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Marvin Goodfriend

This paper contains preliminary findings from research work still in progress and should not be quoted without prior approval of the author.

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MONETARY MYSTIQUE: SECRECY AND CENTRAL BANKING

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Abstract

The paper contains a theoretical discussion of the role of secrecy in the implementation of monetary policy. It documents the Federal Reserve's defense of secrecy as argued in a recent Freedom of Information Act suit. The Federal Reserve's arguments are evaluated on the basis of economic theory. Theoretical papers related to the secrecy issue are reviewed. The discussion highlights a number of potential benefits and costs of central bank secrecy, and identifies some conditions under which secrecy could be socially beneficial.

\*The author is Economist and Vice President of the Federal Reserve Bank of Richmond. Alfred Broaddus, Monica Hargraves, and Robert King have provided valuable comments. This paper is being prepared for the January 1986 issue of the Journal of Monetary Economics honoring Karl Brunner. It has benefited from presentations at the University of Western Ontario Conference on Monetary and Financial Theory and Policy, and at the Federal Reserve System Committee on Financial Analysis at the Federal Reserve Bank of Minneapolis. The views expressed are solely those of the author and do not necessarily reflect those of the Federal Reserve Bank of Richmond, other Reserve Banks, or the Board of Governors of the Federal Reserve System.

## I. INTRODUCTION

In recent years, both the general perception of the importance of monetary policy and interest in following policy have increased greatly. Growing scrutiny of the Federal Reserve has made the press and the public more aware of the secrecy surrounding monetary policymaking.<sup>1</sup> Frustration with Federal Reserve secrecy is also apparent in the U.S. Congress.<sup>2</sup> The widespread use of "Fed watchers" attests to the fact that the Federal Reserve not only keeps secret significant information about policy, but that the value of its information is great.<sup>3</sup> Academic economists too have begun analyzing the role of central bank secrecy in models of monetary policy.<sup>4</sup>

While technical analysis of secrecy in monetary policymaking has only recently been undertaken, students of central banking have commented for years on the level of mystique and secrecy surrounding central banking. Karl Brunner, a lifelong student of central banking, has written:

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<sup>1</sup>For example, see Brekenfeld [1984], Clark [1983 and 1984], Herman [1983], and Rowen [1975]. Also see the extensive well-researched article by Reich [1984].

<sup>2</sup>For example, a report released in December 1983 by the House Banking Committee representing the views of the Democratic majority characterized the Fed as having a "near obsession" with secrecy about its goals and actions. See U.S. Congress [1983], p. 1. In April 1984, a bill was introduced by Republican Congressman Jack Kemp and 28 other Congressmen that proposed "prompt disclosure of certain decisions of the Open Market Committee of the Federal Reserve System," H.R. 5459 [1984]. Thus, congressional frustration over Federal Reserve secrecy appears to be bipartisan.

<sup>3</sup>See Petzinger [1983].

<sup>4</sup>Barro [1976], pp. 21-5, has an early discussion in a rational expectations context relevant to monetary policy secrecy. Lately, Backus and Driffill [1985], Barro [1986], Canzoneri [1985], Cukierman and Meltzer [1985], and Dotsey [1985] have analyzed models in which a monetary authority has private information which is relevant to policy.

Central Banking [has been] traditionally surrounded by a peculiar and protective political mystique. Criticism of Central Banks, if it occurred at all in the political arena, [has been] muted and infrequent. The Federal Reserve operated in the USA over decades with little criticism from the public or its political representatives. The same phenomenon can be found in many other countries. The political mystique of Central Banking was, and still is to some extent, widely expressed by an essentially metaphysical approach to monetary affairs and monetary policy-making. The possession of wisdom, perception and relevant knowledge is naturally attributed to the management of Central Banks. The possession of such knowledge and perception bearing on matters of concern to Central Banking is a function of the political position. The relevant knowledge seems automatically obtained with the appointment and could only be manifested to holders of the appropriate position. The mystique thrives on a pervasive impression that Central Banking is an esoteric art. Access to this art and its proper execution is confined to the initiated elite. The esoteric nature of the art is moreover revealed by an inherent impossibility to articulate its insights in explicit and intelligible words and sentences. Communication with the uninitiated breaks down. The proper attitude to be cultivated by the latter is trust and confidence in the initiated group's comprehension of the esoteric knowledge.<sup>5</sup>

Recently, as a result of the Freedom of Information Act of 1966 (FOIA), some evidence has become available on the motivation for Federal Reserve secrecy. The FOIA significantly reversed long-standing government information policy. Previously, Federal law allowed Federal agencies to keep documents confidential merely by arguing that secrecy was in the public interest. The FOIA replaced this general rule with a policy that gives anyone access to identifiable records without having to state a reason. Most importantly, in the FOIA the burden of proving the withholding of information to be necessary is placed on the Federal agency, and must be

