APPENDIX

Notes for FOMC Meeting
May 19, 1987

Sam Y. Cross

At the time of your last meeting the dollar already had come under persistent pressure and we had begun to intervene as part of a concerted effort. The pressures against the dollar have continued with varying degrees of intensity throughout April and into May. Initially they were concentrated against yen, but over the course of the period they spread to the German mark and to other currencies, as well as to other parts of the financial system. These pressures have abated somewhat during the past two weeks, in the light of intervention and the evolution of monetary policies, so that most dollar exchange rates are now trading above their lows of early May. As of this morning, the dollar was nearly 7 percent lower against the yen than at the beginning of the period of heavy intervention on March 23. This decline occurred despite almost $24 billion in concerted dollar intervention purchases by central banks in keeping with the Paris agreement and a very substantial widening in interest rate differentials in favor of the dollar. Even so, underlying sentiment towards the dollar at present remains negative, and many market participants have expressed skepticism that intervention plus policy actions by the U.S. and foreign authorities will be sufficiently strong to halt the dollar's move downward.

This downward pressure on the dollar stemmed from market participants' widespread disappointment over the lack of apparent adjustment in the world's trade imbalances, coupled with mounting concern that trade frictions were on the brink of escalating into a full-scale trade war. The negative sentiments were reinforced by a number of comments by some Administration officials responsible for trade relations with Japan, noting that a further decline in the dollar/yen exchange rate would surely occur in the absence of significant measures to stimulate the Japanese economy and to ease foreign trade barriers. Given the possibility of still lower dollar exchange rates, there was also concern whether interest differentials favoring the dollar were sufficient to foster a more stable currency and maintain foreign investors' appetite for dollar-denominated assets. At times during the period, the dollar gained support from official U.S. statements that further dollar declines could be counter-productive. But when these statements were not backed by convincing policy measures by the major nations, market participants' doubts about the U.S. willingness or ability to continue large scale intervention resulted in renewed pressures. In this context, market participants were looking for any new initiatives to demonstrate official resolve, and there were widespread rumors of dramatic moves such as that the U.S. was about to issue yen-denominated "Reagan bonds".

Through most of the inter-meeting period intervention was the major policy tool used to respond to the pressures on the dollar. Many market participants, particularly those in Tokyo, had assumed that the Paris agreement of end-February contained a commitment to hold the dollar above the Y150 level against the yen. When the dollar moved through that level in early trading on March 24, market participants began to question official resolve to maintain stability in the dollar/yen rate. As a result, aggressive dollar selling mounted quickly, and official operations by the Desk and by the Bank of Japan, though massive at times, contained but did not stop the dollar's fall.

During the period between March 23 and April 6, the Desk bought dollars daily while massive daily dollar purchases were undertaken by the Bank of Japan. European central banks also intervened on occasion in the dollar against yen, selling yen out of balances.

From April 7 to April 23 we scaled back our operations, and intervened against the yen only to prevent sharp declines in the dollar or to lend support to the dollar in response to brief periods of intense selling pressure. With total U.S. dollar purchases since the Paris agreement having reached $3 billion, and the stimulative actions expected from the Japanese as a result of that accord not evident, questions arose about the appropriateness of the U.S.

continuing to intervene as extensively as in the earlier period. At the same time, following arrangements worked out at international meetings in Washington in April, European intervention to support the dollar against the yen was increased. European central banks enhanced their arrangements for financing yen operations.

From April 24 to the end of the period, when pressures against the dollar became more generalized, and were not limited to the yen, we and the others intervened intermittently to buy dollars against marks as well as yen.

In total the U.S. has bought $4.2 billion since the Paris accord, of which $4.0 billion was against yen and $200 million was against marks. The Bank of Japan purchased

The European contribution to the Paris agreement included purchases of against yen, and against German marks and other European currencies in operations undertaken in a cooperative effort organized by the Bundesbank.

