112-28

MEMORANDUM

MAY 6. 1977

The Commission

The Division of Investment Management

Valuation of Portfolio Securities and Prospectus Disclosure for Money Market Funds

Office of Chief Accountant Directorate of Economic Policy and Research

That the Commission: (1) issue an interpretation of Section 2(a)(41) of the Investment Company Act of 1940 and Rule 2a-4 thereunder indicating its view that the use of amortized cost valuation by money market funds and certain other open-end investment companies in valuing debt portfolio securities with remaining maturities in excess of 60 days does not represent a "good faith" determination of "fair value" by funds' boards of directors, and (2) publish for comment a proposed amendment to Form S-5 under the Securities Act of 1933 which would incorporate in such Form a requirement that, for any quarter when a registrant has 50 percent or more of the value of its assets invested in debt securities maturing in two years or less, such registrants must supplement their prospectus with (unaudited) listings of portfolio securities and historical information as to (a) rates of return; (b) the dollar weighted average maturity of the portfolio; and (c) the average percentage of fund assets invested in specified categories of money market instruments.

Appropriate valuation methods for use by money market funds in valuing portfolio securities, and the desirability of required quarterly supplementation of prospectus disclosure by such funds.

ACTION REQUESTED BY:

RESPONSIBLE STAFF MEMBERS:

NOVEL, UNIQUE OR COMPLEX ISSUES:

May 31, 1977

156-1

Kenneth S. Gerstein, Attorney, X-50233 Herbert H. Davis, Attorney, X-54667 Gregor B. McCurdy, Acting Special Counsel, X-50233

TO:

FROM:

SUBJECT:

OTHER DIVISIONS OR OFFICES CONSULTED:

RECOMMENDATION:

SUMMARY

On April 15, 1975, the Commission published for public comment a position it proposed to take with respect to the valuation of shortterm debt instruments by registered investment companies, including money market funds. 1/ The concern prompting this proposal was the practice of some money market funds of utilizing the amortized cost method of valuation to determine the value of securities in their portfolios. 2/ The proposed position would have suggested "marking to market" as the most appropriate method for valuing debt securities and would have expressed the Commission's view that companies should discontinue use of amortized cost valuation.

The Division has examined carefully this proposal and has analyzed the public comments received. Our conclusion, discussed below, 3/ is that money market funds should value debt securities by "marking to market", but that we should not necessarily object to their use of amortized cost valuation with respect to portfolio securities with remaining maturities of 60 days or less. Moreover, in certain circumstances, the Division believes that such funds should calculate net asset value per share with sufficient accuracy so as to insure that the fluctuating values of portfolio securities are reflected in the prices at which those funds' shares are sold and redeemed with a greater degree of accuracy than is presently the case with regard to some such funds. The basis for these conclusions is that, under certain circumstances, the use of the practices that we urge be discouraged will prevent shareholders from being properly credited with unrealized appreciation and depreciation, and may, therefore, distort or dilute the assets and returns of investors.

Attachment A is a draft release announcing the interpretation with respect to money market fund valuation methods which we recommend be issued by the Commission. The interpretation indicates that it will be applicable to certain open-end investment companies other than money market funds in situations where the use of amortized cost valuation could have a material effect on the net asset values of such funds' shares.

The Division has also concluded that it would be appropriate to augment, in some respects, the prospectus disclosure of money market funds so that investors may be provided with more current and detailed information about such funds. We believe that there are additional types of information that are often not provided to investors which might, in our view, be conducive to more informed investment decisions.

3/ See pp. 7 to 15, infra.

^{1/} Investment Company Act Release No. 8757, File No. S7-568A.

^{2/} The amortized cost method of valuation is described at p. 5, infra.

Therefore, the Division recommends that the Commission publish for comment a proposed amendment to Form S-5 under the Securities Act of 1933 which would require money market funds to supplement their prospectuses quarterly with (1) an unaudited listing of portfolio securities, and (2) historical information as to rates of return, dollar weighted average portfolio maturity and the average percentage of fund assets invested in specified categories of money market instruments. The details of this proposal are discussed at pp. 15 to 21, infra. A draft release with respect to this matter is contained in Attachment B.

We believe that, taken together, these various measures should further the objectives of enabling money market fund investors to: (1) purchase and redeem their shares at prices appropriately reflecting the current value of fund portfolio securities; (2) be properly credited for any unrealized appreciation and depreciation in such portfolio securities; and (3) be provided with meaningful, current, and comparable information with which to appraise the performance, risks, and characteristics of different money market funds. 4/

The Office of the Chief Accountant concurs in our recommendation. The Directorate of Economic Policy and Research does not support our recommendation as to the 60-day cut-off for amortized cost valuation because it believes: (1) such approach is unnecessary in light of the alternatives, and (2) at some times 60 days is unnecessarily burdensome and at other times such standard is not accurate enough. These views are contained in Attachment G.

II. BACKGROUND

Money market funds, generally, are open-end investment companies which invest in short-term debt securities. Although the portfolio compositions of these funds often differ greatly from one another, both in terms of securities purchased and their maturities, the types of securities held by these funds include: (1) U.S. government securities (treasury bills, and securities issued or guaranteed by U. S. government agencies); (2) bank obligations (certificates of deposit and bankers' acceptances); (3) corporate obligations (commercial paper and letters of credit; and (4) repurchase agreements. 5/

- 4/ It should be noted that in Investment Company Act Release No. 8816 (June 12, 1975) the Commission proposed guidelines with respect to standardizing money market fund yield quotations. Although the Division still believes that standardization of such quotations is a desirable goal, we have not determined the appropriate approach in this area, and are not, at this time, prepared to give our recommendations as to this matter.
- 5/ The various types of money market instruments are described in Attachment F, The Money Market.

Money market funds were developed as a response to the unprecedented high short-term interest rates of 1974 and 1975. They enable investors to pool money for the purchase of larger denomination instruments than could normally be bought by the small investor. These funds also offer a high degree of liquidity because investors can purchase or redeem shares on a short-term basis, and thus can attempt to optimize utilization of cash reserves. 6/ Money market funds also have been attractive to larger investors, such as corporations and bank trust departments, which seek the professional management, liquidity and subaccounting services that these funds may provide. There are presently about 60 money market funds offering shares to the public with total assets of approximately \$3.7 billion.

In addition to portfolio composition, money market funds differ from mutual funds with respect to the investment perspective of their shareholders, the methods of portfolio valuation, and the components of distributions to shareholders.

Investors often purchase shares of money market funds seeking safety of principal and high current income. Unlike other mutual funds where money remains invested for many years, the period for which money remains invested in a money market fund has averaged between four to six months. 7/ As a result of these characteristics, the importance of accuracy in the computation of dividends and capital changes is magnified because small variations can significantly affect an investor's total return when measured over short time periods. 8/

Moreover, unlike other mutual funds whose net asset values "float" depending upon unrealized appreciation and depreciation in portfolio securities, many money market funds seek to stabilize their net asset values by utilizing a valuation method or distribution policy which produces a "fixed" net asset value per share. Many funds believe this to be a convenience for investors and a desirable marketing feature because it permits investors to equate dollars with shares of the fund. Another consequence of the unique perspective of investors in money market funds is that investors often seek, and such funds often provide, very current

- 6/ Money market funds often offer shareholders methods of expedited purchase and redemption. In some cases, redemption may be made by writing a check against a fund account.
- 7/ The monthly redemption ratio during the last six months of 1975 for all money market funds was 202% annualized. This would indicate that money remains invested in the funds, on the average, for slightly less than six months. Thus, 50% of the money invested in money market funds remains in the funds for less than six months.

8/ See discussion at pp. 11 to 12, infra.

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d precise information about fund performance. Interest rates can change rapidly, as can the composition of money market fund portfolios which are comprised of short-term instruments. Although shareholders of other funds have been able to track fund performance by observing changes in net asset value, money market fund shareholders often cannot do this because of the tendency toward fixed net asset values in these funds. Thus, many money market funds provide performance information by quoting current "yield" or rates of return by telephone or in sales literature. 9/

In addition, because the objectives of money market fund investors are somewhat different from those of other mutual fund investors, different kinds of historical information are important to money market fund investors. Such investors need more current information than that normally provided via prospectus disclosure because they invest for short periods of time. Moreover, the short-term nature of a typical money market fund portfolio means that information concerning portfolio composition and maturity structure can quickly become stale and outdated.

III. VALUATION

A. Background

Some money market funds utilize amortized cost valuation in valuing portfolio securities. They assert that market quotations for money market securities are not readily available and, therefore, that the value of portfolio securities should be "fair value" as determined in good faith by their boards of directors. 10/ Under amortized cost valuation, a security which is purchased at a discount is valued at its cost on the date of purchase, and a constant daily proportional increase to maturity value is assumed. 11/

Other funds determine the value of their portfolio securities by "marking to market," based upon guotations from one or more dealers on a particular security, or, where such guotations are not available, based

9/ See note 4, page 3, supra.

- 10/ This position is based upon their interpretation of Section 2(a)(41) of the Investment Company Act of 1940 and Rule 2a-4 thereunder. The text of these provisions is set forth at p.9, infra. But see pp. 11 to 15 infra.
- 11/ In simplified terms, for instruments purchased at a discount, the difference between the cost of such instrument at purchase and its maturity value is divided by the number of days to maturity and that amount is accrued daily as an increase in the value of the instrument each day. More precisely, amortized cost valuation may be described as cost, adjusted for amortization of premium, or for accretion of discount. See Attachment C, Explanation of Technical Concepts and Computer Simulations, at p. 1.

fon quotations for securities of similar type, quality and maturity. Unlike amortized cost valuation, which is a mechanical pricing method pre-determined on the date a security is purchased, "marking to market" valuation recognizes price fluctuations in the values of securities which result from changes in interest rates and other factors occurring subsequent to the date of purchase. <u>12</u>/

As noted at page 4, supra, money market funds may have "fixed" or "floating" net asset values. The following combinations of valuation and distribution policies have been used to achieve these results:

(1) Fixed Net Asset Value

a. A fund utilizes amortized cost valuation, and the accrued interest income ("cost accrual") (i.e., the daily increments in value) is declared daily as dividends. Realized gains or losses are declared as realized. Because amortized cost valuation is used, there will be no unrealized appreciation or depreciation.

b. A fund "marks to market", and declares daily as a dividend the cost accrual, realized gains and losses, and any unrealized gains and losses.

(2) Floating Net Asset Value

a. A fund "marks to market", and declares daily as a dividend the cost accrual. Unrealized appreciation and depreciation is reflected in its net asset value and not declared daily as a dividend. Realized gains and losses might or might not be declared as dividends when realized.

b. A fund uses amortized cost valuation, and reflects the daily cost accrual in the net asset value per share. Because amortized cost is used, there is no unrealized appreciation or depreciation. Realized gains and losses might be declared as dividends when realized, or reflected in the net asset value.

Only in above examples (1)b. and (2)a. will a fund recognize and credit to shareholders the effects of unrealized changes in the values of portfolio securities. In example (1)b, these effects are reflected in the fund's distributions to shareholders. In example (2)a, they are reflected in the fund's net asset value per share.

12/ We have determined the valuation methods used by each of the 41 money market funds currently listed in "Donoghue's Money Fund Report." It appears that amortized cost valuation is generally used by 16 of the funds (total assets of \$809.6 million) and that "mark to market" valuation is used by 25 of the funds (total assets of \$2.918 billion).

B. Deficiencies of Amortized Cost Valuation

In Investment Company Act Release No. 8757, 13/ the Commission expressed concern with respect to the use of amortized cost valuation by registered investment companies and proposed to take the position that such companies should discontinue using the amortized cost method in valuing debt securities in their portfolios. The basis for such concern arises from the fact that the value of a debt security will fluctuate as interest rates change. The longer the remaining maturity of a debt security, the more its value will be affected by a given change in interest rates. As noted above, amortized cost valuation does not take into account events subsequent to the date a security is purchased. As a result, as interest rates change, the value of a security valued using amortized cost may be more or less than the value of the security as determined by "marking to market." A portfolio valued at amortized cost might, therefore, have a total value different from the value of the same portfolio valued at market. 14/

This discrepancy is of particular significance in the case of mutual funds, since their shares are sold and redeemed on a continuous basis. In situations where the use of amortized cost valuation causes a portfolio to be significantly overvalued or undervalued: (1) new investors may pay too much or too little for the fund shares they purchase, and (2) redeeming shareholders may receive more or less than their proportionate share of the current value of fund assets. As a consequence of these discrepancies: (1) investors, regardless of whether they buy, redeem or hold their shares, are not properly credited for any unrealized appreciation or depreciation in the value of a fund's portfolio, and (2) dilution of the assets and returns of a fund may occur when new investors purchase shares of an undervalued portfolio, or when shareholders redeem shares of an overvalued portfolio. 15/

These inequities will be more severe in situations where: (1) a large percentage of a fund's assets are valued at amortized cost; (2) debt securities of longer maturities are valued at amortized cost; (3) there is a high turnover in fund shares (i.e., high sales and redemptions); and (4) interest rates change rapidly and dramatically.

C. Proposed Interpretation

The Division has analyzed the aforementioned position proposed by the Commission and has reviewed the 36 letters of comment received thereon.

- 13/ See note 1, supra.
- 14/ See Attachment C, at p. 12.
- 15/ This occurs because as noted above, amortized cost valuation does not take properly into account the affect of market factors upon the value of a security.

These comments are discussed and analyzed in Attachment D. We have concluded that: (1) money market funds should generally value their securities by "marking to market", and be permitted to utilize amortized cost valuation only for securities with remaining maturities of 60 days or less; (2) this interpretation should be applicable to other open-end investment companies if they hold significant amounts of debt securities, such that their net asset value per share might be materially affected depending upon whether amortized cost valuation or "marking to market" valuation were used; and (3) the net asset value per share of money market funds should be calculated with sufficient accuracy so that the effects of unrealized capital appreciation and depreciation resulting from "marking to market" are not "masked." The draft release, contained as Attachment A, reflects these conclusions, the reasons for which are set forth immediately below.

Although we recommend that the interpretation with respect to money market fund valuation be effective upon publication, the draft release indicates that companies should attempt to comply with the interpretation at the earliest possible date consistent with their obligations to avoid disruptions of their operations, but in any event not later than November 30, 1977. We believe that this amount of lead time is necessary because: (1) companies may wish to effect a gradual transition to "mark to market" valuation to avoid any sudden and dramatic changes in their net asset values, and (2) some companies with floating net asset values may desire to effect changes in their distributions to shareholders or declare a reverse stock split to increase their net asset value per share to \$10.00.16/ Moreover, the approach of the draft release is to indicate the uncertainty that has existed as to the proper method to be utilized by money market funds in valuing portfolio securities, and thus minimize the risk of "strike" suits against funds which have utilized amortized cost valuation.

1. <u>Commission Authority</u>. The concerns that prompted the Commission to propose the valuation position contained in Investment Company Act Release 8757 go to the very heart of the mutual fund concept; that is, that fund shares should be sold and redeemed at prices reflecting proportionate shares of a fund's net assets. <u>17</u>/ Various provisions of the Investment Company Act of 1940 (the "Act") focus on this concern. <u>18</u>/

16/ See discussion at pp. 13 to 15, infra.

