

Even Keel Revisited

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This article takes another look at the impact of the Federal Reserve's "even-keel" policy on financial market variables. The possible effects of this policy in the three-year period 1966 through 1968 were previously examined in "An Empirical View of 'Even-Keel'."¹ That study will be updated here by extending the time horizon under consideration to include the period from the end of 1968 through the first quarter of 1973.

The nature of the even-keel commitment was outlined at the beginning of the earlier study as follows:

"...even-keel has meant that for a period encompassing the announcement and settlement dates of a large new security offering or refunding by the Treasury, the Federal Reserve has not made new monetary policy decisions (as contained in announcements from the Board of Governors or as specified in the second paragraph of the policy directives of the Federal Open Market Committee) that would impede the orderly marketing of Treasury securities and significantly increase risks of market disruptions from sharp changes in market attitudes in the course of a financing. . . The even-keel policy does not provide any assurance that particular interest rates on new or outstanding Treasury issues will be maintained."

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¹ Appended to Stephen H. Axilrod, "The FOMC Directive as Structured in the late 1960s: Theory and Appraisal," in *Open Market Policies and Operating Procedures — Staff Studies*, Board of Governors of the Federal Reserve System, July 1971. See pp. 28-36.

The impact of such an even-keel policy was then evaluated by examining time series data for key financial variables to determine if there were differences in behavior during, as compared with outside, even-keel periods.

The earlier study suggested that of the variables considered, only day-to-day money rates (the Federal funds rate and dealer loan rates) — and perhaps marginal reserves — showed any particularly evident effect of even-keel. These variables appeared to remain about unchanged on balance over even keel periods, although there were exceptions, even when they were rising (or falling) sharply in the time span before and after the even-keel period. On the other hand, bill rates and yields on longer-term Treasury issues appeared to show no consistently discernible difference in behavior during even-keel periods. Similarly, it appeared that the monetary and reserve aggregates — M_1 , the monetary base, and the adjusted credit proxy — generally displayed no break in trend or change in degree of fluctuation during even-keel periods. And in those instances in which the aggregates did appear to grow at a relatively rapid rate of expansion in an even-keel period, it was observed that they tended to display a slower growth or to contract in the weeks subsequent to these developments.

These findings seemed to suggest that even-keel was not a major impediment to the control of the monetary aggregates, as has sometimes been asserted. It would appear, for example, that during even-keel periods, the Federal Reserve exerted at best only a very modest resistance to uptrends (or downtrends) in interest rates, that this resistance is focused only on the very shortest-term interest rates, and that it does not result in a significant and/or lasting change in the growth rates of the monetary aggregates.

Since 1968, particularly since early 1970, the Federal Reserve has placed greater emphasis on controlling the monetary aggregates. Bringing the earlier article up to date will permit us to consider, among other things, whether even-keel has assumed a new operational meaning with this shift in emphasis of policy. In addition, in the last few years, the Treasury has come to rely more frequently on the auction technique in its financing operations; this, too may have affected the Federal Reserve's and market's attitude toward even-keel, because the Treasury does not have to set a price on securities to be sold at time of announcement or in advance of the public's bid.

Summary of Even-Keel Periods

The standard time unit for an even-keel period used in this paper is one which covers the interval from a week before the Treasury announces the terms of its financing to a week after the settlement date of this financing. The actual duration of even-keel periods, of course, can and does differ from this designated unit, depending on the nature and size of the Treasury's financing operation, the general condition of financial markets at the time of the financing, the success of dealers in distributing their "takings" in the financing operation, and the FOMC's assessment of the need to make a change in its monetary policy stance.

In the previous study 13 even-keel periods encompassing about 40 percent of the three year time span examined were identified. For the time span from 1969 to the first quarter of 1973 we have identified an additional 19 even-keel periods which again encompass about 40 percent of these four and a quarter years. Of these periods, 17 surround quarterly refundings; the length of these periods varies in several instances, however, because additional financings occurred in close proximity to the quarterly refundings. The other two even-keel periods identified coincided with the sale of longer-dated coupon issues (See the appendix for the details of these financing operations).

There were several financings involving the sale of tax bills or strip bills during the past four and a quarter years, but none were mentioned in the FOMC's directive, and they have, therefore, not been considered to have been even-keeled. Two relatively small auctions of short-term notes were also not classified as even-keel periods, because no mention was made of them in the FOMC's directive.

Method of Approach and Data to be Examined

In gauging the effects of even-keel reliance will be placed on the same procedure used previously; time series of key financial variables have been plotted on graphs and the periods of even-keel as designed above have been marked off. By inspection, then, a comparison is made of the behavior of variables during even-keel periods and at other times. The advantage of this approach is that it enables one to observe developments in the variables during even-keel periods in relation to longer-term trends and turning points in these trends.

For the most part, the data series examined in this study are the same as those charted in the previous article. However, in light of the

FOMC's shift to an RPD target, we substituted this series for the monetary base, the reserve measure previously used. We have also added a chart reflecting the behavior of total reserves. It does not appear that this substitution affects the conclusions to be drawn from the analysis.

Interest Rate Behavior During Even-Keel

Interest rates generally appear to have behaved in essentially the same manner during even-keel periods as they have at other times. Looking first at intermediate and long-term yields presented in Chart 2, it will be noted that trends in these yields that develop prior to even-keel periods are interrupted only infrequently during even-keel periods (indicated by the shaded areas on the chart). Similarly, yields appear to fluctuate around these trends in essentially the same way within and without the even-keel periods. Or to put this another way, one is left with the distinct impression that, if even-keel periods were not designated on the chart, it would be virtually impossible to identify these periods by focusing on the behavior of intermediate- and long-term yields.

The three month Treasury bill rates, as may be seen in Chart 1, also appear to move during even-keel periods more or less in line with the general trend established in surrounding periods. Note, for example, the generally unbroken course displayed by the bill rate during the even-keel periods enclosed by the downtrends from late 1966 to the late spring of 1967 and from late 1969 to early 1971. At times this was part of a generally flat trend. But at other times, such as around the May 1971 refunding, the bill rate was stable during most of the even-keel period while the trend over time was clearly rising. However, looking over bill-rate movements broadly, it would appear that there was no systematic tendency for the rates to behave differently inside as compared with outside even-keel periods.

