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A New Federal Funds Rate Target Series: September 27, 1982 – December 31, 1993

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Abstract

This paper creates a new series of the FOMC's Target for the federal funds rate for the period September 27, 1982 through December 31, 1993. The creation of this series was motivated by Thornton (2005). Analyzing the verbatim transcripts of the FOMC, Thornton finds that most of the FOMC believed they began targeting the funds rate even before it deemphasized M1's role in the Fed's daily operating procedure. The new series was constructed using the verbatim transcripts of FOMC meetings, the FOMC *Blue Book*, the *Report of Open Market Operations and Money Market Conditions*, and data that the author obtained from the Desk for the Federal Reserve Bank of New York dealing with open market operations over the period March 1984 through December 1996. The new series compared with another widely used series presented in Thornton and Wheelock (2000). There are some differences in the dating and magnitude of target changes between the two series prior to but not after October 1989.

JEL Classification: E40, E52

Key words: federal funds rate target, monetary policy, operating procedure, FOMC

The views expressed here are the author's and do not necessarily reflect the views of the Board of Governors of the Federal Reserve System or the Federal Reserve Bank of St. Louis. I would like to thank Matthew Luecke, for providing me with some of the *Blue Books* and the *Report of Open Market Operations* and Andrei Sirchenko for helpful comments.

This paper reports a new series for the Fed's target for the federal funds rate beginning with the September 27, 1982 conference call. This target series is constructed using four sources—the verbatim transcripts of FOMC meetings, the *Blue Book (BB)*, the *Report of Open Market Operations and Money Market Conditions (ROMO)*, and data that the author obtained from the Desk for the Federal Reserve Bank of New York (Desk Data) concerning open market operations over the period March 1984 through December 1996.

The *BB* is prepared prior to each meeting by the staff of the Board of Governors. It typically presents three policy options.¹ For each option the staff suggested the funds rate which it believed was consistent with each alternative for the borrowing objective, referred to here as the initial borrowing assumption (IBA). Committee members frequently express their positions by stating their preference for one of the *BB* alternatives. More often than not, the transcripts are clear about the IBA. In these instances, the FOMC discussion and the *BB* usually provide a clear indication of the implied funds rate associated with a particular level of the IBA. There are two reasons for caution, however. First, it is sometimes the case that the IBA is stated as a range, e.g., \$300 to \$400 million, rather than a specific level. In these instances and before March 1984, IBA is assumed to be the mid-point of the range. After March of 1984 the level of the IBA is obtained from the Desk Data. Second, the *BB* is prepared several days prior to FOMC meetings—most often the Friday prior to a Tuesday meeting. When conditions in the funds market are exceptionally fluid, it is possible that the funds rate

¹ During the period from September 1982 through June 1988 with the exception of the November 1984 meeting the Blue Book presented three options. These options can be characterized as reducing, maintaining, or increasing the existing degree of reserve pressure. More frequently occasions after that August 1988 two options were presented, maintaining the existing degree of reserve pressure and either increasing or decreasing depending on the economic circumstances at the time.

implied by a given IBA in the *BB* could be updated at the meeting. In such instances, and where possible, the rate suggested at the meeting rather than the rate suggested by the *BB* is used.

There are also some instances where the transcript is unclear about the IBA adopted by the Committee. Until the late 1980s this usually arose because the FOMC discussion involved a range for the IBA and some individuals discussed alternative ranges or desired levels at the meeting. Ambiguity about the IBA used in open market operations is resolved by the *ROMO* and/or by the Desk Data after March 1984.

The most serious problem arises because most target changes did not occur at an FOMC meeting. The practice of the chairman making intermeeting policy adjustments occurred early in the new operating procedure is reflected in the exchange at the March 26-27, 1984, FOMC meeting when President Boykin inquired “Technically, Mr. Chairman, can the borrowing assumption be changed other than by the Committee?” Volcker answered, “We change it all the time.” Apparently surprised by the Chairman’s answer, Boykin responded, “All the time?” Volcker went on to say that they would adjust it week to week, but given a sense of what the directive says, they would “change it if the money supply were coming in stronger and business remained strong or whatever.” In an apparent attempt at clarification, President Boehne interjected, “I think what you’re saying is that you are going to look through the borrowings to the funds rate—not that you would be fixing the funds rate, but that with all this uncertainty one is not oblivious to what happens to it.” Volcker responded, “Not oblivious, that’s right. If I had a sense that we were getting a lot more tightness out of this than I judge we were

really looking for, we would redo it. That I can assure you. You may certainly take it for granted that if there were a little easing out of it, we would adjust it.”²

Intermeeting adjustments of the funds rate target are more difficult to identify. They are principally identified by analyzing the wording of the *ROMO*. Also, because the *BB* frequently begins with a discussion of operations since the last meeting, intermeeting changes can sometimes be verified by analyzing the *BB*. Unfortunately, since the Fed was officially targeting borrowed reserves and not the funds rate, the language of the *ROMO* (and the *BB*) with respect to the funds rate target is sometimes fuzzy. When the *ROMO* indicates a target different from the previous *ROMO* and the IBA was changed for other than “technical” reasons, I assume that the target had been changed. The IBA was not always changed when the target was changed, however. In these instances, more discretion is required. Working on the assumption that the staff is very careful in choosing its words, I assumed that phraseology is important. If the *ROMO* states that “this degree of reserve pressure was expected to be associated with Federal funds trading around X percent,” or similar phraseology to suggest the funds rate was a consequence of the degree of reserve pressure the Desk was going to pursue during the period, I assumed that the target was changed. There are a few exceptions, however. These occur when there is contradictory information suggesting that the target was not changed. In instances where the *ROMO* merely stated that “it was expected that Federal funds would trade around X percent” or similar phraseology, I was inclined to believe that the *ROMO* was merely reflecting an expectation that the conditions in the market were such that the funds rate to deviate from the target level. In all such instances, other statements in the *ROMO* (or *BB* and occasionally the transcripts) that suggested the

² See Transcript, March 1984, meeting, p. 87.

target had or had not changed were considered in determining whether the target was changed. In instances where an apparent intermeeting target change is followed by a meeting of the FOMC, the transcript and the *BB* for that meeting were used to verify the new target level.

Target changes that are associated with a meeting of the FOMC are denoted by *m* following the date. Changes associated with a conference call of the FOMC are denoted by *c*. Meeting changes were assumed to be implemented on the next business day following the meeting unless the next business day is a reserve settlement day. If the next business day is settlement Wednesday, the target is assumed to be implemented on the next business day following the settlement day unless documentary evidence, such as the date of the change in the IBA, suggested otherwise. In these instances, the target change is assumed to be effective on the date suggested by the documentary evidence.

With these understandings, Table 1 presents my series for the Fed's funds rate target, denoted $ffTarget^T$, for the period September 27, 1983 through December 1993. Beginning in 1994, the FOMC began announcing target changes, so there is no difficulty in identifying the Fed's funds rate target after 1993. Table 1 also presents an alternative target series found in Thornton and Wheelock (2000) beginning on July 20, 1983, denoted $ffTarget^A$.³ The amount of the change in the discount rate is also presented in instances when the discount rate and the funds rate target were simultaneously changed.