- 17/ See, Statement of Baldwin Bane, Director of the Commission's Division of Registration, Hearings on S. 3580, U. S. Senate, 76th Cong. 3d. Sess., at 136-138.
- 18/ See Section 2(a)(32) which defines a "redeemable security", generally, as "any security under the terms of which the holder upon its presentation to the issuer...is entitled...to receive approximately his proportionate share of the issuer's <u>current</u> net assets....."

In this regard, Section 22(c) of the Act, by reference to Section 22(a) of the Act, authorizes the Commission to adopt rules prescribing, inter alia, methods for computing the minimum purchase price and maximum redemption price of redeemable securities issued by a registered investment company:

> "so that the price in each case will bear such relation to the current net asset value of such security...for the purpose of eliminating or reducing so far as reasonably practicable any dilution of the value of other outstanding securities of such company or any other result of such purchase, redemption, or sale which is unfair to holders of such other outstanding securities...."

Section 2(a)(41) of the Act defines value, as here relevant to mean:

"(B)...(i) with respect to securities for which market guotations are readily available, the market value of such securities, and (ii) with respect to other securities and assets, fair value as determined in good faith by the [registered investment company's] board of directors...."

Rule 2a-4, promulgated under the Act, provides, in part, that the "current net asset value" of a redeemable security issued by a registered investment company used in computing its price, for the purposes of distribution and redemptions, means:

> "***an amount which reflects calculations... made substantially in accordance with the following, with estimates used where necessary or appropriate:

"(1) Portfolio securities with respect to which market quotations are readily available shall be valued at current market value, and other securities... shall be valued at fair value as determined in good faith by the board of directors...."

As discussed in Attachment F, The Money Market, the staff believes that because there generally exists a secondary market for money market instruments: (1) market quotations for some such instruments are readily available and (2) even where precise quotations for a specific security are unavailable, such security can be valued by reference to securities of similar type, quality and maturity. Applying the provisions Rule 2a-4, we believe that where quotations are readily available they should be used. Moreover, we believe the use of amortized cost valuation cannot represent a "good faith" determination of "fair value" by a board of directors where "marking to market" is feasible and the failure to use such method could cause a fund's portfolio to be significantly overvalued or undervalued because amortized cost valuation ignores market factors influencing the values of securities. <u>19</u>/ As discussed at pp. 11 to 13, <u>infra</u>, we believe that such overvaluation and undervaluation would be significant if securities with remaining maturities in excess of 60 days were valued at amortized cost.

2. <u>Applicability to Money Market Funds and Certain Other</u> <u>Open-End Investment Companies</u>. We believe that the disparities and inequities caused by the use of amortized cost valuation need concern the Commission only in situations where a mutual fund has a substantial percentage of its portfolio valued on an amortized cost basis, because only in such situations would the difference between amortized cost and "mark to market" valuation have a meaningful impact on the net asset value of a fund. In other situations the expense and burdens of "marking to market" would appear to outweigh any corresponding beneficial results.

Thus, the draft release indicates that the valuation interpretation is generally applicable to money market funds, and to other open-end investment companies if they hold a significant amount of debt securities, such that the use of the amortized cost method for any

19/ In Accounting Series Release No. 118 (1970), Accounting For Investment Securities By Registered Investment Companies, the Commission emphasized the necessity of determining "fair value" with reference to current market factors:

> "As a general principle, the current "fair value" of an issue of securities being valued by the Board of Directors would appear to be the amount which the owner might reasonably expect to receive for them upon their current sale." [Emphasis supplied]

Among the factors the Commission said are in accord with this principle and should be considered are:

"yield to maturity with respect to debt issues...an evaluation of the forces which influence the market in which these securities are purchased and sold... [and the] price and extent of public trading in similar securities of the issuer or comparable companies, and other relevant matters." [Emphasis supplied] Firtion or type of these securities, rather than "mark to market" valuation, could have a material impact on such other funds' net asset values per share. It also indicates that, generally, the Commission would consider the use of the amortized cost valuation method to have a material impact if the use of that method, as opposed to "marking to market", could cause a change of at least one cent in a net asset value per share of \$10.00. Thus, the interpretation would not affect the use of amortized cost valuation by a bond fund, or balanced fund which used such valuation method only for a small portion of its portfolio invested in money market instruments. On the other hand, an intermediate bond fund would be precluded from using amortized cost valuation in valuing the 50 percent of its portfolio consisting of relatively short-term debt, such as money market instruments. In this later case, the potential for overvaluation or undervaluation, and the resulting dilution from amortized cost would be comparable to the money market fund situation.

3. <u>60 Day Cut-Off Point</u>. As noted above, the staff believes that the Commission ought not necessarily object to the use of amortized cost valuation with respect to determining the fair values of portfolio securities with remaining maturities of 60 days or less. Our research has indicated that 60 days is the maturity length beyond which it is likely that amortized cost valuation will result in significant distortion of net asset value. 20/

Using a sensitivity analysis based upon computer simulations, we have determined the extent to which the inequitable effects of amortized cost valuation can occur in portfolios of varying maturities. For example, we simulated portfolios of commercial paper of differing average maturities. Using the interest rates for prime commercial paper for the 2 1/2 years ending mid-1975, we determined the average differences in the returns of hypothetical portfolios based upon whether amortized cost or "mark to market" valuation was used. The differences in the rates of returns for these portfolios were measured over 13 week periods, and these differences were converted into dollars to quantify their impact on a net asset value of \$10.00 per share. 21/

20/ See note 28, page 16, infra.

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21/ A 13 week period was selected because money often remains invested in a money market fund for a short period of time. If a longer measuring period had been selected, the differences between amortized cost and market valuation would diminish somewhat. If a shorter measuring period had been utilized, the differences would be accentuated. We found that, depending upon whether one valued a portfolio that bought one 60-day security per week (resulting in an average portfolio maturity of approximately 30 days) at "cost" or "market", there resulted an average difference of less than 1/2 cent in a net asset value of \$10.00 over 13 week periods. For a portfolio that purchased 90-day securities the average difference in net asset value was about 1 cent on a \$10.00 net asset value.

We think this difference for the portfolio that bought 90 day securities is significant. For example, assume that during the 13 week period accrued interest income per share was 8 percent annualized (i.e. 20 cents on a share with a net asset value of \$10.00). The average discrepancy of 1 cent, indicated by our simulation where the hypothetical fund bought 90-day securities, would alter the annualized total return over the 13 week period by 5 percent on average (e.g. 8.4 percent or 7.6 percent, versus the 8 percent return assumed above). Such a difference would, in our view, be important to most money market fund investors, since generally they seek to maximize current return. If, instead of 8 percent annualized, we assumed a 6 percent annualized return over 13 weeks, the 1 cent average discrepancy would constitute altering the annualized total return over the 13 week period by 6.66 percent on average. It should be noted that the one cent difference between amortized cost and "mark to market" valuation is an average difference, and on occasions the difference can be significantly greater. 22/

It is our conclusion that an acceptable degree of accuracy in valuation can be obtained if money market funds are required to value all debt securities with remaining maturities of more than 60 days by "marking to market." 23/

- 22/ We were provided with actual figures of the dividends paid by Fidelity Daily Income Trust ("FDIT") during various time periods. FDIT "marks to market" and declares daily accrued interest income and unrealized capital changes, as a dividend. The accrued interest income portion of each dividend represents the return that a "cost" fund (having the same portfolio) would have achieved. From the information we received we computed the return an investor would have received if the fund used amortized cost and the return that an investor would have received if the fund "marked to market". When the returns were compared for 17 one month periods (i. e. hypothetical investor bought at beginning of the month and redeemed on the last day of the month), on average, an investor's return would have varied by about 17 percent depending on which valuation method was used. We also studied results over each of five three-month periods; the returns of the "cost" and "market" fund differed by about 8.7 percent on average. See Attachment E, Results of Investments in Fidelity Daily Income Trust.
- 23/ The interpretation we have recommended would permit a fund to have a policy of switching to amortized cost valuation at day 60, based on the market value on the 61st day. In other words, if a fund bought a 90-day security, it could amortize, beginning on day 60, the difference between maturity value and current market value over the remaining 60 days.

view of the distortions that can arise from the use of amortized cost valuation, we do not believe that the use of such method can represent, within the meaning of Section 2(a)(41) of the Act and Rule 2a-4, a "good faith" determination of "fair value" by the board of directors of a money market fund with respect to securities with remaining maturities of more than 60 days. Nor do we believe that, within the meaning of that Rule, and under the above circumstances, it is necessary or appropriate to utilize amortized cost valuation as an estimate of value because "marking to market" is a feasible and accurate alternative. An interpretation reflecting these conclusions would set a sufficient standard to prevent dilution and insure that investors purchase and redeem fund shares at prices which reflect the current value of the underlying portfolio securities.

Our conclusions are set forth more fully in Attachment C, which, among other things, discusses the computer simulations utilized. 24/ In essence, our recommendations are premised on the fact that the values of very short-term securities are not significantly affected by changes in interest rates. For these securities, amortized cost valuation will ordinarily approximate current value.

Of course, the value of securities with remaining maturities of 60 days or less can be affected by factors other than changes in interest rates. As a result, the fair value of these securities may not be accurately reflected by amortized cost valuation in some circumstances: for example, where the creditworthiness of an issuer is impaired. To deal with this situation, the proposed release emphasizes that use of amortized cost for securities with remaining maturities of 60 days or less is not necessarily a "good faith" determination of "fair value" in all cases.

The \$1 "Floating" Net Asset Value. As indicated at pp. 6 4. to 7, supra, some money market funds with a "floating" net asset value value portfolio securities by "marking to market", accrue and declare interest income daily along with realized gains and losses, but reflect any unrealized appreciation or depreciation of portfolio securities in their net asset values per share. The experience of such funds which originally set their net asset value at \$10.00 per share, verified by our computer simulations, indicates that unrealized appreciation or depreciation, generally, does not amount to more than 10 cents per share. In other words, their per share value generally fluctuates between \$9.90 and \$10.10. However, some funds with "floating" net asset values originally set their net asset value at \$1.00. The net asset value per share of these funds does not, in fact, "float" because the net asset value is calculated accurately only to three decimal places and rounded to the nearest cent. In these cases, interest rate changes have not been sufficiently rapid and large to cause a change in net asset value greater than 1 cent. Thus, the net asset value of the \$1 "floating" fund stays fixed at \$1.00.

^{24/} See also, Attachment D, at pp.6 to 8, which discusses additional reasoning behind the 60-day cut-off period.

If its net asset value per share never changes, then a fund with a \$1.00 "floating" net asset value becomes the functional equivalent of a cost fund. The return that would be received by investors in such a fund would be exactly the same as the return they would receive had the fund been a cost fund. Because unrealized appreciation and depreciation would round out, shareholders would not properly be credited for such changes, and the fund's return could be diluted in the same manner as that of a cost fund.

Moreover, if interest rates did change dramatically to cause a fluctuation of slightly greater than 1/2 cent in the net asset value of a fund with a \$1.00 "floating" net asset value, the resulting one cent movement in price could cause even greater dilution and distortion of returns. A one cent change in a net asset value of \$1.00 translates into two months of interest at 6%. If the net asset value per share did change by one cent, it would be likely to cause an immediate and massive influx or outflow of money which would substantially dilute the fund's return. For example, if the share value moved up to \$1.01, a sophisticated shareholder would redeem his shares and take his profits before the share value fell back to \$1.00. The share value would be likely to return to \$1.00 in a matter of days because: (1) the actual net asset value would be very close to \$1.0049 (the point at which the net asset value would be "rounded" back to \$1.00) and very far from \$1.0151 (the point at which the net asset value would be "rounded" up to \$1.02), and (2) the unrealized appreciation causing the rise in net asset value would, absent any interest rate fluctuations, diminish each day as the maturity date approached, making it likely that the actual net asset value would fall below \$1.0049. Since the share value is rounded up by about 1/2 cent, the redeeming shareholder would receive about 1/2 cent per share more than his proportionate share of the market value of the underlying securities (e.g. \$1.01, instead of \$1.0049). Therefore, these redemptions would dilute the assets of the remaining shareholders. Alternatively, if the share value fell to \$.99, sophisticated investors would buy shares because a rise to \$1.00 could be expected in a matter of days. In such circumstances, these new investors would be paying about 1/2 cent less for their shares than their proportionate share of the market value value of the underlying securities. This could also dilute the fund.

The Commission's position on valuation proposed in Investment Company Act Release 8757 did not deal with the question of "rounding," and thus left a loophole in the proposed standard. For this reason, the interpretation we propose be issued indicates that funds with a "floating" net asset value should compute their share value accurately to the equivalent of the nearest one cent on a net asset value of \$10.00, and thus prohibit "rounding" as a way of doing indirectly what amortized cost valuation does directly. This position would be premised on the view t any less precise computation would not satisfy Rule 2a-4, which requires the current net asset value at which fund shares are sold and redeemed to "reflect" the calculations prescribed by the Rule. 25/

As a practical matter, this would leave those funds with a \$1.00 "floating" net asset value with three choices: (1) distribute all unrealized appreciation and depreciation to shareholders; (2) calculate their net asset value accurately out to 3 decimal places i.e., \$1.000, the nearest 1/10 of one cent); 26/ or (3) declare a 1 for 10 reverse stock split to move their net asset value to \$10.00.

IV. PROSPECTUS DISCLOSURE

A. Background

Because the objectives of a typical money market fund investor are different from those of a typical mutual fund investor, the money market fund investor needs different kinds of historical information about his fund and he places different emphasis on information considered by the typical mutual fund investor. Moreover, because the typical money market fund investor invests for the short term, he needs information more current than that normally provided to the mutual fund investor via prospectus disclosure. Consideration of these factors has led the Division to the conclusion that, to be of maximum utility to investors, money market fund prospectuses should have more current and extensive information in three respects.

First, potential money market fund investors are concerned with the composition of the fund's portfolio of investments. Informed money market fund investors know that managers which emphasize safety of principal rather than yield potential tend to invest most of their assets in U. S. government securities, while managers attempting to maximize yield will tend to invest more in bank obligations or commercial paper. Investors typically obtain some information about portfolio composition from the portfolio listings in the company's prospectus.

- 25/ Our analysis of 41 funds listed in "Donoghue's Money Fund Report" indicates that of the 25 funds using market valuation (assets of \$2.918 billion), nine funds have a "floating" \$1.00 net asset value (assets of \$691.8 million).
- 26/ Questions have been raised by several funds about transitional costs that would be involved in shifting to a net asset value of three decimal places. In one case (Massachusetts Financial Services) we were told that the approximate cost of system redesign would be \$30,000, but a fund representative indicated that it was virtually certain that the fund would avoid this problem completely by distributing unrealized appreciation and depreciation.

Money market funds, like other open-end investment companies, enerally update the listing of portfolio investments in their prospectuses only once per year. 27/ While this may be adequate for most other types of mutual funds which typically sell and replace only a portion of their investments each year, we believe that such an annual update is inadequate for money market funds, which typically sell or redeem and replace their investments several times each year. 28/ Furthermore, it is typical that by the time a money market fund begins using an updated prospectus 29/ it no longer owns a majority of the investments listed in that prospectus. Not only will the specific investments have changed during the time lapse between the date of the portfolio listing and the date the prospectus is first used, but the percentage mix among the general categories (i.e., treasury obligations, certificates of deposit, commercial paper, etc.) of money market securities may have changed significantly. The longer the prospectus is used, the less representative the listed portfolio is and, at some time well in advance of the required prospectus updating, the fund typically owns none of the securities listed.