If any rates reflected some stabilizing impact from even-keel, it appears to be day-to-day rates, as typified by the Federal funds rate, although looking over the whole period from 1966 through early 1973, the evidence is quite mixed. The view that even-keel caused open-market operations, as they affected money-market conditions, to be tempered somewhat (as compared with what otherwise might have happened) is given some support by the data for the late 1960s. But there appears to be less, if any, evidence of a tempering effect in the late 1970s.

CHART 1

SHORT-TERM INTEREST RATES

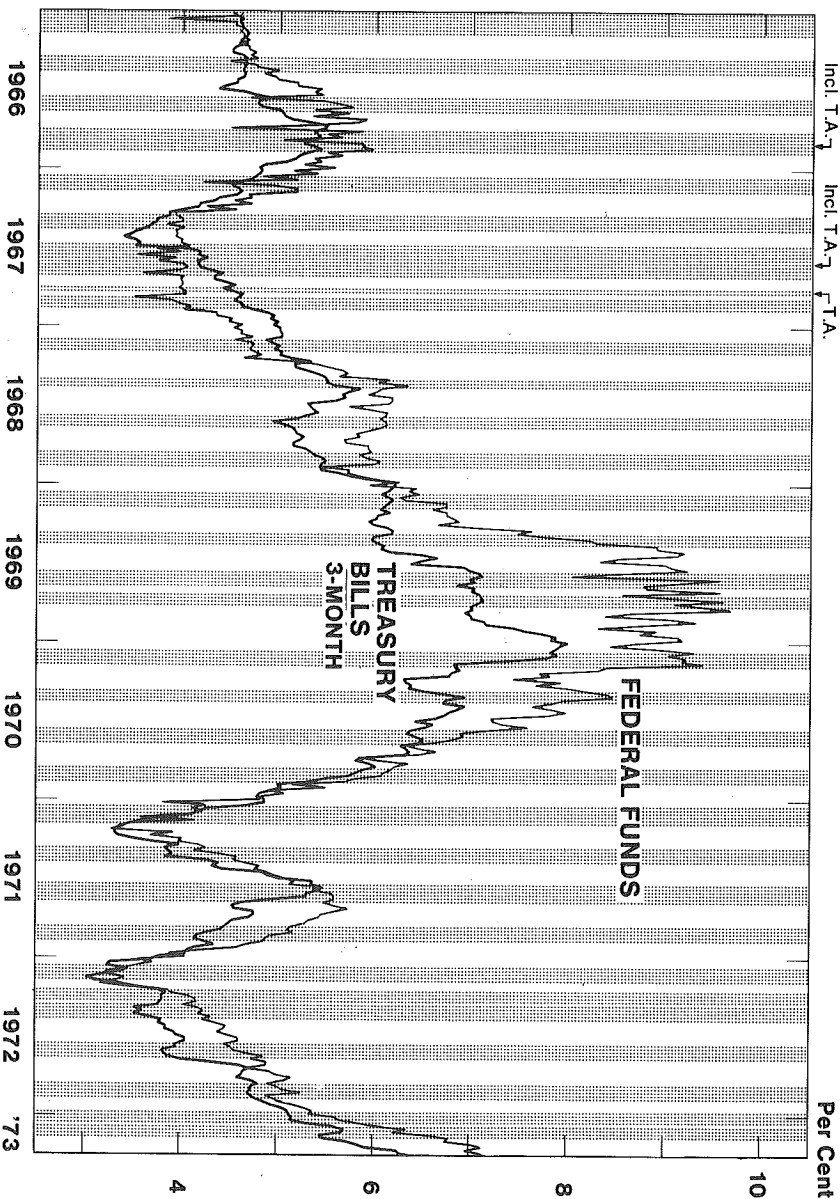
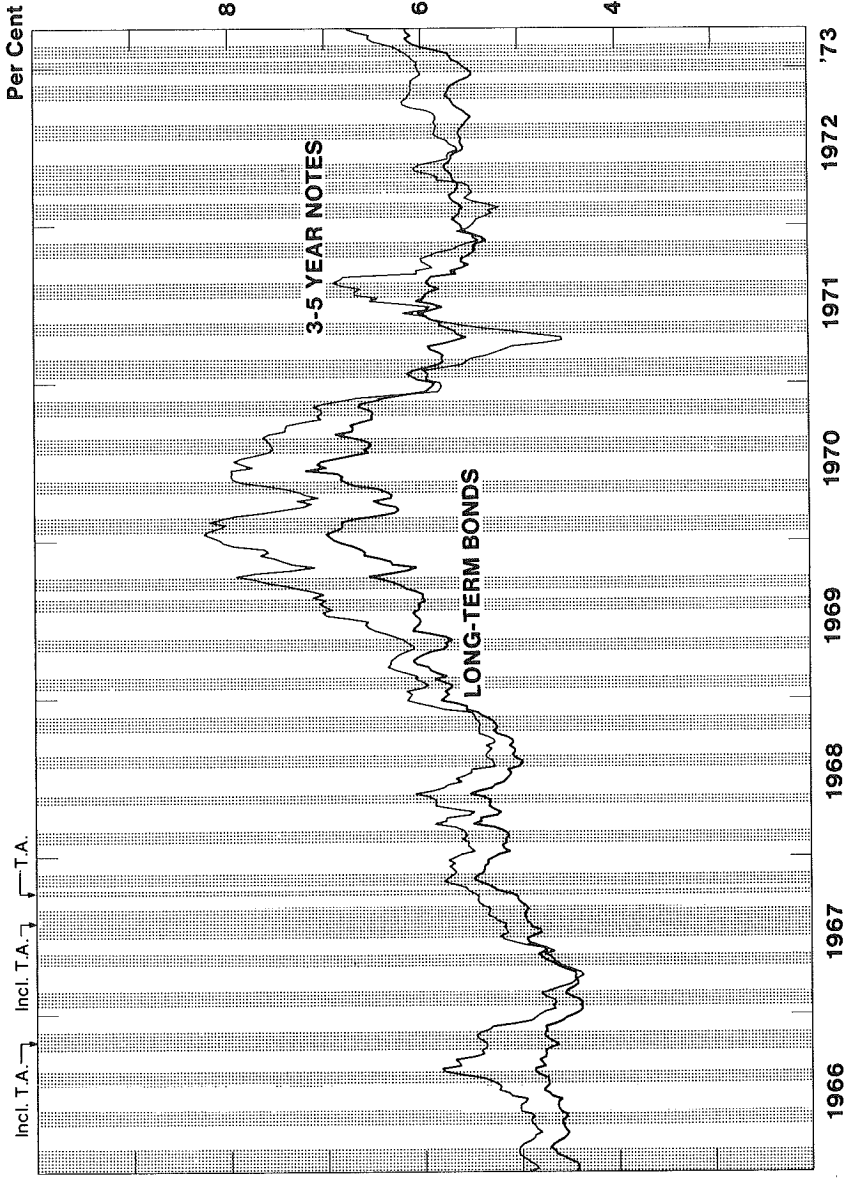