During the past few weeks, monetary policy developments also contributed to a more stable exchange rate environment. Chairman Volcker acknowledged that the Federal Reserve had modestly snugged up monetary policy. Prime Minister Nakasone stated that the Bank of Japan would ease short-term market rates. Some days later, the Bundesbank lowered the rates at which it operates in its domestic money markets. At the same time long-term interest rates in these countries have moved even more, and long term interest rate differentials favoring the dollar are now at their widest points since the dollar was at its peak in 1985.

The movements of interest rates has helped to keep the dollar off its lows of Y137.25 reached on March 27 and of DM 1.7590 reached on May 5. The dollar remains highly vulnerable, however. Market participants are aware that their present levels reflect heavy central bank intervention. They question whether the central banks will continue to have the appetite to intervene in the magnitudes necessary to keep the dollar from falling further. In addition to intervening along the lines discussed in Paris, some foreign central banks have bought dollars in order to rebuild reserves following the January EMS realignment or to temper the rise of their own currency. When all these operations are taken into account, total net official dollar purchases by the U.S., Japan, Canada, and Europe so far this

year come to $67.1 billion. These dollar purchases substantially exceed the expected U.S. current account deficit for the relevant months.

Meanwhile exchange rates are still at levels where intervention might be expected in light of the Paris accord. Our own resources for future intervention now consist of yen balances for the FOMC and the ESF of $300 million and $2.2 billion, respectively, valued at market rates, as well as combined mark balances of $11.7 billion. In addition, the System has a $5 billion swap line with the Bank of Japan and a $6 billion swap line with the Bundesbank. The ESF also has a separate swap arrangement with the Germans.

PETER D. STERNLIGHT

NOTES FOR FOMC MEETING

MAY 19, 1987

Domestic Desk operations since the last meeting of the Committee sought to meet large reserve needs, exacerbated by unusually high Treasury balances, while remaining particularly mindful of the fragile state of the dollar. In varying degrees over the period, the Desk exercised caution in meeting needs, tending to resolve doubts on the less accommodative side. In late April, in line with Committee discussion, a slightly greater degree of restraint was formally acknowledged in a $100 million increase to $400 million in the path allowance for adjustment and seasonal borrowing. Earlier in the period the standard path allowance for excess reserves was cut by $100 million to $850 million, but this was essentially a technical revision in line with recent evidence of demand for excess. Toward the close of the interval, with the dollar appearing on steadier footing, though still vulnerable, the Desk was a touch more forthcoming in meeting indicated reserve needs.

The broad monetary aggregates were well behaved throughout the period, with slow growth in March followed by a near 6 percent pace in April and suggestions of renewed slowdown in May. M1 growth was also slow in March but surged sharply in April, apparently due to tax date build-ups; however, this bulge largely washed out in early May and could produce a flat number this month.

Starting early in the period, the combination of the Desk's gingerly approach to reserve provision, and the tendency for day-to-day reserve needs to exceed expectations, produced noticeably higher Federal funds rates and above-path discount window borrowings. On a few occasions, shortages of collateral impeded the Desk's ability to inject reserves in desired volumes, although this was not a persistent or major factor. The last meeting was midway through the reserve period ended April 8, a period in which funds averaged 6.17 percent and borrowings $393 million--both fairly similar to recent preceding periods. In the April 22 period, funds rose to 6.34 percent and borrowing to $689 million, reflecting the aforementioned combination of cautious reserve provision and fairly frequent misses on the side of less reserves. These tendencies also interacted with market expectations as participants noted the weak dollar and anticipated System responses. Incidentally, up to the last day of that period, borrowing had averaged just $333 million but there was a bulge on the final day reflecting a projection miss and after-the-fact rise in requirements. This was only a warm-up for the two-week period ended May 6, which saw funds average 6.90 percent and borrowings push to about $1.1 billion. This was not so much a result of grudging reserve provision, as it was of large upward revisions to the reserve path as the period proceeded, and very large day-to-day projection misses chiefly due to the extraordinarily high Treasury balances at the Fed. Well into that reserve period, once it was clear that borrowing

would, mathematically, have to average well above its path level, the Desk made some informal allowance for this and did not seek to meet the nonborrowed path in full as this could have sent misleading signals to the market. The current period, which ends tomorrow, has seen an abatement of these forces--gradually lower and more predictable Treasury balances, and a steadier dollar which has permitted a more normal approach to day-to-day reserve provisions. Funds have averaged about 6.80 percent so far in this period and borrowing about $500 million through the past weekend.