Another piece of information important to all investors is the historical return upon an investment in the fund. This information allows investors not only to compare the past performance between funds, but also to compare a mutual fund with other forms of investment.

- 27/ Section 10(a)(3) of the Securities Act of 1933 requires that "when a prospectus is used more than nine months after the effective date of the registration statement, the information contained therein shall be as of a date no more than sixteen months prior to such use...." In order to comply with the provisions, investment companies which make a continuous public offering update their prospectuses via a post-effective amendment once a year to include financial information as of their fiscal year end. Normally, investment companies request that such post-effective amendments are not made effective until approximately four months after their fiscal year end at which time the financial statements in the previous prospectus are sixteen months old and can no longer be used due to Section 10(a)(3). This four month delay is due to the time it takes for the company to have the financial statement prepared, audited, and reviewed by the staff.
- 28/ Historically the average maturity of all money market fund portfolios has run between 75 to 100 days. This indicates that in most cases money market funds "replace" their portfolios several times a year.
- 29/ As explained in note 27, supra, money market funds normally do not use a prospectus until four months after their fiscal year end, which is the date of the financial statements, including the portfolio listing.

a money market fund is current income rather than long-term growth of capital.

Presently, historical return information is generally presented in a "per share" table showing the annual "income" return. with capital changes stated separately in terms of dollars. The Commission's Statement of Policy relating to Advertising and Sales Literature Used in the Sale of Investment Company Shares ("Statement of Policy"), which has governed the presentation of percentage rates of return by funds, has required funds to report rate of return based upon actual income return for annual periods and has precluded combining income return with appreciation to arrive at a "total return" figure. 30/ However, in the case of money market funds, because of the short-term nature of fund portfolios, the short-term perspective of investors, and investor emphasis on high current income, we believe that the use of rates of total return would be more meaningful. 31/ Furthermore, annual rates for prior years are not of as much relevance to a money market fund investor's investment decision as are rates for shorter periods. -----

30/ In part, the Commission's Statement of Policy reads as follows:

"It will be considered materially misleading hereafter for sales literature ---

(a) To represent or imply a percentage return on an investment in the shares of an investment company unless based upon --

(1) Dividends from net investment income paid during a fiscal year related to the average monthly offering price for such fiscal year, provided that if any year prior to the most recent fiscal year is selected for this purpose, the rate of return for all subsequent fiscal years, similarly calculated, shall also be stated; or

(2) Dividends paid from net investment income during the twelve months ending not earlier than the close of the calendar month immediately preceding the date of publication related to an offering price current at said date of publication...."

(b)(1) "To combine into any one amount distributions from net investment income and distributions from any other source."

31/ The Commission has proposed an amendment to the Statement of Policy which would permit the use of rates of total return in sales literature used by investment companies. Investment Company Act Release No. 8571 (November 4, 1974). The Division has not, as yet, delivered to the Commission its recommendation with respect to this matter. A third piece of information, the average maturity of the Find's portfolio, is important to money market fund investors. This information is sought by investors and reported by research services and over the telephone by some money market funds primarily because it indicates the effect that changes in interest rates will have upon the value and return of fund shares. For instance, a sophisticated investor who envisions lower interest rates will invest in a fund whose portfolio has a relatively long average maturity in order to continue receiving the higher yield. Conversely, an informed investor who envisions higher interest rates or who is unsure and wishes to avoid the adverse effect changes in interest rates may have on the value of the fund's shares will invest in a fund whose portfolio has a relatively short average maturity.

Most money market funds have investment restrictions which limit the maturities of the securities they may purchase. In many cases, these restrictions require the fund to invest all its assets in securities maturing in one year or less. Within these stated restrictions, however, fund managers may follow widely varying practices as to the maturity of the securities they actually purchase. As indicated at note 28, <u>supra</u>, the average portfolio maturity of money market funds has ranged from 75 to 100 days. Nonetheless, some funds never have portfolios with average maturities in excess of 40 days. At the same time, others tend always to have portfolios with average maturities in excess of 250 days. Still other funds have fluctuating portfolio average maturities as management attempts to anticipate changes in interest rates.

Currently, money market fund prospectuses do not contain either a discussion of management's policies or historical information with respect to average portfolio maturity. The absence of such information makes it impossible for investors to determine the policies and tendencies of a specific money market fund and to compare such policies with those of any other money market fund. Furthermore, unless historical information is given which would modify the stated investment restrictions as to average maturity stated in the prospectus, investors may think longer term obligations are being purchased than is actually the case.

B. Proposed Amendment to Form S-5

In order to provide investors with the current information necessary to make informed investment decisions with respect to money market funds, the Division recommends that the Commission issue the attached release, proposing for comment a proposed amendment to Form S-5 under the Securities Act of 1933. 32/ Such an amendment would add to that form a requirement that when 50% or more of the assets of a registrant

 $[\]frac{32}{A}$ A draft release with respect to this matter is contained in Attachment B.

invested in debt securities maturing in two years or less <u>33</u>/ it all "sticker" <u>34</u>/ its prospectus at least as frequently as within the first ten days of each calendar <u>35</u>/ quarter to include an unaudited listing of portfolio securities as of the last day of the preceding quarter and a table in the form presented in the draft release. Such table would provide the following information for each of the four preceding quarters:

1. The historical rate of total return figures on an unaudited annualized basis to the nearest one-hundredth of a percent for each quarter. 36/

- 33/ This requirement would apply to all open-end investment companies in order to cover those periods during which companies which are not normally "money market" funds might come within the 50% test for defensive purposes.
- 34/ "Stickering" is a procedure by which new or amended information is attached to the current prospectus, copies of which are then filed pursuant to Rule 424(c) under the Securities Act of 1933. Such a procedure does not entail staff review and such prospectuses may be used immediately.
- 35/ The reporting of this information on a calendar rather than fiscal guarter basis would increase comparability among the prospectuses of the various funds. While approximately one-fourth of the money funds currently registered have fiscal quarters which do not correspond with calendar quarters, the staff is of the opinion that providing this information on a calendar quarter basis would not create a significant burden for such funds. Furthermore, a random sampling made by the staff indicates that most funds prepare portfolio listings on a monthly basis.
- 36/ These figures would be calculated on a standardized basis, net of fund expenses and any continuing account charges. Where applicable, a note that rates of return figures do not take into account the effects of any sales charge would be included in the table.

- 2. The average of the daily dollar weighted portfolio maturities for the quarter. This figure would be computed by dividing the sum of the average dollar weighted maturities for each day in the quarter by the number of days in the quarter. The average dollar weighted maturity for a particular day should be computed by multiplying the days to maturity for each security by the value of such security and dividing the sum of such products by the total value of the portfolio on that day.
- 3. The average daily percentage of the fund's assets invested in each of the following categories: (a) U. S. Government, agency and instrumentality securities; (b) Certificates of Deposit; (c) Bankers Acceptances; (d) Commercial Paper; (e) All other (with any types of security comprising 10% or more of the assets specifically noted).
- 4. In addition, footnotes to the table would describe how the return and average maturity figures were computed.

C. Discussion

The proposed quarterly "sticker" is different from any previous disclosure updating requirements in that it would require updating prospectuses on a regular basis every quarter while most investment companies update their prospectuses only annually. However, the very shortterm nature both of the typical investment in, and the investments of, money market funds seem to dictate more frequent updating of certain disclosure information.

The proposed quarterly sticker will provide investors in money market funds with recent historical information relevant to their investment decisions. Providing this information should not place much of an additional burden on the funds since most funds collect this information on at least a quarterly basis currently and it is published and sent by many funds to existing shareholders on a periodic basis. Moreover, allowing funds to attach this to their prospectuses by means of a "sticker" pursuant to Rule 424(c) under the Securities Act avoids the cost and time which would be involved in the filing of post-effective amendments.

Having all funds undertake to report this information for the same periods (i.e., calendar as opposed to fiscal quarters) and to compute the information the same way would result in a certain degree of standardization. This standardization would have a beneficial effect in that investors would be able to compare the policies, tendencies as to investment selection, and performance of the various money market It is the Division's view that such benefit to investors far the ighs any additional cost or other burden to the funds. By making investors more informed, money market fund managers should become more responsive to investor objectives and needs.

V. RECOMMENDATION

The Division recommends that the Commission issue the draft releases attached hereto as Attachments A and B.

Although the interpretation with respect to money market fund valuation methods would be effective upon publication, as previously stated, the draft release, in recognition of the fact that some funds might have to modify their procedures, states that companies should attempt to comply with the interpretation by no later than November 30, 1977. Moreover, the tone of the release attempts to minimize the risk of "strike" suits against funds which have until now utilized amortized cost valuation.

We recommend that the public comment period on the proposed amendment to Form S-5 be approximately 45 days.

ATTACHMENTS

- A. Draft Release: Money Market Fund Valuation
- B. Draft Release: Money Market Fund Prospectus Disclosure
- C. Explanation of Technical Concepts and Computer Simulations D. Analysis of Comments
- E. Results of Investments in Fidelity Daily Income Trust
- F. The Money Market

K. S. Gerstein

H. H. Davis///X G. B. McCurdy H1 J. H. Goldberg JKG S. H. Mendelsohn J. W. Gleason

G. Views of the Directorate of Economic Policy and Research

ATTACHMENT A

Title 17 - Commodity and Securities Exchanges Chapter II - SECURITIES AND EXCHANGE COMMISSION [Release Nos. IC- , AS- , File No. S7-568A] PART 211 - INTERPRETATIVE RELEASES RELATING TO ACCOUNTING MATTERS (ACCOUNTING SERIES RELEASES)

PART 271 - INTERPRETATIVE RELEASES RELATING TO THE INVESTMENT COMPANY ACT OF 1940 AND GENERAL RULES AND REGULA-TIONS THEREUNDER

Valuation of Debt Instruments by Money Market Funds and Certain Other Open-End Investment Companies.

AGENCY: Securities and Exchange Commission.

ACTION: Interpretative Release Issued.

SUMMARY: The Commission has issued an interpretation of Rule 2a-4 [17 C.F.R. 270.2a-4] adopted under the Investment Company Act of 1940 (the "Act") [15 U.S.C. 80a-1 et seq.] indicating, generally, that it shall be considered inappropriate under the provisions of the rule for "money market" funds and certain other open-end investment companies to determine the fair value of debt portfolio securities on an amortized cost basis, except in the case of securities with remaining maturities of 60 days or less. This interpretation should help insure that shares of such companies are sold and redeemed at prices reflecting the fair value of the underlying portfolio securities.

EFFECTIVE DATE:

FOR FURTHER INFORMATION CONTACT: Kenneth S. Gerstein, Esg., Division of Investment Management, Securities and Exchange Commission, Washington, D. C. 20549 (202-755-0233). SUPPLEMENTARY INFORMATION: On April 28, 1975, there was published for public comment notice of a position the Commission proposed to take regarding the standardization of procedures utilized by registered investment companies, including "money market" funds, for the valuation of shortterm debt instruments in their portfolios [40 FR 18467]. <u>1</u>/ The proposed valuation position would have suggested "marking to market" as the most appropriate method for valuing any short-term debt securities held by registered investment companies and would have expressed the belief that it would be desirable for such companies to discontinue the "amortized cost" method of valuation. <u>2</u>/

Among the public comments received with respect to the proposed position on valuation of short-term debt instruments were those suggesting that: (1) the benefits of "marking to

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^{1/} Investment Company Act of 1940 Release No. 8757, April 15, 1975.

^{2/} Id. The release also indicated the Commission's tentative view that money market funds might be permitted to portray return by means of a quotation such as "yield to average life." In Investment Company Act Release No. 8816 (June 12, 1975) [40 FR 27492] notice was given of proposed guidelines with respect to standardizing money market fund yield quotations. Such guidelines would have permitted the use of "yield to average life" quotations. The Commission is still considering these matters.

market" valuation were small compared to the attendant costs of such valuation method; (2) many "money market" fund shareholders desire a valuation method that would achieve a constant asset value; and (3) the Commission lacks the authority to preclude the use of amortized cost valuation. Other commentators suggested that only "money market" funds be required to "mark to market."

Nevertheless, after consideration and analysis of the comments received with respect to the proposal, the Commission, for the reasons discussed below, has issued this interpretation setting forth its views as to the appropriateness of certain methods utilized by "money market" funds and certain other registered open-end management investment companies to determine the fair value of debt securities in their portfolios. The interpretation that the Commission has issued differs in some respects from the proposed position and is discussed in detail below. The Commission expects companies to comply with this interpretation at the earliest possible date consistent with their obligations to avoid disruption of their operations, but in any event not later than November 30, 1977.

The Commission recognizes that, in the absence of the interpretation it has determined today to issue, there has been considerable confusion and uncertainty as to the appropriate methods to be utilized by "money market" funds in

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valuing their portfolio securities. This interpretation should help remove the uncertainty and further the objectives of enabling investors in such funds to: (1) purchase and redeem their shares at prices appropriately reflecting the current value of fund portfolio securities; (2) be properly credited for any unrealized appreciation or depreciation in such portfolio securities; and (3) be provided with meaningful and comparable information with which to appraise investment returns and the current earning ability of "money market" funds. <u>Interpretation With Respect to Valuation of Debt Instruments By Money Market Funds and Certain Other Open-End</u> Investment Companies.

The Commission is aware that many investment companies, including some "money market" funds, value short term debt instruments in their portfolios on an amortized cost basis. Under this method of valuation, investment companies initially value such instruments at their cost on the date of purchase and, if the instrument was purchased at a discount, thereafter assume a constant proportional increase in value until maturity. 3/

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^{3/} In simplified terms, for instruments purchased at a discount, the difference between the cost of such an instrument at purchase and its maturity value is divided by the number of days to maturity and that amount is accrued daily as an increase in the value of the instrument each day. More precisely, amortized cost valuation may be described as cost, adjusted for amortization of premium, or for accretion of discount.

However, during the period a debt security is held, changes in the market rate of interest and other factors may affect the price at which that security could be sold. As a general principle, the longer the remaining maturity of an outstanding debt security, the more that price will be affected by such interest rate changes.

The Commission is concerned that the use of the amortized cost method in valuing portfolio securities of registered investment companies may result in overvaluation or undervaluation of the portfolios of such companies, relative to the value of the portfolios determined with reference to current market factors. In the case of registered open-end management investment companies ("mutual funds" or "funds"), this would mean investors purchasing or redeeming shares could pay or receive more or less than the actual value of their proportionate shares of the funds' current net assets. The effect of such sales or redemptions may therefore result in inappropriate dilution of the assets and returns of existing shareholders. 4/

4/ For example, redemptions of shares in a fund which has overvalued its portfolio or sales of shares in a fund which has undervalued its portfolio could result in the dilution of the assets and returns of other investors in the fund. The extent of such dilutive effects would be dependent upon several factors, including the extent of the overvaluation or undervaluation, and the proportion of fund shares sold or redeemed at such times.