The last column of the table presents a description the reason for determining the date and amount of each target change. In instances where my series differs from that presented in Thornton and Wheelock (2000), I state why I believe the new series more

³ See Thornton and Wheelock (2000), Appendix B for the sources of these data and Appendix B, Table B2 for another series provided by the FOMC Secretariat beginning on May 24, 1983.

correctly identifies the date and magnitude of the change. The differences are relatively minor. Hence, it is doubtful that the series would generate significantly different results in most applied work. Moreover, the series are identical after October 1989.

Because discretion was used to determine whether the target had or had not changed and the amount of the change, especially relatively early on in the new operating procedure, I attempted to provide enough information that the user can decide to accept or reject my determination in instances where the series differ with respect to either the date and/or magnitude of the change. Fortunately, such instances are rare.

There are a couple of instances where there is a difference of opinion about a target change that are particularly interesting. One occurred with the 25-basis point decrease that I maintain occurred on October 19, 1989. The New York Fed maintains that this change occurred on the 16th, the alternative series indicates that the change occurred on the 18th, while a series provided by the FOMC Secretariat (see Poole, Rasche, and Thornton, 2002 for the Secretariat's series) suggest that the change occurred on the 19th. Poole, Rasche, and Thornton (2002) analyze the *ROMO* and suggest that it supports the Secretariat's date. Nevertheless, they use the 16th because the Desk injected reserves on the 16th when the funds rate was declining. Chairman Greenspan's closing remarks during the October 18 conference call make it clear, however, that the easier policy was not implemented until the 19th.

Another occurred in July 1989. The new and alternative series suggest that this change occurred on July 7, the day after an FOMC meeting while the Secretariat suggests that the change occurred on the 6th—the day of the meeting. Poole, Rasche, and Thornton (2002) note that the “the market viewed the Desk's failure to act on July 6,

when the funds rate was trading significantly below its previous trading level, as a policy action.”⁴ Because of this and the fact that federal funds futures rates responded significantly on the 6th, Poole, Rasche, and Thornton (2002) accept the Secretariat’s dating of this action. However, the facts that (1) this decision occurred at an FOMC meeting, (2) the decision to change the target was made late in the day after the Desk had completed its operations for the day, and (3) the IBA was not increased until the 7th, make it all but certain that the change occurred on the 7th.

These instances indicate how difficult it can be to date the target changes even as late as 1989. This is why I was careful in constructing this new series. Nevertheless, as with any data series, the responsibility lies with the user.

⁴ Poole, Rasche, and Thornton (2002), p. 74.

Poole, W., R.H. Rasche, and D.L. Thornton. (2002) "Market Anticipations of Monetary Policy Actions," Federal Reserve Bank of St. Louis *Review*, 84(4), 65-93.

Thornton, D.L. (2005) "When Did the FOMC Begin Targeting the Federal Funds Rate? What the Verbatim Transcripts Tell Us," Federal Reserve Bank of St. Louis Working Paper no. 2004-015B.

Thornton, D.L. and D.C. Wheelock. (2000) "A History of the Asymmetric Policy Directive," Federal Reserve Bank of St. Louis *Review*, 82(5), 1-16.

Table 1: New Series on the FOMC's Target for the Federal Funds Rate, September 27, 1982 – December 31, 1993				
Date	<i>ff</i> Target ^T	<i>ff</i> Target ^A	DR	Notes
09/27/1982c	10.25			At the conference call Volcker suggested that with the change being proposed the funds rate would trade “comfortably” in the 10 to 10.5 percent range.
10/01/1982	10			The Oct. 6 <i>ROMO</i> indicates that the IBA was reduced by 50 as of Oct. 1, and that the funds rate was expected to trade around the discount rate (10 percent).
10/7/1982	9.5			Oct 13 <i>ROMO</i> indicates that the IBA was reduced by \$200 million from \$500 million to \$300 million at the beginning of the maintenance period and that the funds rate was expected to trade around the 9.5. This discount rate was reduced to 9.5 percent on the 12 th .
11/19/1982m	9		-.5	The discount rate cut was announced “late in the day” on Friday, Nov. 19 to take effect on Monday, Nov. 22. The Nov. 24 <i>ROMO</i> indicates that the IBA was reduced by \$50 million to \$250 million.
12/14/1982	8.5		-.5	Discount rate cut was announced late in the day on the 13 th . The <i>ROMO</i> indicates that the IBA was reduced by \$50 million in response to the discount rate cut on Dec. 15.
03/31/1983m	8.625			There is some evidence that the rate was expected to trade slightly above 8.5 percent prior to this date. However, the IBA was increase by \$50 million at the FOMC's direction and the rate is confirmed by the March <i>BB</i> .
05/25/1983m	8.75			The May 25 <i>ROMO</i> noted that “Following Tuesday's Committee meeting, the nonborrowed reserve objective for the week effectively was reduced by \$100 million to take account of the higher borrowing allowance selected” by the Committee. The target rate is confirmed by the May <i>BB</i> .
06/24/1983c	9			The June 29 <i>ROMO</i> reports that the IBA was increased by \$100 million after the conference call, and that “It was anticipated that a Federal funds rate of 9 percent or a bit higher would be associated with the interim objective.”
07/14/1983m	9.25			The July 20 <i>ROMO</i> indicates that the IBA was increased to \$700 million from \$450 million and that the funds rate is expected to be in the range of 9.25 to 9.5 percent. However, the <i>BB</i> suggests that a borrowing range of \$500 to \$700 implied a funds rate in the range of 9 to 9.5 percent.
07/20/1983	9.4375	9.375		July 27 <i>ROMO</i> indicates that “in view of the perceived relatively high bank borrowing