Market estimates of the extent of the System's acknowledged "snugging" vary. With the overlay of special factors it has not been an easy period for the Fed-watchers to diagnose the Desk--any more than it has been for the Desk to execute! My sense is that market observers expect to see funds in a broad range from about 6-1/2 to near 7 percent, with borrowing probably intended in the upper part of a $400-600 million range. There is divided expectation, maybe about half and half, as to the likelihood of a discount rate rise near term.

To cope with the period's enormous reserve needs, the Desk was busy with both outright and temporary purchases, with the heavy outright activity calling for two temporary increases in leeway, to a total of $11 billion. Under this leeway, the Desk made two market purchases of Treasury coupon issues totaling $4-1/4 billion--and this was in addition to a $2.2 billion coupon purchase the day of the last meeting which counted against the

previous leeway. The heavy focus on coupon issues reflected the relative scarcity of bills in the market as the Treasury was continuing to pay down weekly issues while official foreign exchange intervention led to persistent demand for bills. Meantime, to help meet reserve needs the Desk took opportunities to buy bills from foreign accounts, and we made net purchases of about $5.2 billion from those accounts. On all but nine of 34 days, the Desk was also providing reserves through System or customer-related repurchase agreements--a grand total of about $120 billion. At one point, when Treasury balances were about at their peak, the System held a record $22 billion under RP.

Spurred by a weakening dollar and related concerns about quickening inflation, most market interest rates rose sharply over the period. Day-to-day mood swings and price changes were quite volatile, as most participants lacked the firm convictions that might have provided greater market-making depth. The market sensed, or anticipated, a less accommodative approach by the Fed--normally a factor that would make for higher rates--but interestingly, at times the sense of "snugging" sparked short-term rallies as this was seen as providing support for the dollar and hence ameliorating a major negative factor.

The weak dollar was perceived not only as likely to add to price pressures, but also as discouraging to foreign purchases of U.S. securities. There was particular concern about whether Japanese investors would participate in the large Treasury quarterly refunding as they had on other recent occasions. As it

turned out, once rates had backed up substantially, and a bit of confidence was regained that the dollar might hold its value, Japanese dealer interest was about in line with other recent quarterly auctions. Some of this interest reflected Japanese investor demand while some was dealer takedowns to be held or worked off in the U.S. market.

News on economic activity took second place to foreign exchange developments, and specific price index developments--most recently, last Friday's report of a .7 percent increase in the April producers' price index which set the bond market back sharply. General economic indicators were seen as remaining consistent with modest growth over the year, on the order of 2 to 3 percent real GNP gains, but with some likely quickening of inflation. The slow growth of broader aggregates was noted but drew little reaction, while the gyrations of M1 were shrugged off. The heavy April tax receipts that gave us such operational problems did lead analysts to trim their estimates of this year's budget deficit a bit, but the market seemed to get little encouragement from this as the focus tended to shift toward next year and the difficulty of maintaining deficit reduction progress.

All told, Treasury coupon yields rose about 1 to 1-1/4 percentage points, lifting the 30-year bond yield from 7.85 percent just before the March meeting, or 7.55 just a few days earlier, to about 8.90 yesterday for the new 30-year issue. Meantime, the Treasury raised about $19 billion on the coupon

market, including over $17 billion in the quarterly financing that settled last Friday.

Given the particular supply situation in the bill market--a cumulative Treasury paydown of about $8 billion for the period, and continued official account buying--shorter bill yields registered relatively modest net increases over the interval, but also with substantial day-to-day volatility. Indeed, late last week, before it was clear that timely action would be taken on the debt ceiling, short bills were slightly lower, net, for the period, as there was a widespread expectation that the bill auction held yesterday would have to be cancelled. As it is, the temporary ceiling has been extended (and raised slightly) to run now through mid-July, and yesterday's auction was held. It resulted in rates of about 6.03 and 6.32 percent for the 3- and 6-month issues--up from 5.72 and 5.80 on March 30.