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Although inappropriate valuation of securities could cause these effects in various types of funds, the position taken herein is addressed specifically to the case of: (1) "money market" funds, and (2) other open-end investment companies that hold a significant amount of debt securities, such that the use of the amortized cost method in valuing any portion or type of these debt securities could have a material impact on such funds' net asset values per share. Generally, the Commission would consider the use of a particular valuation method to have a material impact if the use of that method, as opposed to another method, might cause a change of at least one cent in a net asset value per share of \$10.00. The interpretation explained below will be applicable to both "money market" funds and these other open-end investment companies. 5/

Generally, "money market" funds are open-end investment companies which invest primarily in short-term debt instruments. They provide a vehicle to permit investors to take advantage of what at times may be the higher short-term interest rates earned on large investments. Through a pooling

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^{5/} See, generally, Accounting Series Release No. 118 (December 23, 1970) [35 FR 19986], Accounting for Investment Securities by Registered Investment Companies, and Investment Company Act of 1940 Release No. 7221 (June 29, 1972) [37 FR 12790], Guidelines for the Preparation of Form N-8B-1, as they relate to the valuation of portfolio securities by open-end investment companies.

For money these funds enable the purchase of larger denomination instruments than could normally be bought by the individual small investor. These funds have also attracted investments from corporations, bank trust departments, and other institutional investors. Another characteristic of money market funds is the short-term investment perspective of many shareholders. Although the portfolio composition of "money market" funds is variable both in terms of the types of securities purchased and their maturities, the portfolios of such funds typically include U.S. government and government agency issues, certificates of deposit, banker's acceptances, and commercial paper.

Section 22(c) [15 U.S.C. 80a-22(c)] of the Act, by reference to Section 22(a) [15 U.S.C. 80a-22(a)] of the Act, authorizes the Commission to adopt rules prescribing, <u>inter alia</u>, methods for computing the minimum purchase price and maximum redemption price of redeemable securities issued by a registered investment company:

> "*** for the purpose of eliminating or reducing so far as reasonably practicable any dilution of the value of other outstanding securities of such company or any other result of ... purchase, redemption, or sale which is unfair to holders of such other outstanding securities . . . "

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Section 2(a)(41)[15 U.S.C. 80a-2(a)(41)] of the Act defines "value", as here relevant, to mean:

"(B) ... (i) with respect to securities for which market quotations are readily available, the market value of such securities; and (ii) with respect to other securities and assets, fair value as determined in good faith by the [registered investment company's] board of directors...."

Rule 2a-4 [17 C.F.R. 270.2a-4] promulgated under the Act provides, in part, that the "current net asset value" of a redeemable security issued by a registered investment company used in computing its price, for the purposes of distribution and redemption, means:

> "*** an amount which reflects calculations...made substantially in accordance with the following, with estimates used where necessary or appropriate:

"(1) Portfolio securities with respect to which market quotations are readily available shall be valued at current market value, and other securities...shall be valued at fair value as determined in good faith by the board of directors...."

Now that both the Commission and the money market fund industry have had the benefit of experience with this relatively new investment product, and to help insure that shares of such funds are sold and redeemed at prices reflecting the current market or fair value of such fund's portfolio securities, the Commission has concluded that it shall prospectively consider it inconsistent with the provisions of Rule 2a-4 for a money market fund to determine the fair value of debt securities which mature at a date more than 60 days subsequent to the valuation date on an amortized cost basis.

Although debt securities with remaining maturities in excess of 60 days should not be valued at amortized cost, the Commission will not object if the board of directors of a money market fund, in good faith, determines that the fair value of debt securities originally purchased with remaining maturities of 60 days or less shall be their amortized cost value, unless the particular circumstances dictate otherwise. 6/ Nor will the Commission object if, under similar circumstances, the fair value of debt securities originally purchased with maturities of in excess of 60 days, but which currently have maturities of 60 days or less, is determined by using amortized cost valuation for the 60 days prior to maturity, such amortization being based upon the market or fair value of the securities on the 61st day

6/ The fair value of securities with remaining maturities of 60 days or less may not always be accurately reflected through the use of amortized cost valuation, due to an impairment of the creditworthiness of an issuer, or other factors. In such situations, it would appear to be incumbent upon the directors of a fund to recognize such factors and take them into account in determining "fair value."

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prior to maturity. 7/

The Commission believes that money market funds and those other companies to which this interpretation is applicable should value debt securities with greater than 60 days remaining to maturity based upon current market quotations if readily available or, if such quotations are not readily available, in such a manner as to take into account any unrealized appreciation or depreciation due to changes in interest rates and other factors which would influence the current fair values of such securities. 8/ These methods are sometimes referred

- 7/ A fund, if it wished, might use amortized cost valuation for a period less than 60 days prior to maturity, in which case the principles indicated above would also be applicable.
- 8/ In Accounting Series Release No. 118, note 5, supra, the Commission stated that:

"As a general principle, the current 'fair value' of an issue of securities being valued by the Board of Directors would appear to be the amount which the owner might reasonably expect to receive for them upon their current sale."

In that release, the Commission noted various factors that might be considered in arriving at "fair value", which factors included:

"yield to maturity with respect to debt issues...an evaluation of the forces which influence the market in which these securities are purchased and sold...[and the] price and extent of public trading in similar securities of the issuer or comparable companies, and other relevant matters." to as "marking to market." In determining "fair value" by reference to current interest rates and other factors, the board of directors of a money market fund may, of course, utilize whatever method it determines in good faith to be most appropriate. <u>9</u>/ The method utilized could be based in part, for example, upon quotations by dealers or issuers for securities of similar type, quality and maturity.

Except in the circumstances delineated above, the Commission believes that, in view of the experience which has now been gained with respect to the characteristics of money market funds, the use of the amortized cost method of valuation by a money market fund cannot in the future represent a "good faith" effort to determine the "fair value" of portfolio securities for purposes of Rule 2a-4; such valuation fails to consider the impact of market factors subsequent to the date a debt security is purchased on the value of such security. Moreover, the probability that amortized cost valuation will not approximate "fair value" is progressively greater for securities of increasingly longer maturities. The

9/ See note 5, supra.

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"Commission believes that the use of amortized cost valuation by money market funds in valuing securities with remaining maturities in excess of 60 days is not an appropriate estimate of market value or "fair value" and further that, because alternative valuation procedures which consider market factors are available, use of amortized cost valuation under such circumstances as an estimate is not necessary. This standard should help insure that fund shares are sold and redeemed at prices reflecting the appropriate proportionate share of funds' current net assets, and minimize the potential for dilution of the assets and returns of existing shareholders.

The Commission is also of the view that money market fund shareholders should be accurately credited with the effects of any unrealized appreciation or depreciation that may occur when the value of a fund's portfolio fluctuates. If such effects are not reflected in either a fund's net asset value or its distributions to shareholders, as a practical matter the result would be a situation analogous to that which would exist if

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amortized cost valuation were used, and similar dilutive effects could occur. Such may be the case, for example, where a money market fund "marks to market," but declares a daily dividend of accrued interest income and reflects any remaining unrealized appreciation or depreciation in a "floating" net asset value of \$1.00 nominal value per share, rounded to the nearest cent. Under these circumstances, unrealized capital changes, which could materially affect the value of such fund's portfolio, would ordinarily not be of sufficient magnitude to cause the net asset value to change by one cent. The effects of unrealized appreciation and depreciation, in the case of a fund with a "floating" \$1.00 net asset value per share, would generally appear in the fourth decimal place (i.e., one-hundredth of one cent), and when rounded to the third decimal place (i.e., tenths of one cent) would still not have a one cent impact on the net asset value. Moreover, if such a one cent change should occur, dilution may also result, since a relatively small change in net asset value would cause a larger change in the computed net asset value per share due to rounding. For example, if in the type of fund described above the net

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Esset value was calculated accurately to three decimal places, were a change in net asset value from \$1.004 to \$1.006 to occur, such change of \$.002 would cause the net asset value, when rounded to the nearest cent, to change by one full cent.

To alleviate these results and insure that shareholders are more properly credited for any unrealized appreciation or depreciation, the Commission believes that any money market fund which reflects unrealized capital changes in its net asset value should calculate, and utilize for purposes of sales and redemptions, a current net asset value per share with an accuracy of one-tenth of one percent (equivalent to the nearest one cent on a net asset value of 10.00). <u>10</u>/ Any less precise calculation by such a fund might have the effect of masking the impact of changing values of portfolio securities and therefore might not "reflect" the fund's calculations pertaining to its portfolio valuation as required by Rule 2a-4.

10/ Such calculation is applicable only with respect to those money market funds which do not include in their distributions to shareholders all unrealized appreciation and depreciation. If such a fund had a net asset value of \$10.00 per share, it would be appropriate to calculate its current net asset value accurately to one tenth of a cent, rounded to the nearest one cent. If such a fund had a net asset value per share of \$1.00 it would be appropriate to calculate its current net asset value accurately to the nearest one hundredth of one cent, rounded to the nearest one tenth of one cent.

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Boards of directors of money market funds and those other funds referred to above should consider and re-evaluate current fund pricing practices in light of the positions expressed herein. In this regard, the Commission recognizes that such considerations may result in decisions by some funds to make various modifications of their valuation and distribution practices. To avoid any sudden changes in net asset values some funds might wish to effect a gradual transition to new valuation methods. Moreover, some time may be necessary to take the action necessary to adopt new dividend policies or other measures designed to implement the views expressed herein. Therefore, to allow adequate time for planning and effecting orderly transitions, the Commission, as noted above, expects companies to comply with this interpretation by no later than November 30, 1977.

By the Commission.

George A. Fitzsimmons Secretary
GRITIES AND EXCHANGE COMMISSION

 [17 CFR Part 239

 [Release Nos. 33- , IC

 File No.]

QUARTERLY DISCLOSURE OF CERTAIN HISTORICAL INFORMATION BY "MONEY MARKET" FUNDS AND CERTAIN OTHER MUTUAL FUNDS

AGENCY: Securities and Exchange Commission.

ACTION: Proposed Amendment to Form.

SUMMARY: Mutual funds which invest primarily in short-term debt securities typically turn over their investment portfolios several times a year. In addition, this practice of investing in short-term debt securities in conjunction with the high degree of fluctuation in short-term interest rates that has occurred in recent years has resulted, at times, in a wide variation in the rate of return upon an investment in such a fund during a year's time. Because of these factors, the Commission is of the tentative view that historical information concerning rates of return and portfolio composition, including the average maturity of the portfolio securities, should be included in the prospectuses of certain funds on a more frequent basis than annually in order to give investors the information needed for informed investment decisions. The proposed amendment to Form S-5 [17 CFR 239.15] under the Securities Act of 1933 [15 U.S.C. 77a et seg.] ("Securities Act") would require open-end investment companies ("funds") investing primarily in short-term debt securities to supplement their prospectuses at the end of each calendar quarter with an unaudited listing of their investments and a table containing

red unadited historical information.

Stars: Comments should be received by:

ADDRESSES: Interested persons should submit six copies of their views and comments to George A. Fitzsimmons, Secretary, Securities and Exchange Commission, 500 North Capitol Street, Washington, D.C. 20549. All submissions will be made available for public inspection at the Commission's Public Reference Section, Room 6101, 1100 L Street, N.W., Washington, D.C. Submissions should refer to Securities and Exchange Commission File No. S7-

FOR FURTHER INFORMATION CONTACT: Herbert H. Davis, Esq., Office of Disclosure Policy and Review, Division of Investment Management, Securities and Exchange Commission, 500 North Capitol Street, Washington, D.C. 20549 (202-755-1231).

SUPPLEMENTARY INFORMATION: Normally, only funds which invest principally in short-term debt securities pursuant to their regular objectives and policies ("money market funds") would be subject to the proposed requirement. However, as proposed, the amendment would also require other funds which have assumed a defensive position and are temporarily invested principally in short-term debt securities to supplement their prospectuses.

The proposed requirement would allow funds to supplement their prospectuses via a "sticker" pursuant to Rule 424(c) [17 CFR 230.424(c)] under the Securities Act rather than require the filing of a post-effective amendment. As proposed, the amendment would require that the sticker be added to the prospectus within ten days of the end of any calendar quarter during which at any time

50% or more of the value of the company's assets is invested in debt securities maturing in two years or less. The Commission specifically invites comments as to whether the "50% or more" and "two years or less" standards are appropriate.

The proposed requirement contemplates all companies subject thereto furnishing information which is computed for the same period of time and in the same manner, thereby allowing meaningful comparison among funds as well as insight into how each management seeks to achieve its fund's objectives.

Among the historical information which would be required in the proposed table is a statement of total rate of return. If the proposed amendment is adopted with this information being required it will be the first time that the inclusion of such information in any investment company prospectuses will have been required.

Statutory Basis

The proposed amendment to Form S-5 would be promulgated pursuant to the provisions of Sections 7, 10(c) and 19(a) of the Securities Act of 1933, [15 U.S.C. 77g, 77j(c) and 77s(a)]

Commission Action

It is proposed to amend Form S-5 under the Securities Act by adding a paragraph "(e)" at the end of the current item 2, "Financial Statements," of Part I of the Form as follows:

§ 239.15 Form S-5, for open-end management investment companies registered on Form N-8B-1.

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(e) Within ten days after the end of a calendar quarter at any time during which 50% or more of the value of its assets consists of debt obligations maturing in two years or less, the registrant must supplement its prospectus pursuant to Rule 424(c) under the Securities Act of 1933 with the following information:

(1) An unaudited listing of all portfolio securities held at the end of the quarter in the following form:

Principal amount	Name of issuer and title of issue including stated or indicated interest rate	Cost	Value	Maturity
	and maturity date			

(2) A table containing the following unaudited information

for each of the previous four quarters in the following form;

(Malae of fund)

and amounts are unmericed

(uirtar ended Annualized rate of total recurs on a Average percentage of net assets investic during the quarter in: Avorage duily dollar-weighted cours outstanding average maturity ouring the quarter. ? during the quarter. U. S. Certificates Binders Commercial liner ' of deposit securizness pupur Treasury Other .

1. Notes of the sent of the distributions made with respect to a share obtaineding ouring the quarter plus the change in the sente whice curring the quarter to the net asset value of a share at the beginning of the quarter shown on an annualized baris. (If the functions a sales lost this footnote should state that this amount does not take such a load into effect. If a periodic charge is made against accounts, the per share return must include the effect of the maximum per share charge.)

2. The average cally collar-weighted average maturity is computed by dividing the sum of the cally collar-weighted antarities for each day is the quarter. The daily collar-weighted average maturity is computed by maltiplying the value of each security owned that day by the number of days left to maturity for each security ung dividing the sum of these products by the value of all securities owned that day.

3. The average percentage of net assets invested during the quarter is derived by adding the total value of each separate catagory each , ray of the quarter and dividing by the sum of the value of each cay's net assets during the quarter

4. Jost Aut include documented discount notes.

 Any category or type of security which represents on an average 10 percent or more of the average total assets for any quarter enouge be listed separately.)