				demands and the Committee's intent to achieve slightly firmer reserve conditions," the IBA was increased by \$50 million on the first day of the new maintenance period, and that the funds rate was expected to continue to trade in the 9.375 to 9.5 percent range.
07/27/1983		9.4375		This target was clearly put into effect by or before July 20.
08/11/1983	9.5625			The Aug. 10 <i>ROMO</i> reported that the funds rate was expected to be "in the 9 1/2 percent area, possibly with some trading at 9 5/8 percent." However, it was the Aug. 17 <i>ROMO</i> that reported that "It was expected that this degree of reserve pressure would continue to be associated with Federal funds trading mostly in the area of 9 1/2 to 9 5/8 percent," suggesting that this was the new target.
08/17/1983	9.5	9.5625		The Aug. 24 <i>ROMO</i> indicates that "It was expected that this amount of reserve availability would be associated with a Federal funds rate in the 9 1/2 percent area."
08/24/1983m		9.5		The FOMC transcripts indicate that the Committee expected 9.5 funds rate, which is confirmed by Aug 31 <i>ROMO</i> . However, there is no adjustment to the IBA. Moreover, the Aug. 24 <i>ROMO</i> indicates that this target was already in effect.
09/15/1983	9.375			The Sept 14 <i>ROMO</i> indicated that in wake of the Sept. 8 conference call, the Committee expected the funds rate to decline. The Sept. 21 <i>ROMO</i> indicates that the IBA was reduced by \$50 million on the 15 th and that this was expected to be associated with a funds rate a shade under 9.5 percent. The Sept. 28 and Oct. 5 <i>ROMOs</i> confirm the 9.375 target.
10/05/1983		9.375		It appears that the target was changed earlier.
03/01/1984		9.5		It is not clear that the target was changed on these dates. There was no change in the IBA during this period. Moreover, the Feb. 29 <i>ROMO</i> stated that "this degree of reserve availability was thought to be consistent with a Federal funds rate around the upper end of the 9 1/4 to 9 1/2 percent range," suggesting that 9.375 was the effective target for the funds rate, and the March 7 <i>ROMO</i> noted the funds rate was higher, but this appeared to be unintentional. The March 7 <i>ROMO</i> noted that "that amount of borrowed reserves was expected to be associated with Federal funds trading somewhat more consistently above 9 1/2 percent than below that level because of uncertainties related to reserve availability and possibly because of a lessened use of the discount window under CRR." The unintentional nature of the recent funds rate was noted again in the March 14 <i>ROMO</i>
03/15/1984		9.875		
03/22/1984		10		

			which stated, “Recent experience suggested that this degree of reserve availability would be consistent with a Federal funds rate of 9 1/2 percent or somewhat higher.” Again this was suggested by the March 21 <i>ROMO</i> which stated, “Given the pressures associated with the corporate tax date on March 15 and subsequent end of quarter pressures, it was the Account Management’s view, as the period began, the Federal funds rate might average in a range of 9 3/4 to 10 percent over the period.”
03/29/1984m	10.5	10.25	The April 3 <i>ROMO</i> indicates that the IBA was increased to \$1 billion after the meeting and both the transcripts and <i>BB</i> suggest that the FOMC was expecting a 10.5 funds rate. However, the April 3 <i>ROMO</i> states “This degree of reserve restraint was expected to be associated with Federal funds trading in about a 10 to 10 1/2 percent range...” However, the April 11 and subsequent <i>ROMOs</i> , suggest the target was 10.5 percent.
04/05/1984		10.5	The transcripts, <i>ROMOs</i> , and the <i>BB</i> suggest the earlier dating of this target change.
06/14/1984		10.625	It does not appear that the target was changed. There was no change in the IBA and the June 20 <i>ROMO</i> states “Even if borrowing averaged about \$1 billion in the second week it was expected that pressures associated with the June tax payment date would cause Federal funds to trade somewhat above 10 1/2 percent during the week,” suggesting that the higher rate was unintentional.
06/21/1984		11	It does not appear that the target was changed on this date. The higher funds rate appears to be due to circumstances rather than intent. The July 4 <i>ROMO</i> stated that “Given a comfortable excess reserve position for banks at the beginning of the week, it was expected that Federal funds would trade in a range closer to 10 1/2 percent, compared to the average of 11.27 percent in the first week of the interval.”
07/05/1984	11		Despite an unchanged IBA the July 11 <i>ROMO</i> suggests that the funds rate “is likely to trade in a range around 11 percent.” The July 11 <i>ROMO</i> also notes that the Desk took no action on the 5 th or the 6 th in spite of the fact that the funds rate was in the range of 11 to 11.375 percent on those days. The explicit lack of action when the funds rate was trading above the previous target suggests that the target was raised.
07/19/1984m	11.25	11.25	The Committee voted to maintain the existing degree of reserve pressure and there was no change in IBA. Nevertheless, all of the documents suggest the Fed expected a higher funds rate. The new level is difficult to determine. The <i>BB</i> and the transcripts suggest that the FOMC expected the funds rate to be about 11.125 percent. However, the July 25

				<i>ROMO</i> states that “The degree of restraint implied by the reserve objectives was expected to be associated with Federal funds trading in a range around 11 1/4 percent.” The Aug. 1 and 8 <i>ROMOs</i> confirm the 11.25 percent rate.
08/09/1984	11.5	11.5625		The Aug. 8 and 15 <i>ROMOs</i> suggest that the target change occurred on Aug. 9. The Aug. 15 <i>ROMO</i> states that “The degree of restraint implied by the reserve objective was expected to be associated with Federal funds trading in a range around 11 1/2 percent...” The FOMC affirmed this target at its Aug. 21 meeting, when the Committee voted for a \$100 million reduction in the IBA. The rate is also confirmed on p. 43 of the transcripts when Volcker notes that the equilibrium funds rate (without the reduction in the IBA) is 11.75. The Desk Data indicates that the reduction in the IBA did not occur until Aug. 31, however.
08/30/1984		11.4375		The reduction in the IBA occurred on August 31. However, the Sept. 5, 1984 <i>ROMO</i> notes that the funds rate was expected trade “a bit below 11 1/2 percent, once pressures associated with the holiday weekend subsided. This language was repeated Sept. 12, 1984 <i>ROMO</i> ; however, the Sept. 19 <i>ROMO</i> makes suggests that the target was 11.5 percent.
09/20/1984	11.25	11.25		The Sept. 19 <i>ROMO</i> notes that the IBA was reduced \$ 50 million and the Desk Data shows that this occurred on Sept. 13. However, the Sept. 19 <i>ROMO</i> indicated that the funds rate will “continue” to trade in the 11.5 percent range “or possibly a shade lower.” The Sept. 26 <i>ROMO</i> , however, notes that “It was expected that Federal funds would trade in a range of 11 to 11 1/2 percent.”
09/27/1984	11	11		Oct. 3 <i>ROMO</i> notes that the IBA was reduced by \$ 100 million and the Desk Data shows that this occurred on Sept. 27. Moreover, the Oct. 3 <i>ROMO</i> indicates that “the reserve objectives were expected to be associated with Federal funds trading in the neighborhood of 11 percent.”
10/04/1984		10.5625		While the transcript clearly indicates a preference to ease, there was no reduction in the IBA and the Oct. 10 <i>ROMO</i> suggested that the degree of reserve pressure would normally be associated with 11 percent on the funds rate, but it could go as low as 10.5 to 10.625. Moreover, the Oct. <i>BB</i> suggests the low side of 11. The Oct. 10 <i>ROMO</i> states “The Account Management noted that the \$750 million path borrowing level might ordinarily be expected to be associated with a Federal funds rate in the area of 11