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<sup>5</sup>Brunner [1981], p. 5. Supporting comment with respect to the Bank of England is found in Sayers [1957], pp. 43-5, and in Keynes [1971], p. 207. Acheson and Chant [1973], pp. 650-53, discuss secrecy with respect to the Bank of Canada.

justified on the basis of one of nine specific exemptions in the Act. In order to make public access to agency records under the FOIA more effective, a series of amendments to the Act was passed by Congress in 1974.<sup>6</sup>

In 1975, the Federal Open Market Committee (FOMC) of the Federal Reserve System was sued under the FOIA to make public immediately following each FOMC meeting the policy directive and minutes for that meeting. After six years of court proceedings, including a hearing before the U.S. Supreme Court, the case was decided in 1981. The court records for this case (the briefs, affidavits, and rulings) are available in the public domain. For the first time, the public has access to a detailed written Federal Reserve defense of secrecy. A primary purpose of this paper is to summarize and comment on the FOMC's case for secrecy as argued in these court records. In the process of revealing the value of secrecy from the FOMC's point of view, the paper also sheds light on FOMC concerns and objectives. In addition, this case provides a useful illustration of the role that monetary theory can play in a legal ruling.

The paper proceeds as follows. Section II traces the legal proceedings through the courts. The FOMC's defense of secrecy is presented in Section III. Section IV contains a critique of FOMC arguments for secrecy. In order to investigate the secrecy issue further, recent theoretical work related to the secrecy issue is reviewed in Section V. The discussion highlights a number of potential benefits and costs of central bank secrecy, and identifies some conditions under which secrecy could be socially beneficial. A brief summary concludes the paper.

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<sup>6</sup>See U.S. Congress [1975], especially pp. 8-11.

II. THE LEGAL PROCEEDINGS OF MERRILL, ET. AL.  
VS FEDERAL OPEN MARKET COMMITTEE

(1) In the U.S. District Court

In March 1975 a "Freedom of Information Act Request" on behalf of David R. Merrill, a student at Georgetown University Law Center, was made of the Board of Governors of the Federal Reserve System. Merrill asked for access to the Record of Policy Actions taken by the Federal Open Market Committee at its January and February 1975 meetings and the Memoranda of Discussion from those meetings. The request noted that an FOMC regulation stated that the Committee's policy directives would not be available to the public for approximately 90 days after their adoption and that this appeared to be a violation of the Freedom of Information Act. In April, after some further correspondence, Federal Reserve Board Governor Robert Holland stated that the Committee was not prepared to disclose policy actions and minutes immediately after an FOMC meeting and advised that a complaint for judicial review could be filed.<sup>8</sup> In May, a complaint was filed in U.S. District Court with Merrill (plaintiff) charging that the FOMC (defendant) had violated the Freedom of Information Act by deferring the public availability of its Records of Policy Action beyond the date of their adoption and by

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<sup>7</sup>The legal proceedings of Merrill vs FOMC are briefly summarized in the relevant Board of Governors of the Federal Reserve System Annual Reports.

<sup>8</sup>In April 1975, the FOMC announced that it was shortening the delayed release of its Record of Policy Actions from 90 to 45 days. The announcement pointed out that "[a] delay of approximately 90 days had been in effect since mid-1967 when the rules were changed to comply with the Freedom of Information Act. Prior to 1967, the records of policy actions were published only in the Board's Annual Report to Congress." See Board of Governors of the Federal Reserve System, Federal Reserve Bulletin, April 1975, p. 261.

delaying public release of "segregable factual" portions of the Memoranda of Discussion of its meetings for approximately five years following the relevant meeting.

In March 1976 the District Court found that

[FOMC's] records of policy actions are not papers which reflect the [FOMC's] group thinking in the process of working out its policy and determining what its law shall be. [FOMC's] records of policy actions are not pre-decisional nor part of the agency give-and-take--of the deliberative process--by which the decisions themselves are made. [FOMC's] records of policy actions are the decisions themselves, and, in the case of the "Records of Policy Actions", also the rationale therefor. [FOMC's] records of policy actions are the embodiment of the [FOMC's] effective law and policy.

A final question to be decided by the Court was whether the release of the documents by the FOMC 45 days after the meeting at which the policy actions are adopted and to which the Record of Policy Actions relates is current or prompt disclosure as required by the FOIA. On this matter the Court found that "by delaying the publication of the Domestic Policy Directive until 45 days after the meeting at which it was adopted and after another Domestic Policy Directive has been adopted, the FOMC never currently publishes its Domestic Policy Directive, but rather publishes one which is outdated."<sup>10</sup> As for the Memoranda of Discussion, the Court found Merrill entitled to the "reasonably segregable factual" portions of the Memoranda.