Dite:

ATTACHMENT C

TION OF TECHNICAL CONCEPTS AND COMPUTER SIMULATIONS

Present Earning Rates and Historical Returns

A. Pricing of Individual Portfolio Securities

The prices of short-term debt securities are normally quoted in terms of their "yield to maturity." For example, a dealer or issuer may offer a security which matures for \$1,030 in 180 days to yield 6% to maturity. Its price would be \$1,000 because an investor who paid \$1,000 would have a gain of \$30 at maturity — an annualized yield to maturity of \$60 or 6%. 1/

(1) Market Valuation

A fund which "marks to the market" ("market fund") will obtain a yield quotation for each security based on actual market quotations for that security or for securities of similar quality and maturity.

If interest rates dropped to 5% at the end of 30 days, the value of the 180 day security would be \$1,009. Because it will mature for \$1,030 in 150 days, for it to yield 5% to maturity its price must be raised to \$1,009.

(2) Amortized Cost Valuation

A fund which values at amortized cost valuation ("cost fund") assumes a constant proportional increase in the value of the security to maturity. Thus, for the security priced at \$1,000 with a maturity value of \$1,030 in 180 days (6 months), the amortized cost value would increase at the rate of \$5 a month until maturity. The value at the end of 30 days would be \$1,005, regardless of the fact that the market value at the end of 30 days was \$1,009. No recognition would be given to \$4 which resulted from market appreciation due to the decline in interest rates.

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1/ The rates quoted for different types of instruments, e.g., treasury bills, bank certificates of deposit, commercial paper are calculated using different formulas but the general principle is the same. The formulas presented in this attachment are somewhat simplified.

t Earning Rate ("PER")

The "present earning rate" of a portfolio of securities is the birage of the yields to maturity of the securities in the portfolio, weighted by the value of each security and net of expenses. For example, assume that a portfolio with a current value of \$30,000 contained the following three securities:

	Value	Yield to Maturity		
A	\$ 5,000	5.5%		
В	10,000	6.0%		
С	15,000	6.5%		

The present earning rate would not be 6%, the simple average, but rather 6.17%, the asset weighted average. This is expressed by the following formula:

(for simplicity, the effect of fund expenses is not included)

 $5,000 \times 5.5$ + 10,000 × 6 + 15,000 × 6.5 = 6.17 5,000 + 10,000 + 15,000

For securities valued at market, the yield to maturity for each security would be the current market rate of interest for that security and the "value" would be the market value which is based on this rate.

We are presently considering whether the present earning rate should be adopted as the standardized current quotation for money market funds. Its use in this attachment will be for the purpose of comparing the returns of different hypothetical funds.

Portfolio Maturity

The "weighted average portfolio maturity" is the average of the by remaining to maturity for each security in the portfolio, weighted by the asset value of each security. For example, suppose a portfolio with a current value of \$30,000 contains the following three securities:

	Value	Days Remaining to Maturity
A	\$ 5,000	. 30
В	10,000	100
С	15,000	170

The simple average portfolio maturity would be 100 days. The asset weighted average would be 123 days. This is expressed by the following formula:

 $5,000 \times 30 + 10,000 \times 100 + 15,000 \times 170$ 5,000 + 10,000 + 15,000 = 123 days

For securities with remaining maturities of 60 days or less the "value" of the security might be the amortized cost or the market value depending on which method of valuation is used.

D. Historical Total Return

The historical total return over a month is the return an investor who has invested at the beginning of the month, reinvested all distributions during the month, and withdrew the total value of his account at the end of the month would actually receive. This return is normally expressed as an annualized rate. For example, if he invested \$1,000 at the beginning of the month and withdrew \$1,010 at the end of the month, his annualized return would be \$120 or 12%.

E. Basis Points

Differences in historical rates of return or yields to maturity are often expressed in basis points, which represent 1/100 of a percentage point. Thus interest rates of 6.78% and 6.79% differ by one basis point or .01%. Total Return

The different approaches taken to valuation and yield quotations and their consequences can be most easily understood in the context of a hypothetical illustration. 2/ While this example is highly simplified, it fairly portrays the extent of the differences that can occur between cost and market valuation.

Assume that over one month interest rates drop from 6% to 5%. 3/Two money market funds start the month with their entire portfolios invested at 6%: one a cost fund; the other a market fund. Each has an average portfolio maturity of 120 days which remains constant over the month. 4/ To simplify the illustration further, assume that the rates for all short-term debt securities are the same, regardless of the time to maturity. 5/

(1) The Market Fund

When interest rates decline, the securities in the market fund's portfolio will be marked up in value so that their yield to maturity will decrease to equal current interest rates. The resulting unrealized appreciation will increase the total return of the fund over the month. The appreciation resulting from a decline in interest rates becomes greater as the average portfolio maturity becomes longer, as is shown in Figure 1 which follows.

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- 2/ We also conducted more realistic, but complex, studies using computer simulations of money market fund portfolios. The results of this analysis are presented at pp.12 to 21, infra.
- 3/ During the period from January 1973 through June of 1975, interest rates on prime commercial paper changed an average of 21 basis points per week or about 91 basis points per month.
- 4/ Butler's Money Market Fund Report for January 26, 1976, lists the average portfolio maturity for all money market funds as 110 days, where the average is weighted by fund assets.
- 5/ The situation where the rates for all securities of a particular type are the same regardless of time to maturity is referred to as a "flat yield curve." Normally, the rates are higher for securities with a longer time to maturity. This is referred to as an "upward sloping yield curve."

For a market fund, unlike a cost fund, the present rate on a given day represents the average interest rate in valuing the portfolio on that day. The example portrayed. Figure 1 on page 6, assumes that interest rates, and thus the present earning rate ("PER"), have declined from 6% to 5% during the month, and that over the month the average of the present earning rates on each day of the month was 5.5%. With these assumptions, the total return over the month would be 9.5%.

The diagram below indicates that the total return of 9.5% can be expressed as the average of the present earning rates on each day during the month (5.5%) plus an additional 4%. The additional 4% arises from the 1% decline in present earning rates multiplied by a factor of 4 (4 being the average portfolio maturity in months). This relationship can be expressed mathematically as follows:

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4)

9.5%

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Average Present Earning Rate During Month	Decline in Present Earning Rates During Month	Average Portfolio Maturity in Months	Total Return Over the Month
		21. 11011015	ronui

5.5%

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(18



The Market Fund

Effect on Total Return of a Decline in Interest Rates from 6% to 5% over 1 Month



Figure 1 indicates that the longer the average portfolio to the greater the effect a change in interest rates would have total return. If the average portfolio maturity had been 150 (5 months) the 1% decline in present earning rates would be ultiplied by 5 and the total return would have been 10.5%. Hence good money managers try to be as "long" as possible when they expect interest rates to drop. Therefore, it is important to know the average maturity of the portfolio.

The present earning rate indicates what a fund would earn if interest rates remained constant. Thus, in the above example, if interest rates remained constant at 6% through the month the present earning rate would also have remained level at 6%, and the total return over the month would likewise have been 6%. However, the example shows that a relatively small change in interest rates can have a greatly magnified effect on the total return. Thus, the present earning rate should not be interpreted as a projection of future returns. Rather it provides information about the current earning ability of the fund which historical return data cannot give. In the example, after interest rates declined from 6% to 5%, the present earning rate of the fund was 5%. The historical total return of 9.5% during the month would not be indicative of the current earning ability of the fund at the end of the month. In fact a higher total return is associated with a decline in the present earning rate.

Rising interest rates have the opposite effect on total If interest rates rise during a month, the securities in the return. portfolio will have to be marked down in value so that their yield to maturity will increase to equal current interest rates. This situation is illustrated in Figure 2 below. Here the present earning rate is assumed to have risen from 5% to 6% during the month, with the average of the present earning rates on each day during the month being 5.5%. Under these assumptions the total return over the month would be 1.5%. Figure 2 indicates that the total return over the month of 1.5% can be expressed as the average of the present earning rates over the month (5.5%) less 4%. The 4% decrease is due to the 1% rise in present earning rates over the month multiplied by a factor of 4 (4 being the average portfolio maturity in months). Thus, to minimize market depreciation, good money managers try to be as short as possible when they expect interest rates to rise.



The Market Fund





Figure 2 indicates that the average portfolio maturity magnified" effect on the total return as in Figure 1, the longer the average portfolio maturity the greater the return would be reduced due to rising interest rates. If the average portfolio maturity were 180 days (6 months) the 1% rise would be multiplied by 6 and the total return would have been -.5% (5.5% less 6%). Thus a sufficiently long average portfolio maturity can on occasion result in zero or negative returns for brief periods of time.

These examples serve to illustrate how the present earning rate, average portfolio maturity, and historical total return can be used by investors in making an investment decision and in evaluating the ability of management.

(a) <u>Present Earning Rate</u>: The present earning rate indicates the current earning ability, or what the fund will earn tomorrow if interest rates stay the same. However, the results an investor will actually receive will depend primarily on future changes in interest rates. If interest rates should decline, the total rate of return would include market appreciation; if interest rates rise it would include market depreciation.

(b) <u>Average Portfolio Maturity</u>: If an investor expects interest rates to decline he should purchase a fund with a long average portfolio maturity; if he expects rates to rise he should purchase a fund with a short maturity. The extent of any market appreciation or depreciation is magnified as the average portfolio maturity becomes longer. Because future changes in interest rates are uncertain and interest rates may rise, a long average maturity is associated with a greater degree of risk.

(c) Historical Total Return: If the investor does not have the time or the inclination to make decisions regarding portfolio selection or timing, he may wish to determine which fund managers have been most successful in achieving a high rate of return in the past. The total return provides a basis for comparing and evaluating the ability of management. For example, if an investor prefers not to try to estimate future changes in interest rates he can attempt to find a fund manager who can, as evidenced by a high total return.

(2) The Cost Fund

Again assume that interest rates drop from 6% to 5% over a month and a fund started the month its entire portfolio invested at 6%, and its average portfolio maturity is 120 days. 6/ However, in this case, assume that amortized cost valuation is used.

6/ Under the interpretation which we recommend be issued, cost valuation would be permitted only for securities with less than 60 days remaining to maturity.

the month, about one-eighth 7/ of the securities in the portto would have matured and the proceeds would have been reinvested the lower current rates. The remaining seven-eighths of the portfolio would continue to accrue income at the rate of 6%. On this basis we have calculated that at the end of the month, the portfolio would be accruing income at the rate of 5.94%. The rate at which income is accrued will be referred to as "current income." It is the return that a cost fund actually paid out on that day (disregarding any realized gains or losses), since there is no unrealized appreciation or depreciation in a cost fund. In addition, for a cost fund, the accrued income on a given day would be essentially the same as the present earning rate on that day because that is what an investment in the cost fund would start to earn initially.

The average historical return for the cost fund over the entire month would be about 5.97% (i.e., midway between the 6.00% accrual rate at the beginning of the month and the 5.94% accrual rate at the end of the month).

G. Differences Between Cost and Market Valuation

(1) Difference in Total Returns

In the example where a decline in interest rates was assumed, an investor in the cost fund would have received an average return over the month of 5.97%, while an investor in the market fund would have received 9.50%, a difference of 353 basis points. Another way of expressing this difference would be to say that the investment earnings for the market fund over the month are about 60% greater than for the cost fund (3.53/5.97 = 60%).

(2) Difference in Present Earning Rates

The present earning rate for the market fund at the end of the month was 5%. If interest rates remained at 5%, the market fund would continue to pay out a return of 5% each day. The cost fund, however, had a present earning rate of 5.94% at the end of the month and it would pay out a return greater than 5% until the portfolio completely rolled over, which would take 240 days in this example. Measured over the entire 240 day period, the return for both funds would be the same.

^{7/} For simplicity, the fund is assumed to purchase a new 240 day security each day. Thus, at any given time the average portfolio maturity (i.e., the average time remaining to maturity) is 120 days. It would take 240 days for the portfolio to completely roll over. In 30 days, about one-eighth of the portfolio would have rolled over.

parisons Between Cost and Market Funds

- (1) Comparisons of Present Earning Rates
 - a. Between Market Funds

If two market funds have the same portfolio, they will have the same present earning rate. A difference in present earning rates would indicate differences in the makeup of the portfolios. For example, if one fund has a higher present earning rate it would indicate:

- (i) a longer average portfolio maturity (since in the case of the typical "upward sloping" yield curve, longer maturities have higher yield);
- (ii) more risky securities (which normally would have higher yields); or
- (iii) superior selection of securities
 (success in trading securities to
 maximize yield).
- b. Between a Cost and a Market Fund

During periods of declining interest rates a cost fund would normally have a higher present earning rate than a market fund. The fact that its present earning rate is higher results from the cost fund's securities being undervalued relative to the market.

During periods of rising interest rates the cost fund would have a lower present earning rate which means its securities are overvalued.

Thus, the present earning rate for a cost fund generally will differ from a market fund even if both funds have exactly the same portfolio. Unlike comparisons of present earning rates of two market funds, no implications can be drawn about the relative quality of the portfolios or the ability of management. Differences in present earning rates between a cost and a market fund are a result of differences in valuation.

On the other hand, differences in present earning rates between two market funds indicate differences in the makeup of the portfolios. Thus, if use of amortized cost valuation is continued, comparisons of present earning rates or any other type of "yield" quotation would not generally be very meaningful because an investor would not know what implications to draw. Thus, if fund quotations are to be comparable, cost valuation would have to be limited to securities with short maturities where differences between cost and market valuation are not on the average material. Only under such circumstances would quotations calculated the same way be useful in comparing money market funds.

(2) Comparisons of Historical Total Returns

a. Between Market Funds

For a market fund, the decisions of management with respect to market timing and choice of maturities in periods of rising and falling rates are immediately reflected in the total return through unrealized appreciation or depreciation. By comparing total returns investors can evaluate the ability of different managers both during periods of rising and falling interest rates.

b. Between a Cost and a Market Fund

When cost valuation is used, any gains or losses due to changes in interest rates, in effect, are spread out over the life of the portfolio and are merged with the effects of good and bad investment decisions by management. Thus, it would be impossible for an investor to isolate or meaningfully compare the relative ability of management over short-term periods. However, if cost valuation is limited to securities with remaining maturities of under 60 days, as we recommend, these differences would not be material.

II. Analysis of Differences Between Amortized Cost and Market Valuation Based on Computer Simulations

In order to determine the circumstances under which cost valuation might be appropriate and to examine the differences between cost and market valuation, we conducted computer simulations of hypothetical portfolios of money market instruments. Our simulations were based on actual interest rates for both prime commercial paper and Treasury bills and covered the period from the beginning of 1973 through June of 1975. 8/ They attempt to illustrate in concrete terms how yield quotations and historical return data may differ depending upon the maturities of the securities in the portfolio and on the valuation method utilized (e.g., amortized cost or market). They were also used to investigate the extent of the dilution that might result from the use of cost valuation.

^{8/} This was a period of unprecedented fluctuations in interest rates. During 1973, interest rates on prime commercial paper increased from 5.6% at the beginning of the year to 10.5%, and then in early 1974, declined to 6.8%. A high of 12% was reached later in 1974 and in early 1975 rates dropped to 6%. Interest rates on Treasury bills fluctuated in the range of 5% to 9% over this 2-1/2 year period but tended to have more frequent swings up and down than prime commercial paper.