				percent. However, because of the weight of excesses accumulated in the first week of the period, it was felt the funds rate might trade in the area of 10 1/2 to 10 5/8 percent or even sink lower.” Hence, it appears that the lower funds rate was circumstantial rather than intentional.
10/11/1984	10.5	10.5		Even though there was no change in the IBA, the Oct. 17 <i>ROMO</i> stated “It was expected that Federal funds would tend to trade around 10 1/2 percent or a shade higher, given the easier tone that had emerged at the end of the previous maintenance period, although some uncertainty surrounded that expectation.”
10/18/1984	10	10		Whether the target changed on this date is difficult to say, but it seems likely that it did if only tacitly. The Oct. 24 <i>ROMO</i> noted that given the IBA of \$750 million, “achieving the two-week borrowing average (\$750 million) implied average borrowing in the second week of about \$600 million after the high borrowing in the first week.” The Oct. 24 <i>ROMO</i> notes that this fact, combined with possibility that the demand for excess reserves might be on the low side, “might lead to Federal funds rate trading at around 10 percent or a shade lower.” The Oct. 30 <i>ROMO</i> notes the uncertainty about the Desk ability to hit its new target saying, “Given the recent sharp rate movements and uncertain relationship between borrowing and money market conditions, the Desk ventured, with more uncertainty than usual, that Federal funds might trade roughly in the area around 10 percent.”
11/08/1984m	9.5	9.5		Transcripts suggest a clear intent to ease—“half way between A and B.” The Nov. <i>BB</i> indicates that half way between A and B was half way between 9 and 10 percent. This rate is confirmed by the Nov. 14 <i>ROMO</i> .
11/23/1984	9	9	-.5	The <i>ROMO</i> suggested that the funds rate would trade around 9 percent in wake of discount rate cut. Desk data indicates that the IBA was reduced by \$75 million on this day.
12/06/1984	8.75	8.75		Confirmed by Dec 12 <i>ROMO</i> . Desk Data indicates that the IBA was reduced by \$100 million to \$400 million.
12/19/1984m	8.5			The lower target is confirmed by Dec 26 <i>ROMO</i> . Desk data indicates that the IBA was reduced by \$100 million on the 19 th , a settlement Wednesday. Consequently, I date the target change on this day.

12/20/1984		8.5		The change in the IBA suggests that this rate was put into effect on Dec. 19.
12/24/1984	8.125		-.5	Dec 26 <i>ROMO</i> suggested the funds rate would fall in response to discount rate cut. This target is supported by the Jan. 2 <i>ROMO</i> . The discount rate cut was announced late on Friday, December 21 to take effect on Monday, December 24.
12/27/1984		8.125		The evidence suggest the change occurred on the 24 th .
01/24/1985	8.25	8.25		Jan. 30 <i>ROMO</i> notes that on the 24 th the IBA was changed from “up to \$300 million” to \$300 million, indicating a slight firming of reserve pressure. However, the <i>ROMO</i> notes that “it was expected that Federal funds would continue to trade around the recent average level of roughly 8 1/4 percent,” suggesting that the change may have occurred earlier. The previous <i>ROMO</i> clearly indicates that the target was 8.125 percent, however.
02/14/1985m	8.375	8.375		The Desk Data shows that the IBA was increased by \$50 million on the 14 th . Moreover, the Feb. 20 <i>ROMO</i> notes that “it was anticipated that Federal funds would trade in a range of 8 1/4 to 8 1/2 percent.”
02/21/1985		8.5		The Feb. 27 and subsequent <i>ROMOs</i> clearly indicate that the Desk expected the funds rate to trade above 8.5 percent, it is not at all clear that this was intentional. While it is difficult to say for sure, it appears that the <i>ROMO</i> statements during this period do not reflect a change in policy, but merely the recognition that the funds rate would likely be trading somewhat higher than expected by the FOMC. Indeed, the March 20 <i>ROMO</i> notes that “Given the taut money market tone at the close of the previous period and the likelihood of pressure around the March 15 corporate tax date, it appeared likely that Federal funds would trade in a somewhat higher range for a time in the new reserve period, initially close to 9 percent or even a little higher.”
03/21/1985		8.625		
03/28/1985	8.5	8.5		The April 3 <i>ROMO</i> notes that “following discussions at the recent FOMC meeting, the paths incorporated an increased allowance for adjustment and seasonal borrowing of \$400 million—up from \$350 million...It seemed likely that Federal funds would trade around 8 1/2 percent, with the rate somewhat higher in the first few days of the period due to quarter-end pressures.” The 8.5 percent target was reaffirmed by the April 10 <i>ROMO</i> .
04/18/1985		8.375		This may have been a target change. The April 24 <i>ROMO</i> noted “The Desk noted that

				the \$400 million borrowing gap would ordinarily be associated with Federal funds trading in the area of 8 1/4 to 8 1/2 percent. But in light of recent experience including the large buildup of excess reserves early in the period, Federal funds were expected to trade around 8 1/4 percent or lower for a few days.”
04/25/1985	8.25	8.25		The May 1, <i>ROMO</i> indicates that “With this degree of reserve pressure, Federal funds were expected to trade in the area of 8 1/4 percent.” This target was reaffirmed in the May 8 and May 15 <i>ROMOs</i> . The IBA was increased by \$50 million on the 25 th for technical reasons.
05/16/1985		8.125		It does not appear that the target was changed on this day. Rather, it appears that the lower rate was expected on the basis of widespread market expectations of a cut in the discount rate. The May 22 <i>ROMO</i> notes that “It was expected that Federal funds would trade largely around 8 to 8 1/4 percent with this degree of reserve pressure and a discount rate of 8 percent—but with widespread expectations that a lower discount rate might be in the offing.”
05/20/1985	7.75	7.75	-.5	The new target was confirmed in the May 22 <i>ROMO</i> . The funds rate was expected to fall to 7.75 percent following the discount rate cut, which was announced late of Friday, May 17, to take effect on Monday, May 20. The IBA was reduced by \$100 million on May 22 for technical reasons.
07/11/1985	7.6875	7.6875		It is not entirely clear that the new target was established on this date; however, the language of the <i>ROMO</i> suggests this dating. The July 17 <i>ROMO</i> uses somewhat ambiguous language, noting only that “It was expected that Federal funds would trade around 7 5/8 to 7 3/4 percent.” The July 24 <i>ROMO</i> uses more definitive language, stating that “Given the indicated degree of reserve pressure, it was expected that Federal funds would trade around 7 5/8 to 7 3/4 percent.” The earlier date was chosen.
07/25/1985	7.75	7.75		The July 31 <i>ROMO</i> notes that “Given this degree of reserve pressure, it was expected that Federal funds would trade around 7 3/4 percent,” suggesting a new funds rate target.
08/21/1985m	7.8125			The Desk Data shows IBA increase by \$25 million on the 21 st . This change was confirmed by Aug 21 <i>ROMO</i> which stated “With the small borrowing adjustment it was expected that Federal funds would trade mostly in the area of 7 3/4 to 7 7/8 percent.”
08/22/1985		7.8125		The evidence suggested that the increased occurred on the 21 st .