CHART 2

LONG-TERM GOVERNMENT INTEREST RATES



Prepared by Board of Governors, Federal Reserve System

An explanation of a shift in behavior of money-market rates during even-keel periods in the 1970s might be found in the increased emphasis placed on the aggregates. One effect of this shift in the focus of monetary policy could well have been to reduce the significance attached by market participants to changes in day-to-day money rates. Consequently, the manager of the open-market account has perhaps found it possible during even-keel periods to permit the Federal funds rate to move more without seriously jeopardizing the state of market psychology necessary for a tolerably successful Treasury financing operation.

Reference to recent experience provides support for this conclusion. While the funds rate showed little net change in the November '72 refunding period, the rate did rise sharply and almost continuously from early December of last year through the first quarter of this year, even though there were two nearly connected periods of even-keel which covered most of the time span from late December through late February. In the first of these even-keel periods, a 20-year bond issue, amounting to \$600 million, was auctioned to the public. The second involved a rights exchange of \$4.7 billion of publicly held issues maturing on February 15 for a note with three years and six months to mature, as well as a subsequent auction of \$1 billion of a note with six years and nine months to mature. Admittedly, the use of the auction technique in the first financing operation and the decision to backstop the rights exchange in which large attrition was expected with a note auction in the second financing operation may have reduced the constraints customarily required for such financings. Nonetheless, both financings were certainly in the class normally thought to require even-keeling — the first because the issue had a relatively long maturity and the Dutch auction approach was employed for the first time in the sale of such an issue, and the second because it did involve a rights exchange even though large attrition had been expected.

Admittedly, neither of these financings may rank as the most successful ever conducted by the Treasury, but, on the other hand, they were far from failures. This alone would appear an accomplishment, given the conditions under which they were conducted, which included a second devaluation of the dollar, an acceleration of wholesale and consumer price increases, and the strong surge displayed by the economy. One point is quite clear: against this background, the marked advance in the funds rate did not introduce a major disruption to the market's acceptance and distribution of these issues.

Marginal Reserve Measures

As can be seen in Chart 3, the even-keel constraint does not appear to have a noticeable effect on the behavior of net borrowed reserves or member bank borrowing either. As one would expect, after taking note of the behavior of the Federal funds rate, this has been especially the case in the most recent years when the Federal Reserve has placed more emphasis on monetary aggregates. Note for example, that the daily average level of weekly member bank borrowing declines very sharply from the first week of the even-keel period associated with the August 1970 refunding to the last week in this period. Or to focus again on developments from the latter part of December of last year until late February of this year, member bank borrowing increased very markedly, extending the general uptrend present over the whole first quarter. Or taking a broad view of the lines plotted on the chart, it appears that member bank borrowing (and net borrowed reserves) have fluctuated over even-keel periods essentially in about the same degree as at other times, and net changes in these variables from the beginning to the end of these periods have either been generally consistent with the trends prevailing in surrounding periods or at least did not display a systematically different pattern of behavior.