Hypothetical portfolios of six different maturities were used. 9/ meach case, one security was assumed to mature each week and the proceeds reinvested in a new security of the same maturity. Thus, the average maturity of any portfolio will be about half the maturity of the individual securities the fund is assumed to purchase. For example, a fund which purchased 60-day securities would have an average portfolio maturity of about 30 days because at any given time one security in the portfolio will have one week to maturity, another 2, another 3 and so on.

A. Average Differences in Historical Returns

The rates of total return over the previous 90 days 10/ were calculated on both a cost and a market basis. Absolute differences between these returns were then determined and average over the entire 2-1/2 year period. The resulting average differences in rates of return were then converted to dollars on an investment of \$10.00.

The average differences in historical rates of total return of cost and market funds investing in prime commercial paper and Treasury bills are set forth in Table 1, below, for the six different portfolio maturities. 11/ Two different assumptions were made with respect to the use of cost valuation:

- "Cut-off at maturity of instrument" (i.e., cost valuation is used from time of purchase until maturity for all securities in the portfolio); and
- (2) "60-day cut-off" (i.e., cost valuation is used only for securities with 60 days or less remaining until maturity) as in our recommendation.

- 10/ The average period over which money remained in money market funds during 1974-1975 was 4 to 6 months.
- 11/ Interest rates on bank certificates of deposit and bankers acceptances tend to be similar to the rates on prime commercial paper.

^{9/} Maturities of 4 weeks, 8 weeks, 13 weeks, 17 weeks, 26 weeks and 39 weeks were used. These maturities correspond approximately to 30-day, 60-day, 90-day, 120-day, 180-day and 270-day securities and for simplicity we shall refer to them on this basis.

Table 1

Average Differences in Historical Returns Over Three-Month Periods

		Average Differences in Dollars for a \$10 Share					
		Prime Commercial Paper		Treasury	Bills		
Maturity of <u>Instrument</u>	Average Portfolio Maturity (Days)	Cut-off at Maturity of Instrument	60-day Cut-off*	Cut-off at Maturity of Instrument	60-day Cut-off*		
30-day	15	.00125	.00125	.0014	.0014		
60-day	30	.00425	.00425	.0042	.0042		
90-day	45	.01000	.00267	.0082	.0026		
120-day	.60	.01525	.00204	.0117	.0020		
180-day	90	.02875	.00133	.0198	.0013		
270-day	1.35	.05250	.00089	.0322	.0009		

* The fund would value securities purchased with more than 60 days to maturity at market down to the 60th day. It then assumes a constant proportional increase in value until maturity based on the market value on the 60th day.

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One of the questions we were faced with was whether to recommend 30-day, 60-day, or 90-day cut-off for the use of cost valuation. 12/ able 1 indicates that for a fund which invests in 60-day securities (with an average portfolio maturity of 30 days) on the average the results of an investment of \$10.00 would differ by about \$.0042 over any threemonth period. This average difference amounts to less than one-half a cent on \$10.00 and thus, cost valuation provides the same degree of accuracy as rounding share values for ordinary mutual funds to the nearest cent on \$10.00

For 90-day securities, however, Table 1 indicates that the average difference over three month periods would amount to a full cent on \$10.00 on commercial paper and \$.0082 on Treasury bills. Thus, using cost valuation for 90-day securities would not give accuracy to the nearest one cent on \$10.00.

Perhaps the most telling comparison of the effects of a 60-day vs. a 90-day cut-off on historical total rates of return is the contrast between the \$.01 per share difference using a 90-day cut-off on a portfolio of 90-day commercial paper versus \$.0026 difference for the same portfolio under our 60-day cut-off. For a portfolio of 90-day Treasury bills, the comparison is between a difference of \$.0082 and \$.0026. The reason the average differences diminish at 90-days where a 60 day cut-off for cost valuation is used is that a greater percentage of securities valued at market, compared to a fund that bought only 60-day securities and valued all of them at cost. Thus, by using cost to 60 days differences in total return for portfolios containing securities with remaining maturities longer than 60 days would be reduced and greater comparability would be gained.

B. Average Differences in Present Earning Rates

To concisely summarize the differences in present earning rates that might result from the use of cost vs. market valuation, we calculated the average differences in these rates in the same manner as described above for historical returns. These average differences are listed in Table 2, below, based on investments in prime commercial paper and Treasury bills. They are shown for the six different average portfolio maturities and are expressed in terms of basis points.

^{12/} Both IDS Cash Management Fund and The Vanguard Group of Investment Companies recommended a 90-day cut-off for cost valuation in letters to the Division. Several market funds recommended a 30-day cut-off.

Table 2

Average Differences in Present Earning Rates

Average Differences in Basis Points

Maturity of <u>Instrument</u>	Average Portfolio Maturity (Days)	Prime Comme Cut-off at Maturity of Instrument	rcial Paper 60-day <u>Cut-off*</u>	<u>Treasury Bills</u> Cut-off at Maturity of 60-da <u>Instrument</u> Cut-o		
30-day	15	27	27	26	26	
60-day	30	52	52	42	42	
90-day	45	78	32	54	26	
120-day	60	98	25	63	20	
180-day	90	134	16	. 78	13	
270-day	135	162	11	92	7	

* The fund would value securities purchased with more than 60 days to maturity at market down to the 60th day. It then assumes a constant proportional increase in value until maturity based on the market value on the 60th day. In examining the relative impact of a 30-day, 60-day or 90-day off for cost valuation, we also considered the extent of possible differences in present earning rates. Table 2 shows that for a portfolio of prime commercial paper the average difference for a 30-day cut-off would be 27 basis points. For 60 and 90-day cut-offs, the average differences would be 52 and 78 basis points respectively.

While, admittedly, an average difference of 52 basis points might be considered significant, we were persuaded to recommend a 60-day cut-off rather than a shorter one because, as with historical total returns, the difference is greatest for a portfolio of 60-day securities. As more securities of over 60-day maturities are included in fund portfolios, a smaller portion of the portfolio will be valued at cost and the differences in present earning rates will diminish. Moreover, few funds will want to remain under 60 days (average portfolio maturity 30 days). Therefore, we believe it is more realistic to contrast 60 and 90-day cut-offs for a portfolio of 90-day securities.

Based on that comparison, we were persuaded not to permit cost valuation for securities with remaining maturities of 90 days. As noted above, the 78 basis points average difference in present earning rates for a portfolio of prime commercial paper using a 90-day cut-off had to be contrasted with an average difference of 32 basis points using a 60-day cut-off. For a portfolio of 90-day Treasury bills, the choice was between average differences of 26 basis points using 60 days and 54 basis points using 90 days.

If the Commission were to permit cost valuation to 90 days, it is likely that many funds would limit themselves to 90-day securities, thus sacrificing the advantages of the yield curve and maximizing the potential differences in present earning rate quotations. Both results are inconsistent with the investment objective of money market funds maximization of yield consistent with safety of principal.

C. Dilution of a Cost Fund's Return

(1) How Dilution Can Occur When Cost Valuation is Used

When a fund values at cost, at times its shares will be overvalued relative to the market, and at other times they will be undervalued. If a cost fund has net sales while its shares are undervalued, or net redempotions while its shares are overvalued, this will dilute the long term return of the fund. 13/

13/ The same analysis might be made in terms of dilution of asset values.

When interest rates decline this type of dilution could because a cost fund will continue to pay out a higher return based on previous rates. Such fund's present earning rate would be higher than current interest rates and higher than the present earning rate for a market fund. If it had net sales during such a period, the cost fund would have to invest its new money at lower current interest rates. The addition of such new lower-yielding securities would cause the return for the fund to be less than what it would have been if there had been no new sales.

When interest rates rise, the cost fund will continue to pay out a lower return based on the previous rates. Its present earning rate would be lower than current interest rates, and lower than the present earning rate for a market fund. If it had net redemptions during such period, the cost fund could use the proceeds of maturing securities to meet part or all of the redemptions. However, this would preclude it from reinvesting these amounts at the higher current rates which would have improved the return of the fund. The fund could also meet redemptions by selling portfolio securities. However, since its portfolio would be overvalued at this point, if the fund sold portfolio securities it would pay out more to the redeeming shareholders than it could realize through the sale of the underlying securities. This again would dilute the longterm return of the fund.

Thus, in a rising or falling market an investor who switched from a cost to a market fund, and back, depending on which has the highest present earning rate, will always dilute the cost fund. For this type of dilution to occur, an investor does not have to be highly sophisticated to increase his own return at the expense of the cost fund. All he needs to do is pick the fund with the higher present earning rate. He need not forecast future changes in interest rates.

(2) Analysis of Dilution

We investigated the extent of possible dilution of a cost fund assuming net sales when shares were undervalued and net redemptions when shares were overvalued. The cost fund was assumed to have net sales when its present earning rate was higher than current interest rates and to have net redemptions when its present rate was lower than current interest rates.

Three different levels of net sales/redemptions were assumed: 3% of assets per week, 6% of assets per week, and 9% of assets per week. How realistic are these assumptions? During the 6 month period from August 1974 through January a period of rising interest rates, net sales for all money market ands averaged 6% of assets per week. During this period, gross sales averaged 8% of assets per week.

During the month of December, 1975, several smaller funds had net sales exceeding 6% of assets per week. <u>14</u>/ (Incidently, this was a period of declining interest rates, when a cost fund's shares are undervalued and net sales can result in dilution.) The net weekly sales and gross weekly sales as a percent of assets were as follows:

Table 3

Sales as a Percent of Assets for Smaller Money Market Funds

Assets (\$ Million)	Fund	Valuation Method	Net Weekly Sales as a Percent of Assets	Gross Weekly Sales as a Percent of Assets
28.4	Dreyfus Money Market	Cost*	6.1%	10.68
16.6	Fed Fund	Cost*	6.9%	10.1%
9.3	S&P/InterCapital Fund	Cost*	11.9%	14.6%
9.1	Fund for Govt. Investors	Cost	7.9%	15.2%
4.8	Whitehall Money Market	Market	9.98	16.8%
3.2	National Liquid Reserves	Market	10.6%	11.5%

* These Funds have a "floating" net asset value set at \$1.00 and thus are the functional equivalent of cost funds although they use market valuation.

During December, 1975, the gross sales of all money market funds amounted to 4.4% of total assets per week and gross redemptions amounted to 4.3% of total assets per week. More recent figures confirm that there has been a very rapid flow of money in and out of these funds. Thus, we believe that the assumed levels of net sales/redemptions of 3%, 6% and 9% are realistic and representative of actual levels of sales and redemptions for money market funds.

^{14/} As of March 8, 1976, 19 of the 36 money market funds in Butler's Money Fund Report had total net assets of \$30 million.

As indicated above, for dilution to occur, the cost fund must net sales when its shares are undervalued or net redemptions when its hares are overvalued.

In our computer simulation program, we compared the results of a cost fund assuming no sales or redemptions with the results assuming net sales/redemptions of 3%, 6% and 9% of assets each week depending whether the present earning rate for the cost fund is greater/lesser than current interest rates. The comparison was made for each of the six maturities. Each month the return of the cost fund being diluted was less than what the return would have been if there had been no sales or redemptions. Some months the reduction was greater than others. The average reductions over the 2-1/2 year period covered are set forth in Table 4 and is expressed in terms of basis points.

Table 4 shows that the dilution can be significant if the fund purchases 180-day or 270-day securities, especially for the higher net sales/ redemptions assumptions. These are highlighted by the examples beneath the dashed diagonal line on the Table. For example, in the case where the cost fund purchases 180-day securities and there are net sales or redemptions of 6% of assets per week in the pattern necessary to cause dilution, the Table shows that the cost fund's return was reduced by an average of 66 basis points. The average return of the fund over the 2-1/2 year period covered was 8.64%, and so a reduction of 66 basis points would mean that 7.6% of the investment income would be lost through dilution (7.6% = .66/8/64).

Unlike the differences shown in Tables 1 and 2, the effect of dilution does not average out over the long run, but is cumulative. For example, an extra 66 basis points would amount to an extra 1.6 cents on an investment of \$10 over a 90 day period but it would amount to an extra 18 cents when earned over the 2-1/2 year period covered on the chart. For an investment of \$17,000, this would represent a loss of \$306 in return over the 2-1/2 years.

The outer range of potential dilution which we have found to date is illustrated by the practices of S&P/Intercapital Liquid Assets Fund. As indicated in Table 3 above, during December 1975, this fund had net sales of nearly 12% of assets per week. This was a period of declining interest rates when a cost fund's shares are undervalued and net sales can result in dilution. At that time, several large funds which valued at market had current yields ranging from 4.7% to 5.0% while InterCapital's reported yield of 6.1% was attracting new investors. Moreover, InterCapital's average portfolio maturity was 276 days, which is more than double the longest average portfolio maturity (135 days) shown on Table 4. <u>15</u>/ Thus, with 12% sales and a 276 day average maturity, depending upon changes in the interest rates during that period, its potential dilution could have far exceeded the maximum dilutive effect illustrated in Table 4.

15/ In March 1976, S&P/InterCapital's average maturity reached 340 days.

Table 4

Dilution of a Cost Fund's Return

Average Reduction in Return over 2-1/2 Year Period, Expressed in Terms of Basis Points

Net Sales/Redemption Assumption

Maturity of Instrument	Average Portfolic Maturity (Days)	3% of Assets <u>per Week</u>	6% of Assets <u>per Week</u>	9% of Assets per Week
30-day	15	l	2	4
60-day	30	4	9	13 _
90-day	45	11	21	- 30
120-day	60	17		47
180-day	90	35	66	94
270-day	135	60	114	164

ATTACHMENT D

THE ANALYSIS OF COMMENTS

The Commission received 36 public comments on its proposed position that all investment companies value short-term debt securities by "marking to market." The principal arguments raised in opposition to this proposal were that: (1) the requirement of "marking to market" should be limited to money market funds; (2) market quotations for money market instruments are not readily available and therefore, the Act gives fund boards of directors the discretion to determine "fair value" in "good faith", which some boards have determined to be represented by anortized cost value; and (3) continued use of anortized cost valuation is essential to those funds that wish to maintain stable dividends and a fixed net asset value per share. In addition, letters received after the expiration of the public comment period expressed opinions that: (1) "marking to market" is an impractical, inaccurate, and costly valuation method, and (2) if the Commission selected a cutoff point up to which amortized cost valuation could be used, a 60 day period was unnecessarily restrictive. 1/

In response to the public comments suggesting limitation of the Commission's position to the case of money market funds, the interpretation we are proposing is applicable primarily to these funds. We have, however, included within the scope of the interpretation certain other funds, described at pp. 10 to 11 of the memorandum, whose use of amortized cost valuation, we think, raises the same problems as those raised in the case of money market funds.

I. Lack of Commission Authority to Require Market Valuation

Some commentators assert that the Commission lacks the authority to require market valuation. They proceed from the premise that market quotations for money market instruments are not readily available:

"A closer reading of both Rule 2a-4 and Section 2(a)(41) indicates that the current valuation proposal...may be both an illegal attempt to amend Rule 2a-4 and a violation of the provisions of Section 2(a)(41)... Both the Rule and the section of the statute require portfolio securities to be valued at fair value by the board of directors in good faith except in the case of securities for which market quotations are readily available." 2/

However, from this it does not necessarily follow, as suggested by Money Market Management that:

"From this statutory pattern, which is reflected verbatim in the Rule, one can discern the clear intent of Congress

2/ Letter of Money Market Management, Inc. (February 27, 1976).