08/29/1985		7.875		The Sept. 4 <i>ROMO</i> clearly indicates that the Desk expect the funds rate to average about this level. It does not appear that the target was changed as the <i>ROMO</i> notes only that “Federal funds were expected to trade largely in a 7 3/4 to 8 percent range.”
09/06/1985	8	8		This adjustment noted in Sept 11 <i>ROMO</i> , which noted that “It was expected that Federal funds would trade around 8 percent, given the new degree of reserve pressure.” The Desk Data shows IBA increased by \$100 million on the 6 th .
12/18/1985m	7.75	7.75		Confirmed by Dec 18 <i>ROMO</i> , which notes that “It was expected that the reserve objective would be consistent with Federal funds trading around 7 3/4 percent...” Desk Data shows that the IBA reduced by \$50 million on this date.
03/07/1986	7.25	7.25	-.5	Confirmed in the March 12 <i>ROMO</i> that after the discount rate cut the funds rate was expected to trade around 7.25 percent. The IBA was unchanged, however.
04/02/1986m	7.3215			While the April 9 <i>ROMO</i> continued to say 7.25 or slightly higher. However, the 7.3215 rate is confirmed by both the April transcript, when President Guffey said “I hate to ask this question, Mr. Chairman, but I assume that the latter implies a 7-1/4 to 7-3/8 percent funds rate or thereabouts.” It is also confirmed by the <i>BB</i> for the April meeting.
04/10/1986		7.125		It seems unlikely that there was a policy change on this date. The April 16 <i>ROMO</i> notes that “While that level of borrowing previously had been associated with Federal funds trading around 7 1/4 percent or slightly higher, the market’s expectation of further official accommodation was thought likely to lead funds to trade in a 7 to 7 1/4 percent range.”
04/17/1986		7		It is unclear whether the 7 percent is a new target or the consequence of the market’s expectation of a cut in the discount rate. The April 23 <i>ROMO</i> states “Initially it was anticipated that the objective would be associated with Federal funds trading close to 7 percent, with expectations of discount rate action apparently distorting the normal relationships.”
04/21/1986	6.75		-.5	The April 23 <i>ROMO</i> reports that after the cut, which was announced late on Friday, April 18 to be effective on Monday April, 21, a lower trading range was expected to “emerge eventually.” The 6.75 target was confirmed by the April 30 <i>ROMO</i> .
04/24/1986		6.75		Evidence suggest that this change occurred on April 21.
05/22/1986m	6.8125	6.8125		The target is confirmed by June 4 <i>ROMO</i> , which reports that” This degree of reserve pressure was expected to be associated with Federal funds trading mostly in a 6 3/4 to 6

				7/8 percent range. This target is also confirmed by the May <i>BB</i> .
06/05/1986	6.875	6.875		There was no change in the IBA; however, the wording of the June 18, <i>ROMO</i> , which states that “this degree of reserve pressure was expected to be associated with Federal funds trading mostly about 6 7/8 percent,” suggests that the target was changed on this date.
07/11/1986m	6.375	6.375	-.5	This target change is confirmed by July 16 <i>ROMO</i> ; however, there was no change in the IBA. Even though this occurred 2 days after the FOMC meeting it is associated with a meeting because the transcript indicates that the Committee clearly wanted to ease and anticipated a discount rate cut which was presented as a <i>fait accompli</i> .
08/14/1986		6.3125		It is unclear whether this is a change in policy or simply reflects the Desk’s expectations based on the widespread expectation of another discount rate cut. The Aug. 27 <i>ROMO</i> states that “The degree of reserve pressure embodied in the path over the first week of the period was believed to be associated with Federal funds trading at around 6 1/4 to 6 3/8 percent, possibly toward the low end given market anticipations of a policy move and the element of special situation borrowing that was at that time included in the path allowance.”
08/21/1986m	5.875	5.875	-.5	This target change is confirmed by Aug 27 <i>ROMO</i> . This change is associated with an FOMC meeting because the transcript indicates that the Committee clearly wanted to ease and anticipated a discount rate cut. In this case, the discount rate cut was not presented as a <i>fait accompli</i> and some Committee members expressed concerns about “contingency” policymaking.
12/04/1986		6		There does not appear to have been a policy change on this date. The Dec. 17 <i>ROMO</i> states “This degree of reserve pressure would normally have been expected to be associated with Federal funds trading around 5 7/8 percent, but recent experience and seasonal pressures were expected to result in trading more often around 6 percent or a bit higher.” This statement is reiterated in the Dec. 31 <i>ROMO</i> .
01/05/1987	6			The timing of this change is very difficult to determine. The Jan. 14 <i>ROMO</i> noted that “Year-end pressures in the money market were expected to diminish with time, but it was uncertain how quickly. Once they subsided, the degree of reserve pressure being fostered was expected to be associated with Federal funds trading around 6 percent or a bit lower.” This language suggests that the Desk was fostering reserve pressure

				associated with about a 6 percent funds rate. The best guess of when this target was implemented is January 5, which was the first Monday of the new year. Although, it could have happened on Friday, January 2. This objective for the funds rate was confirmed by the Jan 28 <i>ROMO</i> , which stated “This degree of reserve pressure was expected to be associated with Federal funds trading in the area of 6 percent.” The 6 percent target was later confirmed by the Feb. transcript and the Feb. <i>BB</i> when the Committee voted for an unchanged degree of reserve pressure.
04/30/1987c	6.5	6.5		Confirmed by May 6 <i>ROMO</i> . Desk Data shows that the IBA was increased by \$100 million on this day.
05/21/1987		6.75		The IBA was not increased until the 22 nd .
05/22/1987m	6.75			Confirmed by June 3 <i>ROMO</i> , which stated that “This degree of reserve pressure was expected to be associated with Federal funds trading in the area of 6 3/4 percent.” Desk Data, however, shows that the IBA was not increased until the 22 nd , two days after the meeting, so it is dated as occurring on the 22 nd , but it could have occurred on the 21 st .
07/02/1987	6.625	6.625		The July 15 <i>ROMO</i> stated “This degree of reserve pressure was initially expected to be associated with Federal funds trading around 6 1/2 to 6 3/4 percent, perhaps more toward the lower end of this range.”
08/27/1987	6.75	6.75		The Sept. 9 <i>ROMO</i> stated that “With the degree of reserve pressure expected at the outset of the period, the Desk anticipated that Federal funds would trade around 6 3/4 percent,” suggesting that this was the new target.
09/03/1987	6.875	6.875		The Sept. 9 <i>ROMO</i> states that “Following the increase in the borrowing allowance, the Desk expected trading in a range of 6 3/4 to 7 percent...” Desk Data shows that the IBA increased by \$100 million on the 3 rd .
09/04/1987	7.25	7.25	.5	Confirmed by the Sept 9 <i>ROMO</i> . Discount rate announcement was early on this day.
09/24/1987	7.3125	7.3125		The Oct. 7 <i>ROMO</i> stated that “The anticipated degree of reserve restraint was expected to be associated with Federal funds trading in a range of about 7 1/4 to 7 3/8 percent,” suggesting this was the new target.
10/22/1987		7.125		It is not clear that the target had changed on this day. The Nov. 4 <i>ROMO</i> notes that borrowing was reduced from \$600 million to \$500 million at the start of “at the start of the period.” However, the Deck Data indicates that this occurred on the second day of