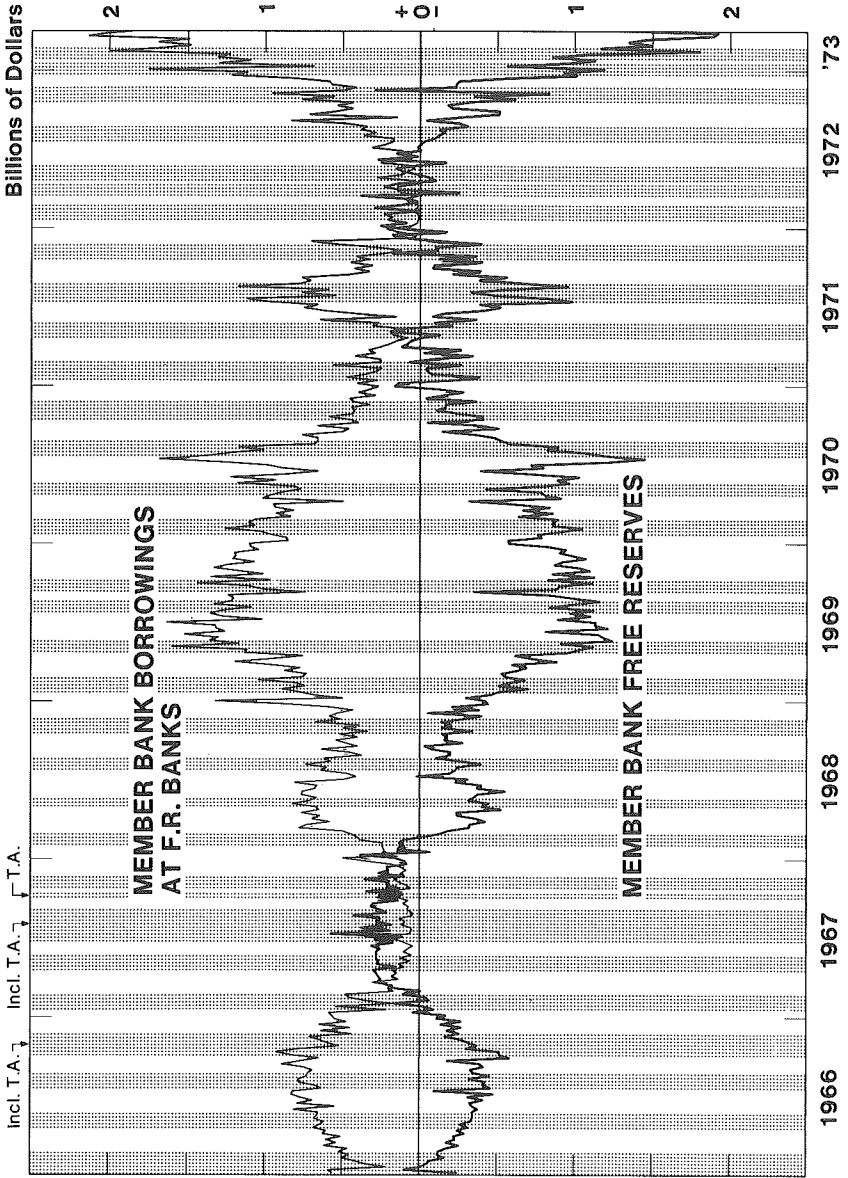
Monetary and Reserve Aggregates

An accurate appraisal of how even-keel affects monetary and reserve aggregates is an extremely complicated task, much more so, for example, than is encountered in analyzing even-keel's impact on interest rates. The effects of even-keel on interest rates, if there are any, most likely would appear to occur simultaneously with the period of even-keel. This is probably not true for the monetary aggregates, however, mainly because of lags. Demand for money, for example, is thought by many analysts to respond to changes in interest rates only after a lapse of time; thus, within this theoretical framework, if even-keel does have a generally consistent impact on M_1 , it would be expected to be observed not during even-keel periods but in subsequent weeks. Or, if one takes another view of the process of M_1 growth, one might expect an even-keel induced growth in M_1 to follow the even-keel period, because M_1 might take some time to respond to the expansion of nonborrowed reserves which may have taken place while even-keel was in operation.

Treasury decisions on whether to permit banks to pay for their security acquisitions by crediting tax and loan accounts also make it

CHART 3

MARGINAL RESERVE MEASURES



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difficult to evaluate the effect of even-keel on the money supply and bank credit. During periods in which tax and loan account crediting is offered, for example, one would expect to see, other things equal, a bulge in commercial-bank assets and U. S. Government deposits, when the newly issued securities are taken into the accounts of banks and the Treasury's balance is increased simultaneously. This would represent no more than a temporary means of distributing the Treasury securities, and the reserves required to support the Government deposits would be reduced as such deposits fell and the banks sold Treasury securities to the public.

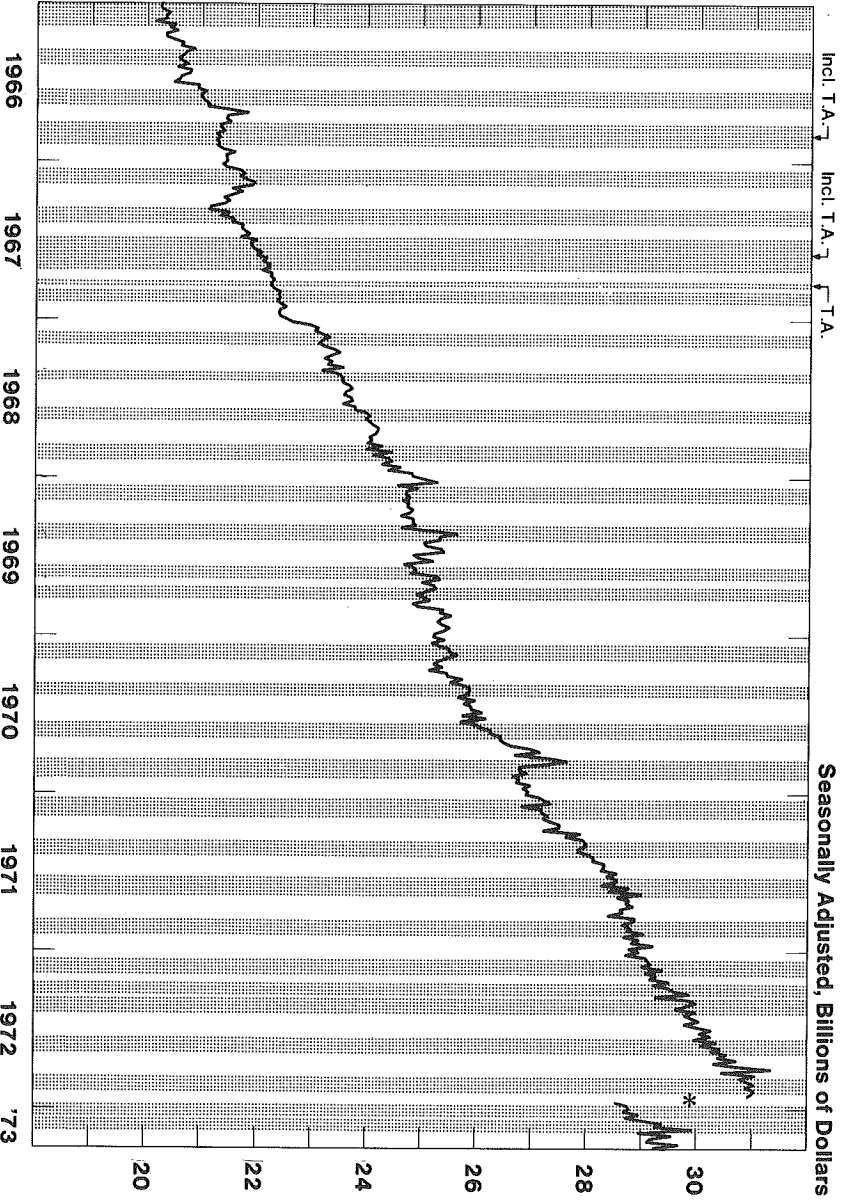
Examination of data series for M_1 , the adjusted credit proxy, and the two reserve measures and total reserves does not reveal a systematic pattern of change during even-keel periods. With respect to reserves, both RPD and total reserves (Charts 4 and 6, respectively) have advanced fairly steadily since 1966. Thus, one would expect to find that both reserves measures, even if they were unaffected by even-keel conditions, increased in a large number of the even-keel periods — just as one would expect them to do in a large number of noneven-keel periods. Inspection of the chart confirms this expectation but does not reveal that these measures tended to advance at relatively more rapid rates during even-keel periods. Moreover, there are a number of instances in which both reserve measures stayed flat or declined during even-keel periods, but not relatively more often than can be observed for other periods. The best summary statement, then, would appear to be that it is not possible to identify systematic effects of even-keel on the behavior of RPD or total reserves.²