Finally, the Court concluded:

In finding that the FOMC may not delay the public disclosure of its records of policy actions nor the factual portions of its memoranda of discussion, the Court is not unmindful of the repeated insistence by the [FOMC] that such disclosure

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<sup>9</sup> Merrill...[1976], p. 14. Wherever quotation underlining appears in the paper, it appears in the quoted source itself.

<sup>10</sup> Ibid., p. 18.



would be injurious to its function and the nation's monetary and economic status. But the Freedom of Information Act requires prompt disclosure of non-exempt materials. FOMC has not satisfied the Court that the records sought in this proceeding are exempt from disclosure under any exemption in the Statute as enacted by Congress. If it is necessary for the FOMC to carry out its monetary policy in secrecy then that determination must be made by Congress and not this Court.

The U.S. District Court handed down a written decision favoring Merrill in March 1976. The Court found that the FOMC should make available for public inspection and copying the Records of Policy Actions within one business day after the Actions are adopted, and should make those portions of the Memoranda of Discussion containing "segregable statement of fact" promptly available. Thereupon, the FOMC filed a notice of appeal and the U.S. Court of Appeals again found in favor of Merrill.<sup>12</sup> The FOMC appealed the decision once more, and the case was heard by the U.S. Supreme Court.<sup>13</sup>

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<sup>11</sup>Ibid., p. 20.

<sup>12</sup>The Appeals Court decision is summarized by Federal Open Market Committee..., in Supreme Court Reporter [1982], p. 2807.

<sup>13</sup>In May 1976 the FOMC again voted to speed up publication of the Record of Policy Actions taken at each meeting, deciding that the policy record for a meeting should be released a few days after the next regularly scheduled meeting, rather than 45 days later. At the same time, the FOMC voted to discontinue its Memoranda of Discussion, that is, it voted to discontinue keeping detailed written minutes of FOMC proceedings as it had been doing since 1936. Consequently, the Memoranda of Discussion was no longer an issue in the case. See Board of Governors of the Federal Reserve System, Federal Reserve Bulletin, June 1976, pp. 552-53. Numerous letters from monetary economists on the value of the Memoranda of Discussion are included in U.S. Congress [1977]. Recently, Chairman Volcker has come out in favor of preparing and eventually releasing detailed FOMC minutes once again. See Volcker [1983], p. 841. However, the FOMC has not yet proceeded to do so.

(2) In the U.S. Supreme Court

In the U.S. Supreme Court, the FOMC advanced an argument that immediate release of the Domestic Policy Directive would jeopardize the Government's commercial interests by imposing substantial additional borrowing costs on the United States Treasury. The Supreme Court reiterated that the purpose of the FOIA is "to establish a general philosophy of full agency disclosure unless information is exempted under clearly delineated statutory language."<sup>14</sup> But in response to the FOMC's argument the Court said:

Exemption 5 [of the FOIA] incorporates a qualified privilege for confidential commercial information, at least to the extent that this information is generated by the Government itself in the process leading up to awarding a contract.

Although the analogy is not exact, we think that the Domestic Policy Directives and associated tolerance ranges are substantially similar to confidential commercial information generated in the process of awarding a contract. During the month that the Directives provide guidance to the Account Manager, they are surely confidential, and the information is commercial in nature because it relates to the buying and selling of securities on the open market. Moreover, the Directive and associated tolerance ranges are generated in the course of providing ongoing direction to the Account Manager in the execution of large-scale transactions in Government securities; they are, in this sense, the Government's buy-sell order to its broker.<sup>15</sup>

Concluding that the Domestic Policy Directive was potentially within the scope of Exemption 5, in June 1979 the Supreme Court vacated the previous judgment of the Court of Appeals and remanded the case to the District Court with the following instructions:

The sensitivity of the commercial secrets involved, and the harm that would be inflicted upon the Government by premature disclosure, should continue to serve as relevant

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<sup>14</sup>Federal Open Market Committee..., in Supreme Court Reporter [1982], p. 2808.

