulus can result. The expected monetary policy easing built in is only on the order of 50 basis points, and may reflect in part expectations of what the Committee might do based on its Minutes and the public statements of its members, rather than a conviction by market participants of the policy needed to support economic activity. In any case, rates should back up only moderately if the Committee does not validate market expectations, and the staff has built into its forecast a rise reflecting this factor and a bit stronger economy than markets seem to expect.

Finally, there are only a few signs that credit supplies are tightening, so that a given real rate would have more bite. Bank loan officers reported that margins on business loans were squeezed further. With minor exceptions, spreads in securities markets have stayed fairly narrow, suggesting ample credit availability through this channel. Although delinquency rates on household debt have been rising, loan officers reported very limited tightening of terms and conditions for consumer credit.

Thus the staff forecast, taken at face value, would seem to present a case for alternative B, with little presumption about the direction of the next policy move, assuming the lack of disinflation were acceptable. However, as noted, there are a few straws in the wind that real rates

might be on the high side, suggesting the possibility that the positive surprise to output may prove to be less durable or smaller than the staff has assumed. In these circumstances, the current stance of policy really could prove to be restrictive, opening up a margin of economic slack over time. If this result were not the Committee's intent and it were concerned about such an outcome, it might want to be especially alert to evidence that a more accommodative stance could be appropriately implemented. In addition to the usual evidence on spending and output, failure of borrowing to pick up as the staff is forecasting or further unexplained weakness in broad money growth might indicate less accommodative financial conditions than anticipated.

While disinflation at current or even slightly lower levels of resource utilization would be surprising, such an outcome might merit special consideration for policy. In particular, falling inflation and inflation expectations would raise real short-term rates at a steady nominal funds rate. Moreover, any further edging off of inflation might suggest that the potential of the economy was higher than we thought. In that event, a lower real as well as nominal funds rate than in the staff forecast would be needed to hold the economy at its potential.

If the Committee were worried the level of real rates was too high, one question would be how strong it

would wish evidence to be that policy was restrictive before acting. An asymmetric directive toward ease would suggest the Committee wanted to act promptly and would not be demanding with regard to the decisiveness of the evidence before acting. A symmetric directive would imply a greater burden of proof, perhaps taking more account of the current low level of the unemployment rate and the expectations of staff and many outside forecasters of little further progress toward price stability.