The performance of M_1 and the adjusted bank credit proxy during even-keel periods *vis-a-vis* noneven-keel periods has also failed to show any readily observable consistent pattern of behavior, as may be seen in Chart 5. M_1 , for example, in some instances, such as in late 1969 and early 1970, appears to be rising up to the time of even-keel, to flatten during the even-keel period, and then begins increasing after the end of the even-keel period. In other instances,

²Quite clearly, a thorough study of this question will require a much more sophisticated approach than that used here. Among the complications which would have to be considered in such a study is lagged reserve accounting. For example, bank demands for reserves in a current period are primarily determined by the volume of reserves they are required to maintain against the deposit balances of preceding weeks. Thus, if the Federal Reserve were to follow a more liberal reserve policy during an even-keel period this would probably be reflected in a decline in the volume of reserves borrowed and an increase in nonborrowed reserves rather than an increase in total reserves. One might also expect to see some increase in the volume of excess reserves.

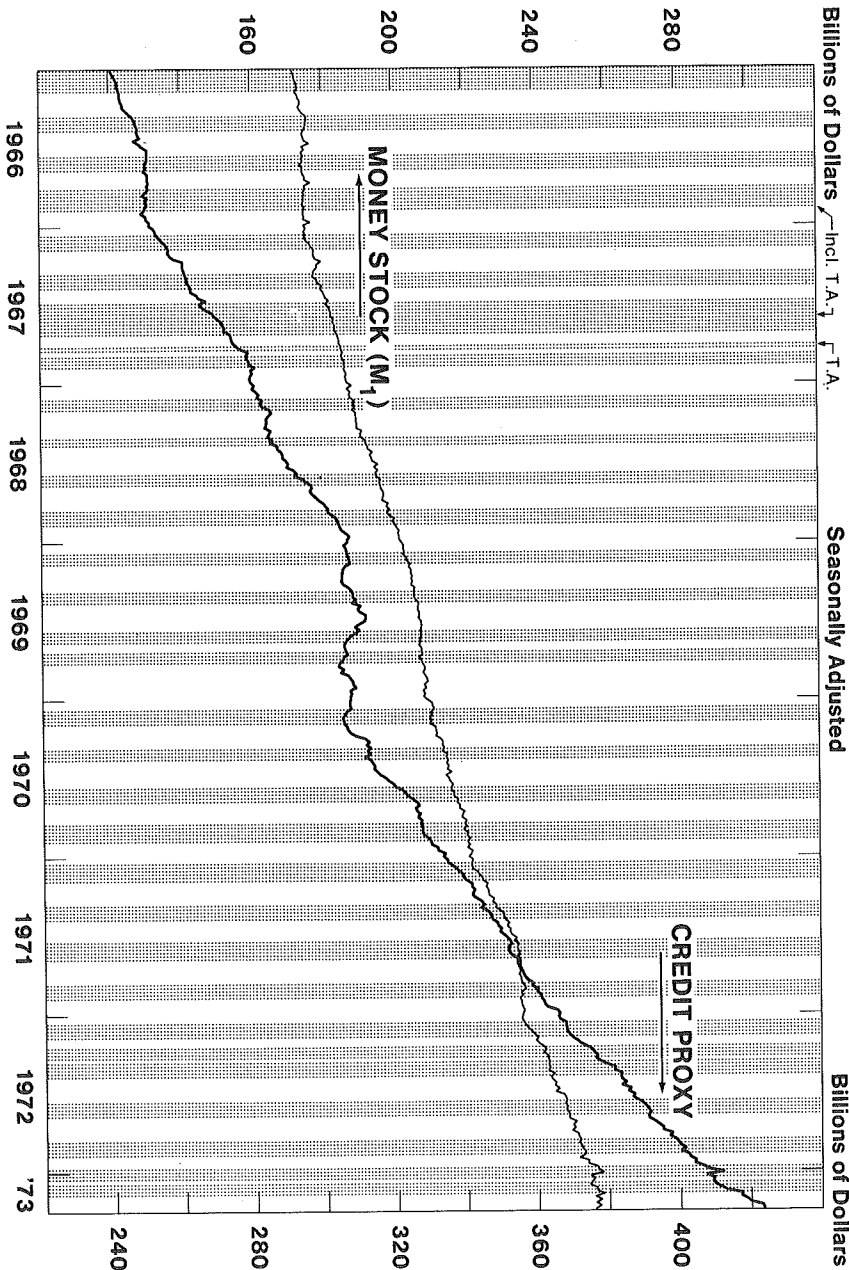
CHART 4

RESERVES AVAILABLE FOR PRIVATE DEPOSITS



Prepared by Board of Governors, Federal Reserve System

BANK CREDIT AND MONEY STOCK



such as in late 1971 and early 1972, M_1 shows no growth prior to even-keel, then begins increasing sharply during even-keel and continues this uptrend in subsequent time periods. Quite obviously, it is possible to see other combinations of developments on the chart. Similar statements concerning the behavior of the credit proxy could also be made.

In order to give rough consideration to the impact of tax and loan account crediting and thereby make some allowance for this factor in reading the Chart, those financings in which such crediting was allowed are indicated by the x's marked on the Chart. As may be seen, the credit proxy does rise perceptibly in the very latter part of many of these even-keel periods. It also appears that, in many cases, these increases were not subsequently offset by declines of similar magnitude. At the same time, however, the subsequent advances in the proxy appear so large relative to the increase on the day of tax and loan account crediting that it would be straining to attribute to tax and loan account crediting responsibility for the general advance in the credit proxy over any significant time period.