				the maintenance period, the 23 rd . The IBA was reduced again by \$50 million on Oct. 28; however, the Nov. 4 ROMO characterizes both of these changes as technical in nature, noting that “The adjustments were viewed as tentative in recognition of current financial market developments.” The Nov. 4 ROMO made no statement about the expect funds rate, noting instead that “Federal funds remained firm but volatile through most of the first week, trading in the broad range of around 6 7/8 to 7 5/16 percent.”
10/28/1987		7		See the previous explanation.
11/04/1987m	6.8125	6.8125		The new target is confirmed by the <i>BB</i> and the Nov. 18 <i>ROMO</i> , which stated that “It was anticipated that this degree of reserve pressure would be associated with Federal funds trading around 6 3/4 to 6 7/8 percent.” Desk Data indicates that the IBA reduced by \$50 million on this day.
01/28/1988	6.625	6.625		New target confirmed by the Feb. 10 <i>ROMO</i> . Desk Data confirms that the IBA was reduced by \$50 million on this day.
02/11/1988m	6.5	6.5		Even though the directive was symmetric, the FOMC transcripts note that Greenspan indicates that this “implies a funds rate of roughly 6-1/2 percent,” and asks if there any disagreement among FOMC members. The new target is confirmed by the Feb. 24 <i>ROMO</i> . Desk Data confirms that the IBA was reduced by \$50 million on this day.
03/30/1988m	6.75	6.75		Then new target is confirmed by the April 6 <i>ROMO</i> . Desk Data confirms that the IBA was increased by \$100 million on this day.
05/09/1988	7	7		New target is reported in May 18 <i>ROMO</i> in response to a conference call on May 6. The <i>ROMO</i> states that “With the slightly higher degree of reserve pressure indicated by the higher borrowing target, it was anticipated that Federal funds would trade around 7 percent, an increase from the 6 3/4 percent area expected at the start of the period. There is no transcript of the conference call; however, both the Desk Data and the <i>ROMO</i> indicate that the IBA was increased by \$100 million on this day.
05/25/1988	7.25	7.25		The new target is reported in the June 1 <i>ROMO</i> , which notes that “With the slightly higher degree of reserve pressure indicated by the new borrowing target, it was expected that Federal funds would trade around 7 1/4 percent, an increase from the 7 percent area expected at the beginning of the period.” Desk Data confirms that the IBA was increased by \$100 million on this day.

06/22/1988c	7.4375	7.5		There is no transcript of this conference call; however, it is mentioned on p. 59 of June FOMC transcript. The new target rate of 7.4375 percent is confirmed by the June 29 <i>ROMO</i> , which reports that the “adjustment was made after a telephone conference at which the Committee was informed of a decision to accept the pressures that had emerged in the money market that saw Federal funds in the 7 3/8 to 7 1/2 percent area. Desk Data confirms that the IBA was increased by \$50 million on this day.
07/01/1988m	7.5			The new target is confirmed by July 13 <i>ROMO</i> , which reports that “With this degree of reserve pressure, it was anticipated that Federal funds would trade in the area of 7 1/2 percent...” The Desk Data indicates that the IBA was increased by \$50 million on this day.
07/19/1988c	7.6875	7.6875		The FOMC seems to have increased the target in response to market pressures. The July 27 <i>ROMO</i> notes that “At the beginning of the period, it was expected that Federal funds trading would ease to the area of 7 1/2 percent or a shade higher from the elevated levels that characterized the close of the previous period. However, funds traded between 7 3/4 and 7 7/8 percent through most of the period, despite the Desk’s efforts to encourage somewhat lower rates by providing reserves relatively generously in relation to statistical needs and permitting excess reserves to run well above the usual allowance... As noted in the Committee conference call on July 19, market psychology acted to raise the anticipated range for Fed funds to 7 5/8 to 7 3/4 percent.”
08/08/1988c	7.75	7.75		Reported in Aug 10 <i>ROMO</i> , which notes that “With incoming data suggesting continued economic strength and attendant inflationary risks, the borrowing objective was raised to \$700 million following the Committee conference call on August 5 and it was anticipated that funds would trade in the area of 7 3/4 percent or slightly higher. The Desk Data confirms that the IBA was increased by \$100 million to \$700 million on the 8 th and then reduced back to \$600 on the 9 th when the discount rate was raised by .5.
08/09/1988	8.125	8.125	.5	Supported by a July 20 conference call and the Aug. 10 <i>ROMO</i> , which notes that “With the change in the discount rate, the borrowing level was returned to \$600 million, and it was expected that funds would trade in a range of 8 to 8 1/4 percent. The new target is also supported by the Aug. and Sept. <i>BBs</i> . This is also confirmed by the Aug. 10 <i>ROMO</i> .
10/20/1988		8.25		The target does not appear to have changed on this day. The higher rate seems to reflect

			market conditions rather than policy intentions. The Nov. 2 <i>ROMO</i> notes that “Given this degree of reserve pressure, it was expected that Federal funds would trade in a range between 8 and 8 1/4 percent, though with trading centered more around the 8 1/4 percent level, as in the previous maintenance period.” The Nov. 16 <i>ROMO</i> makes a similar statement, noting that “This degree of reserve pressure might normally have been expected to be associated with Federal funds trading in a range between 8 and 8 1/4 percent. It was recognized, however, that at least initially trading would center around 8 1/4 percent, the rate that had prevailed for most of the previous period.”
11/17/1988	8.3125	8.3125	Whether the target changed on this day is questionable. The Nov. 30 <i>ROMO</i> states that “The borrowing allowance was considered as tentative, because recent experience suggested that \$600 million of borrowing might well be associated with Federal funds rates appreciably above recent levels. In view of this, and pending further consideration, the Desk decided, initially, to approach reserve needs with an anticipation that Federal funds would trade near recent levels, at about 8 1/4 to 8 3/8 percent.” I assume that it changed on the basis of the fact that the Desk appears to have at least acquiesced to the rate, presumably the blessing of the Chairman.
11/22/1988c	8.375	8.375	The new target is confirmed by the Nov. 30 <i>ROMO</i> , which noted that “Given this degree of reserve pressure, Federal funds were expected to trade around 8 3/8 percent.” The IBA was reduced by \$200 million on the advice of the Chairman for technical reasons.
12/15/1988m	8.6875	8.6875	The new target is confirmed by the Dec. 28 <i>ROMO</i> , which indicated that “This degree of reserve pressure was expected to be associated with Federal funds trading in an 8 5/8 to 8 3/4 percent range.” The Desk Data indicates that the IBA was increased by \$100 on this day. It is also confirmed by the Feb. 1 <i>ROMO</i> .
12/29/1988		8.75	There is no evidence in the <i>ROMO</i> , BB, or Desk Data suggesting that the target was changed on this date.
01/05/1989	9	9	This is confirmed by the <i>ROMO</i> for Feb. 1 which notes that “Over the period since the last FOMC meeting on December 14, the Desk sought to effect the two-stage increase in the degree of reserve restraint adopted at the meeting. Accordingly, the borrowing allowance was increased by \$100 million following the meeting (Dec. 15) and by an additional \$100 million on January 5 to \$600 million.”
02/09/1989m	9.125	9.0625	The Feb.22 <i>ROMO</i> reports that “the Desk continued to approach the borrowing