Other short-term rates--such as commercial paper or CDs--showed larger increases than bills, more in line with the higher funds rate, and banks raised their prime rates by 3/4 of a percentage point to 8-1/4 percent in three steps. For other intermediate and long rates, increases were similar to or sometimes greater than those on Treasury issues, with notable volatility in the markets for mortgage-backed and tax-exempt issues. Some of these price gyrations were quite costly to unusually nimble-footed dealers, as well as to investors. Merrill Lynch's well-publicized $275 million loss in mortgage-backed issues, part of it due to unauthorized trades, was

uniquely large, but there were numerous others on a smaller though still painful scale. I'm not aware of major participants being crippled, as even Merrill's loss is being covered out of its parent's deep pockets, but the losses tended to foster an attitude of caution with somewhat less willingness to stand up and make broad markets. In turn this could produce continuing substantial price volatility.

For market participants looking some months ahead, it seems to me that most are now anticipating higher rates in the intermediate term, though there are also adherents to a sluggish world-wide economy school who see the recent rise as just a temporary setback. The majority, I think, are more impressed with the likelihood of increased pressures from the lower dollar and related inflationary tendencies. They see the economy not as super strong but as "strong enough" to withstand some further rate increases.

JAMES L. KICHLINE
May 19, 1987

FOMC BRIEFING

Economic activity seems to be expanding at a moderate rate this quarter while the pace of inflation is appreciably higher so far this year than last. The staff's forecast prepared for this meeting of the Committee entails, in a number of cases, comparatively small changes in the broad economic aggregates, but those changes may tend to mask somewhat more fundamental differences in the character of the current projection. We have made some adjustments to the assumptions underlying the forecast, the composition of economic growth has been altered a bit, and there have been upward revisions to the wage and price side.

Turning first to recent developments, the labor market continues to demonstrate considerable strength. Employment in April rose substantially further and the unemployment rate fell a surprising 0.3 percent to 6.3 percent. Growth of employment continues to be concentrated in trade and services, while manufacturing employment has changed little on balance so far this year. In the industrial sector, output has been sluggish of late with the industrial production index declining 0.4 percent in April and half that in March. The bulk of the decline in output has been associated with cutbacks in motor vehicle

production, although there have been small, but widespread reductions in other areas. Cutbacks in auto production and a pickup in sales has halted the growth in dealer stocks, although supplies of domestic autos remain uncomfortably high.

We anticipate a fairly sizable increase in real consumption spending this quarter reflecting higher auto sales. Outside of autos and nonconsumer items, the retail sales figures for April suggest that spending on goods rose at a moderate rate.

Housing starts and permits data for April, released this morning, point to a little slowing of activity about in line with our expectations. Total starts were at a 1.7 million unit annual rate, 50,000 below the month earlier. Total permits fell by a larger amount to 1.6 million units annual rate.

For business fixed investment spending, we do not yet have any hard data on developments this quarter. However, the forecast contains a rise in real terms associated partly with a snapback from the tax-related fall in spending early this year. On the whole, however, the available indicators for business fixed investment spending point to rather slow growth in coming quarters.

Putting this all together, we come out with a 2-1/2 percent increase in real GNP at an annual rate for the

current quarter, little different from the average over the preceding two quarters. That growth includes an anticipated small contribution from net exports, with a sizable gain in exports partly offset by a rebound in oil imports.