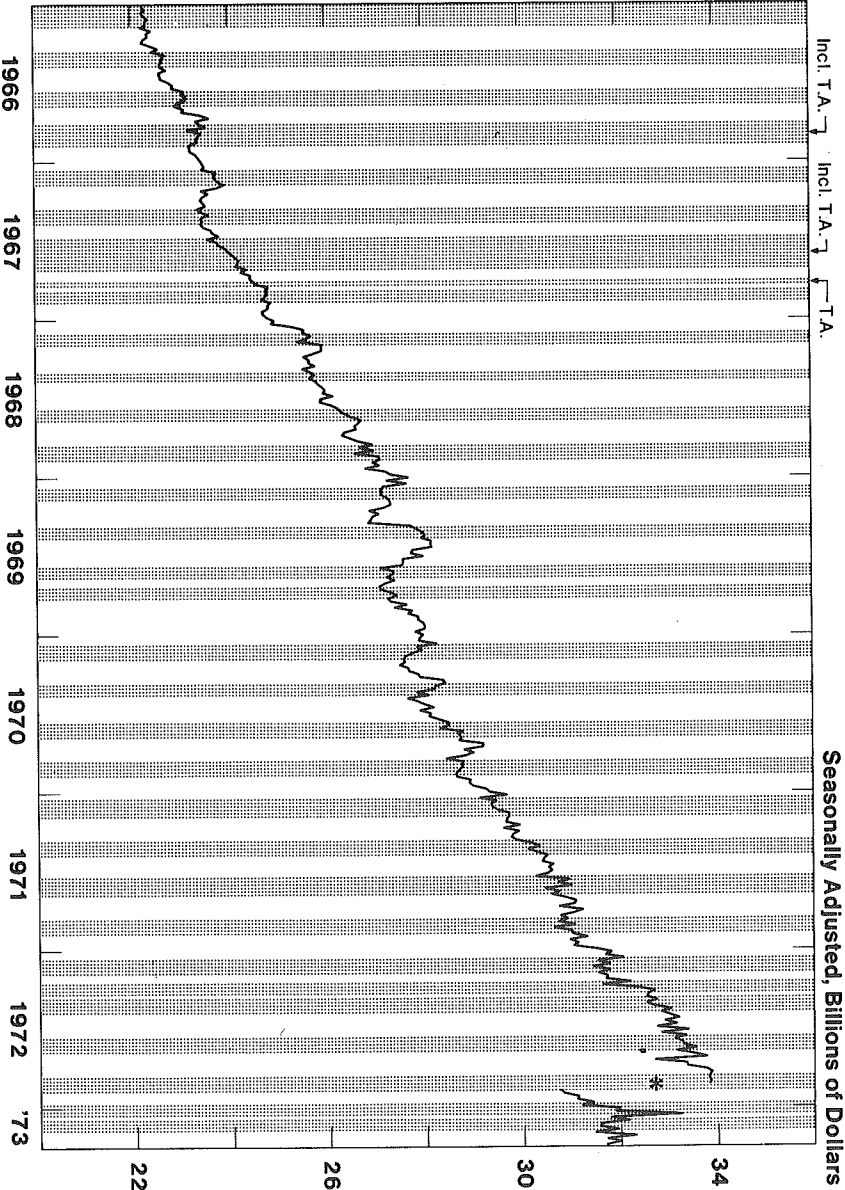
Summary of Findings

While clearly much more sophisticated analyses of the impact of even-keel are required, we believe that the casual empiricism of the present and earlier study does support the view that even-keel policy does not systematically tend to hold interest rates, other than one-day money-market rates, at relatively low levels during periods in which rates are rising or at relatively high levels during periods in which rates are falling. And with respect to one-day rates, it also appears that the greater emphasis placed on monetary aggregates in the formulation of monetary policy in recent years has diminished the extent to which even the overnight Federal funds rate is influenced by even-keel considerations.

Monetary and reserve aggregates appear to be similarly unaffected, although much more sophisticated procedures than used in this paper might be more helpful in analyzing this complicated question. One can offer the observation, however, that, if our assessment of the interest-rate effects of even-keel are near the mark, then it would appear unlikely that even-keel has had a profound effect on any of the aggregates. Moreover, this surmise is generally supported by our interpretation of the charted data presented in this study.³

³These conclusions are generally consistent with those obtained recently by Paul Kasriel in his nearly completed doctoral dissertation on even-keel for Indiana University. After performing a number of econometric tests covering the period 1959 to 1970, as well as sub-periods therein, he generally was unable to discover a discernible even-keel impact on financial market variables.

CHART 6
TOTAL MEMBER BANK RESERVES



Prepared by Board of Governors, Federal Reserve System

Has the Emperor Clothes?

Given the criticism leveled at the Federal Reserve's even-keel policy by some analysts and the importance traditionally attributed to the need for an even-keel policy during Treasury financing operations by Federal Reserve and Treasury officials, the conclusions reached in this paper will presumably be viewed as surprising by many. Has even-keel been a myth after all?

The answer to that question would appear to have a number of sides to it. First, with respect to the behavior of interest rates, it should be noted that while the rates examined, including the Federal funds rate, do not appear systematically to deviate from trends during even-keel periods, neither do they display a tendency to rise relative to prevailing trends. A rise might be expected given the generally large size of the financing operations involved. Therefore, the effects of "even-keel" may be to moderate the tendency for rates to rise in response to financing operations, and this type of impact is, at least in a sense, consistent with the customary assumption about the effect of even-keel. There is then at least a possibility that even-keel may serve to loosen the Federal Reserve's control over the monetary aggregates. It would appear unlikely, however, judging from the charted figures, that such a policy could result in a very significant expansion in the growth rate of these aggregates, certainly not to the extent that actions taken by the Federal Reserve after an even-keel period could not offset this potential.

Second, the failure to discover that interest rates are not relatively more stable during even-keel periods may simply reflect the general stance taken by the Federal Reserve in its conduct of monetary policy. That is to say, Federal Reserve policy actions are generally aimed at promoting conditions in which interest rates tend to show gradual, steady changes rather than sharp, immediate changes. Thus, against this background it is difficult to identify the separate impact of even-keel.

Third, it should be noted that while difficult to quantify, even-keel presumably does have an influence on market conditions, because it affects the psychology of the market. The market knows that the Federal Reserve stands ready to insure that a Treasury financing operation does not fail, and this most assuredly imparts an underlying confidence not clearly reflected in objective market variables.