				allowance with flexibility in light of the persistent uncertainty about the relationship between borrowing and the Federal funds rate...The initial degree of reserve pressure (prior to the \$100 million increase in the IBA on Feb. 14) was expected to be associated with Federal funds trading in a range of 9 to 9 1/8 percent, or perhaps a bit higher as a carryover from the previous period's close." This is consistent with the discussion at the Feb. 8 FOMC meeting in response to President Melzer's inquiry about the current objective for the funds rate, Governor Johnson responded 9 – 9 1/8. Chairman Greenspan corrected Johnson, saying "I would say 9 1/8 percent would be a little closer."
02/14/1989	9.3125	9.3125		The <i>ROMO</i> for March 22 reports the intermeeting move on Feb. 14 when the IBA was increased to \$ 700 million. This is confirmed by the March <i>BB</i> and the Desk Data.
2/23/1989		9.5625		The March 22 <i>ROMO</i> notes that "Reserve pressures were again firmed on February 23 when the borrowing allowance was tentatively raised to \$800 million, to be reviewed at a Committee conference call that afternoon, with Federal funds expected to trade in the area of 9 1/2 to 9 5/8 percent." The Desk data shows that the IBA was reduced back to \$ 700 million on the 24 th after being increased to \$800 million on the previous day. There is no transcript of the conference call. I believe this to be a temporary adjustment by the Desk to reserve pressures, not a change in the target.
02/24/1989	9.75	9.75	.5	The March <i>BB</i> notes that the "federal funds rate was moved up to average a little above 9-3/4 percent" in association with the increase in the discount rate.
05/04/1989		9.8125		There is evidence that the funds rate was allowed to trade above 9.75 percent prior to the May 16 meeting. It is not clear whether this constituted a formal change in the target, and, if so, when the target was changed. The May 10 <i>ROMO</i> noted that "informal adjustments were made for above—path demand in the April 5 and May 3 maintenance periods and below—path demand in the April 19 period. Federal funds were expected to trade at 9 3/4 percent or a shade higher." Hence, the change could have occurred before May 4. At the May FOMC meeting in response to Vice-Chairman Corrigan's statement that "the market views that policy as the funds rate in the 9-3/4 to 9-7/8 percent area, Chairman Greenspan responded, "Basically, the funds rate has averaged 9-3/4 to 9-7/8 percent."
05/17/1989m	9.8125			The Committee voted to accept the funds rate in the 9-3/4 to 9-7/8 percent range at the May FOMC meeting. This is reflected in the Transcripts, the May <i>BB</i> and the June 28

				<i>ROMO</i> . Given the uncertainty as to when and whether the target was changed prior to this meeting, it seems reasonable to date the formal change in the target on this date.
06/06/1989c	9.5625	9.5625		This change is reflected in the June 5 Conference call, the June 28, <i>ROMO</i> and the June <i>BB</i> .
07/07/1989m	9.3125	9.3125		At the July 6 FOMC meeting the Committee voted “to decrease slightly the existing degree of pressure on reserve positions.” In response to a question by Governor Angel, Chairman Greenspan made clear that the associated funds rate was 9-1/4 to 9-3/8 percent. This is confirmed by the Aug. <i>BB</i> and Aug. 16 <i>ROMO</i> . The Desk Data shows that the IBA was not increased until the 7 th .
07/27/1989c	9.0625	9.0625		This change is noted in the July 26 Conference Call and the Aug. 16 <i>ROMO</i> . The IBA was reduced by \$50 million on the 27 th .
08/10/1989		9		Following the July 27 target change the funds rate tended to trade close to 9 percent. However, there is no indication in either the Aug. 16 <i>ROMO</i> or the Aug. and Sept. <i>BBs</i> that there was a change in the target or the degree of reserve pressure. Indeed, the Sept. 27 <i>ROMO</i> states that “Since the last FOMC meeting on August 22, the Desk has sought to maintain the existing degree of reserve pressure. The borrowing allowance remained at \$550 million, although the Desk continued to view this allowance flexibly in light of the uncertain relationship between the Federal funds rate and borrowing. With this degree of reserve pressure, Federal funds were expected to trade in the area of 9 percent or a shade higher.”
10/18/1989c		8.75		The evidence suggests the change occurred on the 19 th .
10/19/1989c	8.75			The Nov. 1 <i>ROMO</i> reports that “As noted at the Committee’s October 18 conference call, the nonborrowed reserve objective incorporated an allowance for adjustment and seasonal borrowing of \$400 million, a decrease of \$100 million from the previous period. One half of the reduction reflected a shift to a slightly more accommodative policy stance, with the remainder representing a technical adjustment to account for the ongoing decline in seasonal borrowing...This new degree of reserve pressure was expected to be associated with Federal funds trading in the area of 8 3/4 percent.” Greenspan concluded the conference call by saying, “Okay. I still would think it appropriate to have the Desk ease with the period starting tomorrow if nothing untoward occurs. I think we ought to play it loose today, in any event, and see what occurs.” The Desk Data indicates that the

				IBA was changed on the 19 th .
11/06/1989	8.5	8.5		The Nov. 15 <i>ROMO</i> notes that “The allowance for adjustment and seasonal borrowing incorporated in the nonborrowed reserve objective was reduced by \$50 million on four separate occasions during the period. Three reductions were made for technical reasons to account for the continuing decline of seasonal borrowing (November 2, 9, and 15), while the remaining reduction (November 6) reflected a shift to a slightly more accommodative policy stance.” The change is confirmed by the Nov. <i>BB</i> .
12/20/1989m	8.25	8.25		The Jan 27, 1990 <i>ROMO</i> reports that “the allowance for adjustment and seasonal borrowing incorporated in the nonborrowed reserve objective was lowered by \$25 million to \$125 million on December 20, reflecting the shift to a slightly more accommodative policy stance that was voted at the preceding day’s Committee meeting. With this new degree of reserve pressure, Federal funds were expected to trade in the area of 8 1/4 percent, down from 8 1/2 percent earlier.”
07/13/1990	8	8		Reported in the July 25 <i>ROMO</i> reports that “on the first Friday, July 13, the path allowance for adjustment and seasonal borrowing was cut to \$400 million from \$450 million. This reduction was designed to lower slightly the pressures in the reserve markets, and followed Chairman Greenspan’s indications to the Congress that a degree of financial restraint appeared to have developed that was greater than anticipated or appropriate...Following the July 13 policy step, Federal funds were expected to trade around 8 percent, compared with 8 1/4percent earlier.” The IBA was reduced by \$50 million on July 13.
10/29/1990	7.75	7.75		The Oct. 31 <i>ROMO</i> notes that “the Desk reduced the degree of reserve pressure on Monday, October 29, following Congressional agreement on a budget package. The allowance for adjustment and seasonal borrowing was lowered by \$50 million to \$350 million that day, reflecting this slightly more accommodative reserve stance and a further reduction in seasonal borrowing. This degree of reserve pressure was expected to result in Federal funds trading in the area of 7 3/4 percent.”
11/14/1990m	7.5	7.5		The Nov. 14 <i>ROMO</i> reported that “the Desk moved to reduce the intended degree of reserve pressure on Wednesday, November 14, consistent with the Committee’s decision at its meeting on the previous day. The allowance for adjustment and seasonal borrowing was lowered by \$75 million on the last day of the period, reflecting this slightly more