Looking out over the next 1-1/2 years of the forecast, real GNP is projected to expand around 2-1/2 to 3 percent, essentially the same as the last forecast. As I noted at the outset, however, there are differences and one of those differences involves interest rates. We have put into the forecast a higher level of rates, with long rates about a percentage point or so above those in the March forecast--namely 30-year Treasuries around 8-3/4 to 9 percent. These higher interest rates have evolved in the context of heightened concerns about the foreign exchange value of the dollar and actual and anticipated inflation. Consequently, in our thinking much of the rise of rates involves increases in nominal rather than real rates and that limits the toll on interest-sensitive sectors. Nevertheless, we have cut back a bit on outlays in the housing sector and, to a lesser extent, business investment spending and purchases of consumer durables. Another change in the forecast stems from a lower foreign exchange value of the dollar; the dollar is now assumed to drop at about the same average pace as over the past two years. Largely as a result, growth prospects abroad have slipped further, but on

net the lower trajectory for the dollar is projected to boost exports sufficiently to offset the negative impact of higher interest rates on domestic demands.

On the wage and price side of the forecast we also have made some adjustments, raising the projected rates of increase 1/4 to 1/2 percentage point depending on the measure picked. To a sizable extent the runup in inflation rates early this year reflects developments in energy markets which had largely been anticipated; over the next year and one-half we have assumed that world oil prices drift upward and that energy prices will rise less than aggregate inflation. Food prices in the near term likely will move upward in light of the recent rise of livestock prices; however, looking beyond the next few months, we believe that food prices too will be increasing less than broad measures of inflation. Prices of non-oil imports are on the rise in a more visible fashion than previously; in the forecast such prices are projected to move up at double-digit rates through 1988. These price rises have been revised up given the lower value of the dollar embedded in the projection. In labor markets, the available wage and compensation data point to continued moderation through the first quarter. Looking ahead, however, we have made some upward adjustments, especially in 1988, associated with the higher rates of inflation and less slack in labor markets.

On the whole, recent developments and the projection raise a variety of troublesome issues, many of which have been around for some time but have become the focus of increased attention.

Donald L. Kohn
FOMC Briefing
May 19, 1987

In domestic financial markets the period since the last FOMC meeting has been marked not only by rising and volatile interest rates but also by erratic money growth. The rate movements have seemed keyed primarily to expectational factors--related in large measure to the performance of the dollar in foreign exchange markets and incoming price data--rather than to any surprises in the economy or even to the slight "snugging" by the Federal Reserve. The irregular pattern of money growth is stemming from the exceptional bulge in tax payments in April, and the resulting distortions to deposits appear to be masking a more fundamental trend of fairly slow monetary expansion--at least for the broad aggregates. Both phenomena--higher interest rates and modest money growth--along with the developments in the outlook for the dollar have affected the short-run alternatives outlined in the bluebook as well as the longer-run financial assumptions underlying the staff's economic forecast.

With regard to money, the clearing of tax payments in late April and early May is having a depressing effect on growth in May, especially for M1, but for M2 as well. Growth of both aggregates is expected to pick up in June--to rates somewhat more in line with underlying demands based on income and interest rates. For the 3-month March-to-June period, however, growth is expected to be below the alternative B paths given in the last bluebook. Those paths were based on unchanged money market conditions, and of course interest rates have risen to levels more like those of alternative C last time or even higher in longer-term markets. Partly as a result, M2 may be appreciably below the lower end of its range at mid-year. In addition, M2 demand in the first half of the year may be depressed by

some special factors, including shifts into the bond and stock markets in the first quarter and the use of M2 balances accumulated earlier to support spending in the wake of the new tax laws and to pay taxes. M3, on the other hand, is affected very little in the short run by the rise in interest rates, given that this aggregate is importantly driven by the funding needs of depository institutions, and bank credit growth seems to be even stronger, in part boosted by the effects on bond issuance of the rise in long-term rates. M3 is expected to move up to or a little above the lower end of its long-term range by June.

Given the circumstances in which they are occurring, the shortfall in M2 growth and jump in interest rates may not represent a tightening in monetary policy that will lead to a very marked weakening in the economy at some later time. The extent of any increase in real interest rates accompanying the rise in nominal rates probably has been small, in light of the concerns about inflation that seem to have accompanied the upward movement of rates in recent weeks. Certainly, the behavior of the dollar and precious metals and other commodities prices would seem to indicate little, if any, rise in real interest rates--or at least that any increase in such rates might be too small to choke off incipient inflationary pressures. The behavior of interest rates themselves, with long-term rates rising by much more than short rates and leading the increase in those rates would suggest the dominance of expectational factors--including the possibility of System tightening in the face of inflation and dollar pressures.