Finally, it should be stressed that the conclusions reached pertain only to developments and attitudes prevailing in the relatively recent

past and may not be representative of even-keel's impact on financial conditions in earlier periods. There is in a very real sense much less need for even-keel today, because the private economy in general and financial markets in particular have been growing relatively to the size of Treasury financing operation. The Federal Reserve and other market participants may have adjusted to this alteration in circumstance and realigned policy and attitudes accordingly.

APPENDIX A

TREASURY FINANCINGS DURING EVEN-KEEL PERIODS

Directive Date	Dates Related to Even Keel			Type	Description of Offering		Attrition or Allotment Ratio		
	Announcement Date	Books opened	Settlement date		Amount ^{1/} (\$ billions)	Maturity			
251	1/14	1/29	2/3-2/5	2/15	Rights	5.5	15 mo.	.36	(AT)
	2/4						7 yr.		
	4/29	4/30	5/5-5/7	5/15	Rights	6.1	15 mo.	.28	(AT)
							7 yr.		
	7/15	7/30	8/4-8/6	8/15	Rights	3.2	18 mo.	.13	(AT)
	8/12								
	9/9	9/17	9/22-9/24	10/1	Rights	7.6	19 1/2 mo.	.24	(AT)
							3 yr. 7 1/2 mo.		
							6 yr. 10 1/2 mo.		
	1/15	1/28	2/2-2/4	2/16	Rights	5.6	18 mo.	.13	(AT)
							3 yr. 6 mo.		
							7 yr.		
	4/7	4/29	5/5	5/15	Cash	3.7	18 mo.	1.00	(AL)
	4/7	4/29	5/4-5/6	5/15	Rights	4.9	3 yr.	.29	(AT)
							6 yr. 9 mo.		
7/21	7/29	8/5	8/17	Cash	3.2	18 mo.	.10	(AL)	
7/21	7/29	8/3-8/5	8/17	Rights	5.6	3 yr. 6 mo.	.15	(AT)	
						7 yr.			
10/20	10/22	10/26-10/29	11/16	Rights	6.0	3 yr. 6 mo.	.11	(AT)	
						5 yr. 9 mo.			
10/20	10/30	11/5	11/16	Auction	2.0	18 mo.			

^{1/}Offered to the public.

APPENDIX A
TREASURY FINANCINGS DURING EVEN-KEEL PERIODS

Directive Date	Dates Related to Even Keel			Description of Offering		Amount ^{1/} (\$ billions)	Maturity	Attrition or Allotment Ratio
	Announcement Date	Books opened	Settlement date	Type				
					1971			
1/12	1/20	1/25-1/27	2/16	Rights (incl. pre- refunding)	12.1	4 yr. 6 mo.	^{2/} 6.8/.17	(AT)
4/6	4/28	5/3-5/5	5/17	Rights	5.9	7 yr. 15 mo. 3 yr. 6 mo.	.31	(AT)
7/27	7/21	7/26-7/28	8/16	Rights	4.3	4 yr. 3 mo.	.34	(AT)
7/27	7/30	8/5	8/16	Auction	2.5	10 yr. 18 mo.		
8/24	8/25	8/31	9/8	Auction	1.3	5 yr. 2 mo.		
	10/12	10/15	10/22	Auction	2.0	3 yr. 4 mo.		
10/19	10/27	11/1-11/3	11/15	Rights (incl. pre- refunding)	7.1	7 yr. 15 yr.	^{2/} 3.3/.34	(AT)
10/19	11/4	11/9	11/15	Auction				
					1972			
1/11	1/26	1/31-2/2	2/15	Rights (incl. adv. refunding)	5.2	4 yr. 3 mo. 10 yr.	^{2/} 1.3/.32	(AT)

^{1/}Offered to the public.

^{2/}Amount exchanged in prefundings or advance in billions of dollars.

APPENDIX A
TREASURY FINANCINGS DURING EVEN-KEEL PERIODS

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Directive Date	Dates Related to Even Keel			Type	Description of Offering		Attrition or Allotment Ratio
	Announcement Date	Books opened	Settlement date		Amount ^{1/} (\$ billions)	Maturity	
				1972 (cont.)			
3/21	3/21	3/28	4/3	Auction	1.7	3 yr. 1 mo.	
4/17	4/26	5/2	5/15	Auction	1.8	1 yr.	
						9 yr. 9 mo.	
7/18	7/26	7/31-8/2	8/15	Rights	9.2	3 yr. 6 mo.	^{2/} 6.5/.25 (AT)
				(incl. preref. & adv. ref.)		7 yr.	
						12 yr.	
10/17	10/25	11/1	11/15	Auction	2.9	4 yr.	
				1973			
12/19/72	12/27	1/4	1/10	Auction	0.6	20 yr.	
1/16	1/31	2/5-2/7	2/15	Rights	2.5	3 yr. 6 mo.	.47 (AT)
1/16	1/31	2/7	2/15	Auction	1.0	6 yr. 9 mo.	
4/17	4/25	5/1	5/15	Auction	2.7	7 yr.	
						25 yr.	

^{1/}Offered to the public.

^{2/}Amount exchanged in prefundings or advance in billions of dollars.

DISCUSSION

C. RICHARD YOUNGDAHL*

Steve Axilrod and Fred Struble have studied the movements of short-term interest rates, long-term interest rates, member bank borrowings, reserves available for private deposits, bank credit, and the money supply during periods of so-called even keel and otherwise for the seven and one-half year period from 1966 through the first half of 1973. Their conclusion is that there is little evidence that the Fed's even-keel policy had much, if any, effect on any of these key monetary variables, with the possible exception of day-to-day interest rates — in particular the Federal funds rate. Even here, it seems that in most recent years the Federal funds rate does not seem to behave much differently in an even-keel period than at other times.

I am not inclined to dispute this conclusion. I agree that it would not be possible to find the even-keel periods from an examination of the variables they have studied. The authors logically raise the question, therefore: Does even keel then have any reality, for all the importance attached to it by Treasury and Fed officials? Does the emperor have clothes?