^{1/} Some of the letters discussed below were sent to the staff in connection with a public meeting it held on February 27, 1976, to solicit additional views.

to mandate pricing to market only when market 'quotations' are readily available." [emphasis in original]

Section 2(a)(41) and Rule 2a-4 do not mandate pricing to market only when quotations are readily available. Rather, they require market quotations to be used where readily available and in other cases, leave the responsibility to the board of directors to determine "fair value" in "good faith." Where the prices of securities are affected by interest rate movements, such market factors would appear relevant to a "good faith" determination of "fair value," regardless of whether market quotations are readily available or not. This has already been indicated by the Commission in Accounting Series Release No. 118 <u>3</u>/ which noted that "fair value" should take into account market factors which would affect the price at which a security could be sold.

We do not disagree entirely with those commentators who have suggested that where market quotations are not readily available the statute vests discretion as to valuation in the board of directors. We think, however, that such discretion is limited. The approach of the draft release is that beyond 60 days remaining to maturity, market factors will have a meaningful impact on the value of debt securities, and it would therefore not be in "good faith" for these factors to be ignored by using amortized cost valuation.

II. Need For A Stable Net Asset Value

At the heart of the position maintained by some advocates of amortized cost valuation is the overriding desire to maintain a stable net asset value per share:

"One of the major advantages that money market funds offer over other mutual funds and several alternative forms of investment is the ability to maintain a constant net asset value per share.... The maintenance of a constant net asset value is a crucial feature for many investors in money market funds. It is not simply a matter of shareholder preference or desire but a basic need and prerequisite to investing in a money market fund for many shareholders... " 4/

3/ See Memo, p. 10, n. 19.

4/ Standard and Poor's/InterCapital Liquid Asset Fund (March 22, 1976). This argument is also advanced by Money Market Management. It asserts that bank trust departments, whose investments comprise a significant portion of the fund's shares, require a stable net asset value and steady return. Money Market Management believes that it would lose this type of shareholder if it were not able to use cost valuation which can provide this feature of stability.

(Footnote continued on next page)

Although the net asset values of mutual funds typically fluctuate due to unrealized capital changes, we are not opposed, in principle, to the idea of a fixed net asset value per share. However, where a constant net asset value is obtained by using amortized cost valuation, or by "rounding" a floating \$1 net asset value, shareholders are not being credited for the unrealized capital appreciation and depreciation in the portfolio, and the potential for dilution exists. 5/

Some funds have contended that because they "hold to maturity" they will always get face value upon maturity and therefore, the unrealized gains and losses experienced through "marking to market" are fictitious (i.e., they will never be realized). However, by analogy, the net asset value of the typical mutual fund fluctuates due to paper gains or losses that may never be realized. In addition, a money market fund might have to sell securities before maturity to meet redemptions. Moreover, although the fund may hold to maturity, shareholders are constantly coming in and going out of the fund and should be credited with any unrealized capital changes that occur while they hold their shares. 6/

Under our approach, money market funds would continue to be able to maintain a constant net asset value per share, but they would have to do so in a manner that accurately credits investors with unrealized gains and losses. This could be done either by maintaining a very short average portfolio maturity, at the expense of the extra yield that could be obtained from longer term securities, or by distributing all unrealized changes (which would introduce greater volatility into the daily dividend).

(Footnote continued)

However, White Weld Money Market Fund (assets of \$91 million as of March 31, 1977, which also markets extensively to bank trust departments, marks to market and achieves a stable net asset value by distributing unrealized gains and losses. It has not experienced marketing difficulties with this method and supports our recommended approach. See Letter of White Weld, March 2, 1976.

- 5/ See Memo at pp.13 to 15.
- 6/ Some money market funds, despite a general policy of holding securities to maturity, often sell portfolio securities to "play the yield curve" and realize appreciation. For example, Capital Presevation Fund, Inc., has indicated that for some quarters realized gains have amounted to about 10 percent of the fund's total return.

Deficiencies of Marking to Market

The proposed valuation position was criticized by some commentators as impractical and imprecise because of the difficulty of attempting to arrive at a market value for securities in the absence of market quotations:

"There is no real market; absolute comparability of valuation will not be achieved by a rule requiring money market funds to 'mark to market,' since a fund must divine its own market quotation wherever one can be found.... While we do not support such a course, it is clear to us that no true uniformity of valuation can be had unless the Commission creates a 'procrustean bed' by mandating that all money market funds either (a) value their portfolios on the basis of amortized cost... or (b) value their portfolios by obtaining a quotation... from a common source." 7/

The proposal was also criticized as requiring a level of accuracy in valuation more precise than the available quotations on which such valuation would be based:

> "In effect, the Staff is saying that we must be very accurate — must measure to 1/20 of 1% on the basis of a 'market' yardstick, while the research of MMM indicates the yardstick may vary between 35 and 37 inches depending on the source of the so-called market information. This contrast of standards reminds one of the chemistry student who in his zeal to obtain a high grade made the computation in the experiment to four decimal points. Although impressed by the student's zeal, the professor had to remind him that the scale being used in this rather rudimentary class was at best accurate to one decimal point." 8/

Our research, which included discussions with managers of money market funds that "mark to market", and market makers in money market instruments, indicated that the market values for securities can be determined with reasonable accuracy. 9/ The active secondary market

- 8/ Letter of Money Market Management, Inc. (February 27, 1976).
- 9/ Charles Terrana, a representative of the Merrill, Lynch's Bond Pricing Service told us that a matrix pricing system could value money market securities accurately to within 12-1/2 basis points.

^{1/} Letter of Massachusetts Financial Services (March 3, 1976).

many money market instruments indicates the availability of motations which could be used for valuation purposes or to determine the "fair value" of similar securities. 10/ However, even if there should be a small degree of error in pricing money market instruments, the values obtained by "marking to market" are clearly closer to "reality" and "fair value" than is amortized cost valuation.

Another fear of the opponents of market valuation is that a small movement in market rates of interest will cause dramatic fluctuations in the yield a fund reports:

"If the fund's portfolio securities are valued to a degree of accuracy of one-tenth of one cent... per share, a rise in market yields on any one day of as little as 7 basis points would offset the entire amount of our daily income for that day... A change in market yields of as little as 2 basis points up or down from present levels would cause our daily income yield, which is presently a little under 6%, to fluctuate between zero and 12%." 11/

However, this observation is based on the effect of market valuation on InterCapital Liquid Asset Fund which on March 8, 1976, had an average portfolio maturity of 340 days, by far the longest of any money market fund. It would experience these fluctuations because longer term securities are more sensitive to interest rate movements. 12/

The portfolio values of other money market funds would not be as volatile. InterCapital Fund gains some extra basis points in return from its long portfolio maturity, but appears to disclaim the elements of risk and volatility that accompany longer-term paper. 13/ It appears to be shielding

- 10/ See Attachment F, and also, Instruments of the Money Market, Federal Reserve Bank of Richmond (1974).
- 11/ Letter of Standard and Poor's/InterCapital Liquid Asset Fund, (March 22, 1976).
- 12/ See Attachment C at p. 4.
- 13/ Under most circumstances, long term rates are higher than shortterm rates for this very reason — the purchaser of long term paper bears the risk that rates will rise or fall for a long period of time.

really passing these unrealized changes on to shareholders in an arbitrary manner which can cause significant dilution if it has net sales when its shares are undervalued or net redemptions when its shares are overvalued. The extent of such dilution is discussed in Attachment C at pp. 17 to 21.

IV. A 60 Day Cut-Off Is Unnecessarily Restrictive

We have proposed that cost valuation be permitted only for securities with remaining maturities of less than 60 days. Some have asserted that this 60 day period is too short. Instead, they suggest that cost valuation be permitted for securities with remaining maturities of 90 days. Others (notably Money Market Management) have proposed that cost valuation be permitted for a fund which has an average maturity of 120 days (the equivalent of a fund which purchases a 240day security each week).

We have tested these suggestions by examining their impact on hypothetical money market fund returns over three month periods based on actual interest rates on prime commercial paper from Janauary, 1973 through June, 1975. (During this period the average rate of return was 8.67%).

We found that returns on a portfolio of 240-day securities (average maturity 120 days) over such three month periods would vary on the average by 20% depending upon the valuation method utilized. $\underline{14}$ / We considered this too great a difference and rejected the suggestions that cost valuation be permitted for portfolios with an average maturity of 120 days.

For a fund which purchases 90-day securities (average portfolio maturity 45 days) investment results varied on the average by 4.6% over a three month period (\$10.00 on a \$217 return). By contrast, our 60day proposal (average portfolio maturity 30 days) would mean an average variation of 1.2% (\$2.67 on a \$217 return). 15/

^{14/} To illustrate, assume a \$10,000 investment in a money market fund. (The average investment was \$17,600 in December, 1975, based on Butler's Money Fund Report.) If the rate of return was 8.6%, the investment would earn \$867 over a year or \$217 over a quarter. If cost valuation were used, investment results would have varied on the average by \$43.40 or 20% (43.40/217.00).

^{15/} Stated differently, using a 90-day cut-off would have meant that when a market fund paid 8.67%, on the average, a cost fund's return could have been 8.27% or 9.07%. A 60-day cut-off would permit the 8.67% return to vary, on the average, from 8.56% to 8.78%.

Whether or not to require this degree of precision is not a ficult question:

- We considered the difference between a 2% variation and a 4.6% variation in rates of return to be meaningful.
- (2) The 4.6% variation for 90-day securities (average portfolio maturity 45 days) represents the <u>average</u> difference; on occasion the actual variation was as great as 10%. <u>16</u>/
- 16/ We discussed the results of our computer simulations with the officers and directors of Temporary Investment Fund on November 3, 1975. Our discussion focused on whether amortized cost valuation should be permitted for 45-day, 60-day, or 90-day securities. In an earlier letter (June 23, 1975) Temporary Investment Fund had taken the position that it would not be unreasonable for a board of directors to determine that amortized cost valuation for maturities of 30, 60, 90 or 120 days would represent fair value in certain circumstances.

At that meeting, we suggested it might be appropriate to limit cost valuation to securities with less than 45 days remaining to maturity (i.e., average portfolio maturity 23 days). After this meeting Michael J. Robinson, Vice President and Treasurer, suggested that the 45 days could be extended to 60 days and that the directors were concerned about the wide variations that can occur on occasion when 90-day securities are valued at cost:

"Our Directors were impressed with your studies. They feel the results very much support their original position on cost valuation. They believe your 45 days could be extended to 60 days but can offer no new arguments to support their conclusion. We were originally valuing securities with 90 days or less maturities at cost. The Directors, relying on their banking background, still believe this proper. They were however concerned, as you were, about those few abberations that occurred in your 90 day study." Letter of Temporary Investment Fund, November 18, 1975. (3) Assuming all funds used a standardized yield quotation, such as the present earning rate, if cost valuation is permitted for securities with up to 60 days remaining to maturity, the present earning rates of funds purchasing 60-day securities (average portfolio maturity of 30 days) could differ by 52 basis points on average, depending on whether cost or market valuation was used. However, because funds would probably buy securities longer than 60 days, some portion of all fund portfolios would be valued at market. Thus, if a fund had a 45 day average portfolio maturity and used cost valuation under 60 days, its present earning rate would differ from that of an identical "market fund" by only 26 to 32 basis points. 17/

Sixty days is the outer limit for which cost valuation can be permitted if present earning rates are to be comparable. If the period for which cost valuation is permitted were extended to 90 days the average difference in present earning rates would increase to 78 basis points and could, in some cases, exceed 150 basis points. Differences of this magnitude would seriously impair the comparability of present earning rates. <u>18</u>/

(4) There is a functioning secondary market for most money market securities with over 60 days to maturity. Fair value can be determined accurately and consistently from quotations in this market. 19/

17/ See Attachment C, at p.15.

- 18/ The adoption of a standard quotation such as present earning rate will remove one reason why yield quotations differ; which is, because funds use different formulas for calculating quotations. However, the present earning rates will vary significantly if funds use different methods of valuation. There can be fair comparisons of present earning rates only if the method of valuation is also standardized, or at least standardized to the extent that any differences are not material. See Attachment C, pp.15 to 17.
- 19/ See Attachment F, The Money Market.

ATTACHMENT E

RESULTS OF INVESTMENTS IN FIDELITY DAILY INCOME TRUST

The following table summarizes and translates the investment results of a shareholder in Fidelity Daily Income Trust ("FDIT") for various one month and three month periods. The figures are based on an investment of \$17,000, which is the average account size in FDIT. The table compares the return an investor would receive for different time periods depending upon whether cost or market valuation were used. For example, the fourth line indicates that if an investor bought \$17,000 worth of shares on April 1, 1975, and redeemed those shares on April 30, 1975, if the fund used cost valuation the investor would receive \$17,097.07 upon redemption. If the fund used market valuation that investor would have received \$17,074.12. The difference is due to unrealized depreciation which a fund using amortized cost would not take into account. The investor in a cost fund, in this situation, would upon redemption receive more than his proportionate share of fund assets and such redemption would dilute the assets and returns of the remaining shareholders.

The difference between the return using amortized cost valuation, and using market valuation amounts to \$22.95. Expressed as a percentage, this is 23.64 percent of the amortized cost return.

It should be noted that during the periods used for the chart below: (1) FDIT's portfolio maturity was relatively short-term, and (2) interest rates were relatively stable. Under different circumstances the differences between market valuation and amortized cost valuation could be significantly greater.

							I VISA	
DATE BOUGHT	DATE	AVERAGE PORTFOLIO MATURITY #	\$ UPON RE COST	LEMATICE) MARKET	DIFFEREN	ERC.ENTT	COST	MARKET
1/1/75	1/31/75	ZYAJ VSI	\$17,127.67	\$17.164.05	\$ 36.38	28.5 %	9.01	1.58
2/1/75	2/28/75	135	17,103.53	17,104.21	. 68	. 65	7.31	7.36
3/1175	3/31/75	124	17,106.74	17,107,10	. 34	,32	7.54	7.56
4/1/75	4/20/75	106	17.097.07	17,074.12	(22.95)	23.64	6.85	5.23
5/1175	5/21/75	45	17.094.01	17,115.09	21.08	22.42	6.64	8.12
6/1175	6/20/75	. 95	17,087.55	17,054.57	(32.98)	37.67	6.18	3.85
7/1/75	7/3//75	80	17.088.23	17,082.28	(5.95)	6.74	6.23	5.81
8/1/75	8/21/75	80	17. 088.91	17,084.66	(4.25)	4.78	6.28	5.98
4/1/75	9/20/75	62	17.086.87	17.091.46	4.59	5.28	6.13	6.46
10/175	10/31/75	82	17.090,27	17,129.20	38.93	43.13	6.37	9.12
11/175	1/20/20	79	17.085.00	17,076.50	(8.50)	10.00	6.00	5.40
11/175	12/2/15	98	17.087.55	17,103.36	15.81	18.06	6,18	7.30
12/1/13	1/31/75	149	17.083.81	17,104.55	20.74	24.75	5.92	7.38
1/1/16	7/29/26	139	17.070.55	17,048.28	(22.27)	31.57	4.98	3.41
$\frac{d(1;1/0)}{2(1,17)}$	2/21/10	101	17.073.44	.17,072.59	(. 85)	1.16	5.18	5.12
3/1/10	11/20/19	80	17.070.04	17, c 75. 31	5.27	7.52	4.94	5.32
7/1/15	5/20/10	<u> </u>	17.072.59	17,055.08	(17.51)	24.12	5.12	3.89
5/1/76	3/3///5	57		17 290 46	(1.57)	. 54	6.87	6.83
3/1/75	5/31/75	95	17,292.04	17,210,14		16.86	6.08	5.06
6/1/75	8/31/75	80	17, 258. 53	17,214.42	713.607	13.82	6.02	6.85
9/1/75	11/30/75	79	17,255.95	17,241.51		6 10	5.54	5.28
12/1/75	2/29/76	139	17,235.52	12,34 4.76	14.22	(20	4.93	4.62
3/1/76	5/31/76	54	17, 209.45	17,125.25	(13.20)	0.20		1

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ATTACHMENT F

THE MONEY MARKET

Money market instruments are various types of shortterm debt securities issued by the U.S. Government, banks and corporations. Each money market instrument has unique characteristics, and as a result, the money market is really a group of several distinct markets. Unlike the NYSE or AMEX the money market is not a physical place, but rather, a "telephone" market concentrated in major "money centers" that enables organizations with additional cash needs to find those with excess cash reserves.