Rising interest rates--especially nominal rates--and slow money growth may be an appropriate response if the situation is one of accelerated

dollar decline and the threat more of rapid inflation. The staff economic projection includes a further increase in short-term rates over the forecast horizon, to levels somewhat above those assumed for the last greenbook, and M2 growth near the lower end of the Committee's range. Even so, as noted by Mr. Kichline, this forecast embodies continued moderate economic expansion, and a little more inflation than in the last forecast. Given the inflation effects of the greater drop in the dollar assumed in this forecast, a further rise in nominal rates could be required just to keep real rates unchanged. Moreover, some increase in real rates also may be forthcoming, in response to the extra economic stimulus from the dollar's decline and to constrain inflation in the face of somewhat less favorable price-output tradeoffs.

The rise of interest rates would damp money demand and increase velocity, in effect, reversing the pattern with respect to money growth and velocity of previous years when inflation was moderating. We can see the beginnings of this in the second quarter, with noticeable increases in both M2 and M3 velocities projected, while the decline in M1 velocity moderates substantially. As noted above, the staff forecast assumes that M2 will be in, but near the lower end of its range for the year, and grow at a similar pace next year. However, if its growth is as weak as expected under alternatives B or C of the bluebook, this aggregate could be well under its range at midyear. Returning to the range by year-end without a later substantial easing of policy would require an abatement of some of the special factors depressing M2 growth so far this year. In effect, this is what the staff has assumed to get M2 growth of 5-3/4 percent in June under alternative B. Clearly an evaluation of this post-tax date

experience will be important when the Committee comes to reconsider the long-run ranges in July.

Finally, I would like to draw the Committee's attention to several aspects of the near-term specifications and directive language. First, is the borrowing assumptions and associated federal funds rates. Alternative B is keyed off of the current borrowing objective of $400 million. However, borrowing has been running somewhat above this level, in part because the federal funds rate has been held up by uncertainties about the current stance of policy and prospects for an immediate further tightening, given the continuing concerns about the dollar and inflation. The language in the first set of brackets in the draft directives referring to the degree of reserve pressure sought in recent weeks recognizes the difference between the $400 million borrowing in the path and the level that has been realized. I would expect that if the Committee chose to instruct the Desk to continue to use $400 million borrowing in the reserve paths over time the funds rate would work back down, at least to the 6-1/2 percent area. It might drop by even more if this were to occur in conditions of greater stability in foreign exchange markets, though the reduction of money market pressures might reduce the odds on such a stabilization, at least absent further easing moves abroad.

Alternative C embodies only a modest further tightening from recent experience. Federal funds trading in a 6-3/4 to 7 percent range might accompany either a rise in borrowing to $600 million or an increase in the discount rate of one-half point. Such a firmness might stem the dollar decline for a while, and this demonstration of Federal Reserve resolve to resist inflationary pressures could feed back in a positive way into the bond market, given current psychology.

Second, the draft language would retain the March base for the aggregates. This base, rather than a shift forward to April, may be desirable because it precedes the tax-related build-up in transactions balances, and therefore abstracts from a good part of its distorting effects.

Third, two variants of the directive language are offered. One would build on the current directive, retaining its heavy dependence and emphasis on exchange market conditions to trigger intermeeting reserve adjustments. If the Committee felt that the conditions facing it at this meeting were not that different from those facing it last time, this directive may still be considered appropriate. The other variant would move back toward the standard directive used, with variations, for several years now--re-emphasizing the aggregates as possible factors that might call for intermeeting adjustments. Given the still-fragile state of the dollar in foreign exchange markets, if the Committee goes back in this direction it may want to consider retaining some of the emphasis on the foreign exchange market in the current directive. The staff has suggested that one way of accomplishing this would be to keep these conditions in the "depending on" clause, along with the aggregates.