My assignment is to take a look at this problem from the standpoint of a market participant and perhaps incidentally from the standpoint of an ex-Fed official who served at a time when the impact of even keeling was far more significant than it seems to be today.

Not too many years ago, operational conflicts between debt management and monetary policy, were at the very center of the monetary stage. All of us can recall the mental paralysis that pervaded monetary thinking in the official arena, in the financial markets, and in academic circles as well, when, after World War II, the size of the debt was taken to rule out indefinitely any significant

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use of Fed policy as an instrument for influencing economic developments. For six years after the end of the War, all but the most feeble struggles to use monetary measures to restrain inflation were precluded by the concerns as to how the debt could be refunded and the government financed, should the protective arm of the Fed be lifted even slightly from the shoulders of the Treasury debt managers. These fears were not held only by Treasury officials and President Truman. They were very much alive in the minds of a majority of Fed policy makers as well. And the worries did not relate to the debt-management problem alone, but to the effects of a decline in the value of the public debt on the capital structure of our banks and other financial institutions.

The major finding of a study of even-keeling today is that we have made tremendous progress in the tools and the thinking of debt managers, the Fed, and the market which has made possible this massive change over the last 22 years. In the fifties following the Accord in 1951, the flexible use of monetary policy was certainly inhibited in several periods by debt-management considerations, either real or imagined. The term "even keel"¹, which came into general use in the second half of that decade, seemed to cover a three-week or one-month period of time. When applied to the regular quarterly refunding and to cash financings, it seemed to those of us looking at monetary policy from the market side that even keel was at least one important factor that inhibited the Fed from taking timely action on a number of occasions in the fast cyclical swings of 1957, 1958, 1959 and 1960.

Both basic and technical developments have contributed to the change in importance of even keeling over the last 10 years. One key fact, mentioned by the authors, is the decline in the size of the total Treasury debt relative to the size of our financial markets. Another is that the Treasury, by advance refunding in favorable markets, has kept down the size of the quarterly maturing issues which may have to be refunded under unfavorable market conditions. Perhaps equally important, the Treasury has adopted some refunding techniques that

¹Since the Accord, the Fed has not intervened as a direct buyer in the market during a refunding to influence the price of the "rights", the "when issued" securities, or outstanding securities in the coupon market. (There may have been one exception in the late fifties.) Intervention by the trading desk on behalf of the Treasury, however, has been common, and particularly so in the first half of the sixties. The market does not read these efforts as reflective of a Fed policy to hold a particular interest rate level but rather as an effort by the Treasury to prevent a marginal market surplus of rights from driving down quotations on the new issues, the news of which might unfavorably affect the exchange decisions of the numerous relatively unsophisticated investors that regularly participate in a Treasury financing.

have introduced greater flexibility into a refunding operation and minimized the risk of a pricing mistake or of an unfavorable random event. I am thinking here, for example, of the split refunding technique, where longer maturity options are offered investors first on a rights basis, with whatever is not taken raised immediately with a cash offering. This technique avoids "attrition", if that is what the cash position of the Treasury calls for, and at the same time permits the markets to take as much of the longer-term issues as it will absorb at the offered yields. Another technique that minimizes an even-keel role is the use of the auction, which assures that a given amount of securities will be taken, leaving the price to be determined by the market.

Significance of Even Keeling

From where I sit, I believe that for some time the Fed and the Treasury have attached a great deal more significance to even keeling than has the market. To the market, even keel now means, and has for some years meant, that the Fed will not make a policy move, or allow it to appear that they have, in the middle of a Treasury refunding operation. If the Fed has been tightening, and the market expects further tightening, the fact of even keel will hardly cause dealers to load up on positions in the hope of unloading at a profit before the even-keel period ends. In a period of monetary restraint, dealers may build large positions and thus give great support to a refunding, but this will be done only if the Treasury has made an offering that looks attractive despite expectations of future monetary tightening. The success of a refunding effort depends on the debt managers, and it is in effect assumed by the market that the Fed will do what it feels is appropriate when the refunding is over. Most dealers in the Treasury market certainly do not now assume that they are assured a significant period of time after a refunding to find investment buyers for an issue, during which period nothing bad is supposed to happen.

The exact period of even keel has always been left a bit vague. As far as the market itself is concerned, it would seem adequate for the typical duration to be about two weeks. Refunding terms are usually announced on Wednesday, and it would be reasonable to hope that the Fed would not make an overt policy move during that week since the Treasury needs as calm a market as possible against which to judge the proper terms for its offerings. Typically the refunding period is over by the following Wednesday, and the even-keel period might logically continue through that week as well.

There is no reason why the Fed should not change its monetary posture before delivery date of the new issues if that is considered appropriate. Chances are that whatever the Fed does will occur well after most people in the market have seen the need for action and built into their expectations the impact of that change. Dealers and investors in Treasury securities have become fairly sophisticated about the basic factors underlying a proper monetary policy. (I might add they are also fairly cynical about the time lag between the need for action and the actuality.)

Messrs. Axilrod and Struble have concluded that even keel at present still has a significance not reflected in the variables they have used as measures because "it affects the psychology of the market." In some measure this is probably true. They state further, however, that "the market knows that the Federal Reserve stands ready to insure that a Treasury financing operation does not fail." I must confess that I have trouble with the latter statement in its baldest form. It is true that to a dealer the assurance of even keel is a psychological plus when he is making markets in large size during the period the books are open on an exchange offering. I do not believe, however, that there are many market participants who look to the Fed as an ultimate guarantor that a Treasury offering will not fail. The last time that I recall a failure threatened a Treasury financing was when the Treasury was selling a short note for cash (not at auction) in early May of 1970 to pick up the "attrition" on an 8 percent long-note offering. In that case, the Fed trading desk called the dealers and certain key banks to inquire about what these institutions might be planning to do by way of subscriptions. My recollection is that enough of them got the message so that the issue was taken up, albeit at 100 percent allotment of the subscriptions tendered. Not until after the refunding did the Fed intervene to buy coupon issues.

In summary, the decline in importance of the Fed's even-keel role in a Treasury refunding is one of the success stories in the monetary area over the past quarter century. It is one of those happy cases where everyone has grown with experience — the Treasury, the Fed, and particularly the market — and in the process a problem which once loomed large has lost its potency.