The primary features of money market instruments are their short maturities and high liquidity. These enable lenders to put excess cash into interest bearing assets, while permitting them to recover their cash quickly with minimal risk of loss. In the money market small differences, measured in basis points, are important to all participants because the primary purpose of the money market is the optimization of short-term cash management.

An examination of money market instruments and how they are bought and sold was an initial step in our analysis of the Commission's proposal to require money market funds to use market valuation. 1/ Our findings are summarized below. They reveal that money market securities are traded and that the prices at which they are sold depends upon market factors that can be taken into account when valuing such securities.

I. MONEY MARKET INSTRUMENTS

A. Government Securities

(1) <u>Treasury Bills</u>. Treasury bills represent the obligation of the U.S. Government to pay the bearer a fixed sum after a specified number of days from the date of issue. They are sold at auction by the Treasury at a discount and are issued with maturities of 91, 182, or 365 days, and in five denominations ranging from \$10,000 to \$1 million.

<u>v</u>	In addition to our discussions with professionals in the money market field, our research included the following materials:
	Instruments of the Money Market, Federal Reserve Bank of Richmond (1974)
	Robinson, Roland. Financial Institutions (1960)
	Prather, Charles. Money and Banking (1965).
	Carson, Deane. Money and Finance (1967)
	Munn, Glenn. Encyclopedia of Banking and Finance (1973)
Treasury bills are often referred to as "the next thing to money," and are the most liquid of all money market instruments. If Government securities dealers maintain a large and highly organized secondary market for these instruments, which enables holders to get exact quotes on the bill they hold and to sell bills prior to maturity. Although quotes from different dealers will vary slightly, prevailing interest rates, and the supply of new bills determines the price at which bills can be sold in the secondary market.

(2) Federal Agency Securities. Various U.S. Government agencies issue debt obligations primarily to raise money for federal lending programs. Some of these agencies are government operated, in which case their issues are fully guaranteed by the government. In other cases the agencies are government sponsored private corporations. 2/ Although the issues of these agencies are not guaranteed it is implicit that the federal government will stand behind them. As of December 31, 1973, 31.2% of all outstanding agency issues had maturities of less than one year, and 50.2% had maturities of one to five years.

The liquidity of agency issues is a "notch" below Treasury bills; the most liquid being large issues from the older and best known agencies such as the Federal Home Loan Bank Board. Precise quotations on larger issues can be obtained from government securities dealers who also make markets in agency issues. However, some smaller or lesser known issues are sold on a "work-out basis." In the "work-out" situation, before bidding a dealer books for a buyer to whom he can sell. The ability of the Federal Open Market Committee to enter into repurchase agreements with respect to agency issues, since 1966, has tended to broaden and strengthen the secondary market for all agency issues.

B. Bank Obligations

(1) <u>Negotiable Certificates of Deposit</u>. A negotiable certificate of deposit is a marketable receipt for funds deposited in a bank for a specified period at a specified rate of interest. Although issued in denominations ranging from \$25,000 to \$10 million, denominations greater than \$100,000 are not subject to the interest rate ceilings of Regulation Q. Maturities usually vary from one to 18 months, However, in December 1973, 87% of outstanding certificates had maturities of four months or less.

1/	Prather.	note	1.	n	1	Sunna	at 100	1
			-,	P •	-,	<u>bupra</u> ,	av 100.	

2/ These agencies include: Federal National Mortgage Association (FNMA), Federal Land Banks, Federal Intermediate Credit Banks, Banks for Cooperatives, and Federal Home Loan Banks. The primary and secondary markets for certificates of sit can be broken into two distinct sub-groups: Primeme banks and regional banks. The top 9-15 banks issue their certificates directly and a large buyer can negotiate for favorable interest rates. When these banks have little need for more money, new issues will be scarce. However, a secondary market for negotiable certificates of deposits exists. Thus, the certificates of these banks could be picked up in the secondary market. The secondary market in certificates is of vital importance to the prime-name banks because it adds liquidity to their issues and makes them easier to market.

Regional banks, on the other hand, often market all their certificates locally. In other cases, they reach the market through dealers in New York who maintain a secondary market for these issues and make them more attractive.

Although interest rates and normal supply and demand forces influence the prices at which certificates of deposit are bought and sold, bank quality is also an important factor. Thus, smaller lesser known certificates are offered at a slightly higher interest rate than those of the big name banks. These predictable relationships between the rates on certificates of different banks, in the absence of exact quotations, can be used to approximate accurately the price of a certificate.

(2) <u>Bankers' Acceptances.</u> Typically arising from foreign trade transactions where a time draft is drawn by a foreign seller or the bank of a U.S. buyer, a bankers' acceptance represents the bank's unconditional promise to honor the draft upon its maturity. The acceptance can be sold by the foreign seller prior to maturity at a discount to an acceptance dealer or bank. Both the drawer, who endorses the acceptance when he negotiates it, and the accepting bank are obligors. 1/ Although maturities of bankers' acceptances generally range from 30-180 days, a maturity of 90 days is most common.

The secondary market in bankers' acceptances is not as extensive as that for Treasury bills, however, there are a number of dealers that specialize in acceptance trading. Moreover, because some acceptances are purchased and sold by Federal Reserve Banks for their own accounts, acceptances have added liquidity that certificates of deposit do not have. Prices of acceptances in the secondary market are readily quoted and are differentiated by maturities. Thus, market quotations don't vary on the basis of who the accepting bank is.

Thus, bankers' acceptances are sometimes referred to as "two-name paper."

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C. Corporate Obligations

(1) <u>Commercial Paper</u>. Generally speaking, commercial paper is an unsecured short-term promissory note sold at a discount by corporations and finance companies to raise cash for short-term needs. Since it is unsecured, issuers of commercial paper are usually large corporations with impeccable credit ratings. These notes are issued in multiples of \$1,000, in amounts ranging from \$5,000 to \$5 million or more.

Some issuers of commercial paper sell their issues through dealers (dealer paper). Other issuers, particularly finance companies, such as GMAC and Sears, sell their commercial paper directly to the buyers of the paper (directly placed). Maturities of dealer paper generally range from four to six months. The maturities of directly placed paper ranges from 30 to 270 days and up. 1/

Commercial paper can be "sold" prior to maturity. Directly placed paper can usually be sold only to the issuer who will repurchase as a courtesy to its lenders. With respect to dealer paper, each dealer will make a market in paper of the issuers whose paper it places and will bid on the paper even before finding a buyer. The price at which the dealer will purchase the paper is dependent upon what the going price would be for new paper of the same issuer, with the same remaining maturity. Dealer paper with a remaining maturity of 90 days or less is also eligible for rediscount at Federal Reserve Banks.

(2) Letters of Credit. Sometimes termed "documented discount notes," letters of credit are commercial paper accompanied by a standby guarantee of a bank (i.e. a letter of credit). This type of "two-name" paper is used by weaker issuers that would find it hard to market their own paper at a favorable rate of interest. The bank, in effect, is a guarantor of the corporation's debt. The secondary market for letters of credit is the same as that for ordinary commercial paper. However, the paper of the weaker issuers that use letters of credit is less desirable, and as a result, less liquid.

Because commercial paper with a maturity in excess of 270 days must be registered with the Commission /Securities Act of 1933, Section 3(a)(3)7, only a small volume of paper with maturities over 270 is issued.

D. Repurchase Agreements

Banks that need additional cash to meet their reserve requirements and dealers that need to finance inventory often enter into repurchase agreements. A repurchase agreement is the sale of a money market security, coupled with a obligation to repurchase the same security at a future date for the sales price plus interest. In effect, it is a form of borrowing with collateral. Generally, the "maturity" of a repurchase agreement is very short; often overnight or for the weekend. As a contractual commitment to repurchase, these agreemeets are not traded and thus their value is solely dependent upon the agreed rate of interest.

II. CONCLUSIONS

From this analysis, it is apparent that most money market instruments are traded in secondary markets. However, the depth and liquidity of these markets may be impaired on a few occasions. For example, in the aftermath of the Franklin National Bank failure the market for certificates of deposit, from all but the top banks was very weak.

The price at which money market instruments are sold is dependent on many market factors, including the prevailing interest rates. Moreover, dealer quotations are, in some cases, available for specific securities, and in other cases, available for a type of security, and can be used for valuing a portfolio of money market securities.

Dealers maintain sophisticated "quotation sheets" for money market instruments. In addition, as illustrated on the following page, the Wall Street Journal publishes daily some of this information. Exact quotations are published for Treasury bills and some agency issues. More general quotations are published for certificates of deposit, bankers' acceptances and commercial paper.



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Money Rates

Money Rates NEW YORK - Bankers acceptance offered rates quoted by one dealer: 30 days, 4.80%; 60 days, 4.85%; 90 days, 4.90%; 120 days, 5.10%; 150 days, 5.20%; 180 days, 5.4%; Federal funds in an open market: days inigh 4*8%; tow 4.11-16%; closing bid 44%; offered 44%; Prime lending rate at large New York banks: 64.%; Call money lant brokers on stock exchange collateral: 50% to 64%; Commercial paper placed directly by a major tinance company: 30 to 59 days, 44%; 60 to 89 days, 44%; 61 days, 44%; Commercial paper sold through deaters: 30 to 278; days, 44% to 6%; Cortificates of deposit (\$100,000 or more): top rates; paid by major banks in the newly issued market, one paid by major banks in the newly issued market, one for anti-s, 543%; one year, 6%; Rates shown are days a guideline to gangraf freeday. and deart necessarity represent actual transactions.

Wall Street Journal April 21, 1976

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ATTACHMENT G

Views of the Directorate of Economic Policy and Research

Subject: Valuation of Portfolio Securities

The Division of Investment Management has recommended that the **Commission adopt an interpretation** of Section 2(a)(4) of the Investment Company Act and Rule 2a-4 thereunder indicating that it shall be considered inappropriate under the provisions of the rule for a "money market" fund to value debt portfolio securities on an amortized cost basis, except in the case of securities with remaining maturities of 60 days or less. It also indicates that such valuation shall be considered inappropriate for any other type of registered open-end management investment company if such valuation materially affects the net asset value of the company's portfolio; and that any "money market" fund, which reflects unrealized capital changes in its net asset value, should calculate its share price (net asset value per share) with an accuracy of one-tenth of one percent. The stated objectives of these proposals are (1) to ensure that fund shares are sold and redeemed at prices which more accurately reflect the current market value of a company's portfolio of securities; and (2) to minimize the potential for any dilution of the equity or earnings of a company's current shareholders.

The Directorate supports the objectives of the proposed interpretation and its underlying principles. We differ with the proposal on two points. First, we believe the restriction on the use of the amortized cost method of valuation to debt securities which mature within 60 days is unnecessary, burdensome and ineffective. Second, we believe the interpretation could be applied to all registered open-end investment companies, if the Commission agrees with our alternative interpretation.

We submit that the stated objectives of the proposed interpretation can be met in a more cost-effective manner by adopting the following alternative interpretation: "The Commission believes that the use of amortized cost method of valuation by a registered open-end investment company can no longer be presumed to represent the "fair value" of portfolio securities for purposes of Rule 2a-4 because such valuation fails to reflect changes in interest rates, changes in the creditworthiness of the issuer or changes in other factors that might reasonably be expected to affect the price at which the security could be sold on the valuation date. However, the Commission will not object to the use of the amortized cost method of valuation as an estimate of fair value if the use of such method does not have a material impact on the net asset value of the company's portfolio of securities.

The probability that fluctuating interest rates will make the amortized cost method of valuation inappropriate increases with (1) the size of the fluctuations, (2) the percentage of the net asset value of the company's portfolio of securities which are valued on an amortized cost basis and (3) the dollar-weighted average maturity of the company's portfolio of securities which are valued on an amortized cost basis. The

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Commission expects each company to consider these factors in determining under what circumstances the amortized cost method of valuation is appropriate. The Commission believes that the valuation practices of a company should ensure that its shares are sold and redeemed at prices which reflect the current market value of the company's portfolio of securities and that the equity and earnings of the company's current stockholders are not diluted. "

The proposal to restrict the use of the amortized cost method of valuation is unnecessary because the stated objectives of the rule can be satisfied under our alternative proposal. The original proposal is ineffective because, under some circumstances, the use of the amortized cost method of valuation for debt securities which mature in 60 days or less could have a material impact on the net asset value of a company's portfolio of securities. It is burdensome because it will impose the costs involved in "marking to market" on some money market funds whose use of the amortized cost method of valuation would not have a material impact on the net asset value of a company's portfolio of securities.

We believe that the factors which determine the appropriateness of the amortized cost method of valuation are too complex to state categorically that it is inappropriate to value debt securities on an amortized cost basis unless those securities mature within 60 days.

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Investment Management justified the use of that limitation on the results of a simulation model. That simulation model assumed that a money market fund valued 100% of its portfolio on an amortized cost basis. If they had assumed only 50% of the portfolio was valued on an amortized cost basis, i.e., that market quotations are available for debt securities which represent the other 50% of the net asset value of the portfolio, the results of their simulation model would have indicated that a 90-day limitation was adequate to achieve their objectives. The appropriateness of the amortized cost method of valuation can only be determined by examining a particular portfolio of securities. Therefore, we believe that each company should determine the appropriateness of using the amortized cost method of valuation in light of its particular portfolio characteristics.

It could be argued that our alternative interpretation would make enforcement of the rule impracticable. To this argument, we offer two points. First, a simulation model such as the one presented by Investment Management could be used to determine whether the use of the amortized cost method of valuation had a material impact, under actual circumstances, on the net asset value of a company's portfolio of securities. Second, would it make sense to take enforcement action against a company if the company used the amortized cost method of valuation for debt securities maturing in 60 days or more, but the use of that method did not have a material impact on the net asset value of the company's portfolio of securities? We believe that would not make sense.

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