				accommodative reserve stance and a further reduction in seasonal borrowing. This reduction in the degree of reserve pressure was expected to result in Federal funds trading down from the area of 7 3/4 percent to 7 1/2 percent after a day or two, when pressures arising from banks' period-end reserve management and from the settlement of the midquarter refunding and interest payments had subsided."
12/07/1990	7.25	7.25		Reported in the Dec. 12 <i>ROMO</i> reports that "the Desk moved to reduce the intended degree of reserve pressure on Friday, December 7, following the release that morning of unexpectedly weak employment numbers as well as recent evidence of reduced wage pressures and slow money growth. The allowance for adjustment and seasonal borrowing was lowered by \$25 million to \$125 million on that day to reflect the slightly more accommodative stance. This reduction in the degree of reserve pressure was expected to result in Federal funds trading in the area of 7 1/4 percent."
12/19/1990m	7	7	-.5	The Dec, 25 <i>ROMO</i> notes that "the Desk moved to reduce the intended degree of reserve pressure on Wednesday, December 19, consistent with the Committee's decision at its meeting on the previous day. On December 18, after the meeting, the Board approved a reduction in the discount rate from 7 percent to 6 1/2 percent effective on December 19. Consequently, in implementing the reduction in reserve pressure, the allowance for adjustment and seasonal borrowing was actually increased by \$25 million to \$125 million on that day. With this new degree of reserve pressure, Federal funds were expected to trade in the area of 7 percent, down from 7 1/4 percent."
01/09/1991c	6.75	6.75		The Jan. 9 <i>ROMO</i> reports that the Desk "moved to reduce pressures slightly near the end of the period, after consultation with the Chairman, in light of new evidence of pronounced weakness in the monetary aggregates. The Desk paved the way for the move on the second Tuesday and confirmed it the following day—the final day of the period. Following the move, the funds rate would normally have been expected to trade in the area of 6 3/4 percent, down from 7 percent previously...In implementing this degree of reserve pressure, the allowance for seasonal and adjustment borrowing was lowered by \$25 million to \$100 million."
02/01/1991c	6.25	6.25	-.5	In the Feb. 1 conference call Chairman Greenspan announced of the Board's plan to announce today a 50 basis point reduction in the discount rate to be effective on Monday

				and noted that “we are planning to give instructions to the Desk to allow the 50 basis point [reduction] to pass through to the funds rate.”
03/08/1991	6	6		The March <i>BB</i> noted that “on March 8, in response to data indicating that the economy had continued to weaken substantially into February, the borrowing allowance was lowered by \$25 million and the Desk signaled a 25 basis point reduction in the System’s intended federal funds rate.”
04/30/1991c	5.75	5.75	-.5	At the April 30 conference call Chairman Greenspan announced “Gentlemen, the Board has just voted to lower the discount rate by 1/2 percentage point and the Desk will reduce the federal funds rate by only half of it, bringing the funds rate down 25 basis points.”
08/06/1991	5.5	5.5		The Aug. 14 notes that “on August 6, reserve pressures were eased in view of persistently weak monetary aggregates and signs of a sluggish recovery. The move followed an FOMC conference call. The path allowance for borrowing was lowered to \$375 million, expected to be consistent with Federal funds trading in the area of 5 1/2 percent.” Weak M2 growth was discussed during the Aug. 5 conference call, but there was no decision to reduce the funds rate. Also, the IBA had been ratcheted up to \$400 million during previous weeks in response to stronger than expected borrowing.
09/13/1991	5.25	5.25	-.5	The Sept. 25 ROMO notes that “on September 13, the Federal Reserve lowered the discount rate to 5 percent from 5 1/2 percent. As reviewed in an FOMC conference call, Federal funds were expected to trade in the area of 5 1/4 percent. Since these moves reintroduced an anticipated spread between the funds and discount rates, the path allowance for borrowing was raised to \$325 million.” There is no transcript of this conference call.
10/31/1991	5	5		The Nov. <i>BB</i> reports that “In response to signs of flagging consumer and business confidence and a weaker-than-expected economic recovery...the borrowing allowance was reduced by \$25 million on Thursday, the first day of the current maintenance period. Consistent with this change, the expected trading area for federal funds was lowered to 5 percent.” This option was discussed at Oct. 30 conference call, but no decision was made at that time.
11/06/1991m	4.75	4.75	-.5	At its Nov. 5 meeting the FOMC voted to “decrease somewhat the existing degree of pressure on reserve positions.” Consistent with that decision, the Dec. <i>BB</i> reports that the discount rate was reduced by 50 basis points and the funds rate target was reduced by

				half of that change.
12/06/1991	4.5	4.5		The Dec. 11 <i>ROMO</i> noted that “in the middle of the period, reserve pressures were lowered modestly and Federal funds were expected to trade in the area of 4 1/2 percent. The move followed the release of a particularly weak November payroll employment report and took account of a prevalent market assumption that this would result in an easier policy stance.” The Desk Data shows that the IBA was reduced by \$25 million on Dec. 6.
12/20/1991c	4	4	-1.0	The Dec. 25 <i>ROMO</i> notes that “on December 20, following the announcement of a full percentage point cut in the discount rate to 3 1/2 percent and in line with the discussion at the Committee’s conference call in the morning, reserve pressures were formally lowered, with Federal funds expected to trade in the area of 4 percent.” There is no transcript of this conference call.
04/09/1992	3.75	3.75		The May <i>BB</i> notes that “reserve conditions were eased on April 9, reducing the expected federal funds rate to 3-3/4 percent.” The Desk Data shows that the IBA was reduced by \$25 million on the 9th.
07/02/1992c	3.25	3.25	-.5	At the July 2 conference call Chairman Greenspan announced that “the Board a few minutes ago voted 7 to 0 to lower the discount rate from 3-1/2 to 3 percent,” and then noted that he intend “to allow the 50 basis point reduction in the discount rate to pass through fully to the funds rate.” On July 1, the FOMC voted to “to maintain the existing degree of pressure on reserve positions.” However, there was considerable sentiment to ease policy.
09/04/1992	3	3		The Oct. <i>BB</i> notes that “on September 4, in response to a weak employment report and in the context of that had picked up to only a modest rate, the Desk signaled an easing of the intended federal funds rate to 3 percent.” The Desk Data shows that the IBA was reduced by \$25 million on the 4 th .