<sup>15</sup>Ibid., pp. 2812-13.

criteria in determining the applicability of this Exemption 5 privilege. Accordingly, we think that if the Domestic Policy Directives contain sensitive information not otherwise available, and if immediate release of these Directives would significantly harm the Government's monetary functions or commercial interests, then a slight delay in the publication of the Directives, such as that authorized by 12 CFR § 271.5, would be permitted under Exemption 5.<sup>16,17</sup>

(3) On Remand to the U.S. District Court

As the District Court judge understood it, "at bottom, the FOMC [has] concluded that uncertainty in the monetary markets best serves its needs."<sup>18</sup> In response, Merrill offered six affidavits prepared by monetary policy experts taking issue with the FOMC's projections of the probable result of current disclosure of the Directive and expressing their view that the result would actually be beneficial from a social point of view.<sup>19</sup>

From the judge's point of view it was apparent, however, upon reviewing the affidavits that the dispute among the experts in this case [was] not one over facts in any objective sense, but rather [was] a dispute over economic theory. It may in fact be finally reducible to a dispute over proper monetary policy.<sup>20</sup>

Consequently, the judge reasoned:

Insofar as judgments pertaining to the validity of a particular economic theory or the wisdom of a particular policy are entrusted to the FOMC under the auspices of Congress, the Court lacks the expertise necessary to substitute its

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<sup>16</sup>Ibid., p. 2813.

<sup>17</sup>See Ibid., pp. 2814-16, for the dissenting opinion by Justices Stevens and Stewart.

<sup>18</sup>Merrill...[June 1981], page 8.

<sup>19</sup>Merrill's affiants were: Richard C. Aspinwall, Michael R. Darby, Thomas F. Dernburg, Milton Friedman, Sherman J. Maisel, and James L. Pierce.

<sup>20</sup>Merrill...[June 1981], p. 7.

judgment or that of plaintiff's experts for that of the FOMC.<sup>21</sup>

On this basis, in June 1981 the District Court ruled in favor of the FOMC, thereby concluding the legal proceedings.

### III. THE FOMC ARGUMENT FOR SECRECY

As mentioned in the introduction, Merrill vs FOMC is interesting because it contains the first detailed Federal Reserve defense of secrecy. Ultimately, the U.S. Supreme Court established a criterion for deciding the case calling for immediate disclosure unless immediate release "would significantly harm the Government's monetary functions or commercial interests." The Supreme Court thereby caused the FOMC to base its case for secrecy almost exclusively on monetary and financial theory. As a result, the FOMC was required to explain in economic terms why it values secrecy. The FOMC's defense of delayed disclosure also yields some insight into FOMC concerns and objectives.

Prior to Merrill vs FOMC, the only public statement of the rationale for FOMC deferment of availability of policy actions was contained in its "Rules Regarding Availability of Information."<sup>22</sup> That brief rationale reads:

Reasons for deferment of availability. Publication of, or access to, certain information of the [FOMC] may be deferred because earlier disclosure of such information would--

(i) interfere with the orderly execution of policies adopted by the Committee in the performance of its statutory functions;

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<sup>21</sup>Ibid., p. 10.

<sup>22</sup>Board of Governors of the Federal Reserve System, Federal  
(Footnote Continued)

(ii) permit speculators and others to gain unfair profits or to obtain unfair advantages by speculative trading in securities, foreign exchange, or otherwise;

(iii) result in unnecessary or unwarranted disturbances in the securities market;

(iv) make open market operations more costly;

(v) interfere with the orderly execution of the objectives or policies of other government agencies concerned with domestic or foreign economic or fiscal matters; or

(vi) interfere with, or impair the effectiveness of, financial transactions with foreign banks, bankers, or countries that may influence the flow of gold and of dollar balances to or from foreign countries.

Point i is a catch-all rationale. It is of little use in FOIA litigation because "it proves too much" and it is not specific enough to be interesting from a monetary economist's point of view. Points ii through v are more specific and therefore more interesting. Elaborations of these rationales became the core of the FOMC's argument in *Merrill vs FOMC*. Point vi never played a role in the case.

During the trial proceedings the most important document at issue, and by agreement the only one at issue once the case was remanded to the District Court, was the current Domestic Policy Directive. The Directive, which is part of the Record of Policy Actions, contains the FOMC's instructions to the Manager of the System Open Market Account on the conduct of open market operations during the interim between FOMC meetings. Specifically, it contains short-term objectives set by the FOMC for money stock growth as well as tolerance ranges for fluctuations in the Federal funds

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(Footnote Continued)  
Open Market Committee, Rules Regarding Availability of Information, in Federal Reserve Regulatory Service, Volume III.

rate. The Directive is thus of particular interest because it discloses circumstances that prompt the Account Manager's entry into the market.<sup>23</sup>

The FOMC's theoretical defense of deferred availability for the Directive was initially based on affidavits from Federal Reserve officials Stephen Axilrod, Peter Sternlight, and Governor Robert Holland. Later, after the case reached the U.S. Supreme Court and was remanded to the District Court, the FOMC utilized a second affidavit from Sternlight and one from Governor Charles Partee. For purposes of the discussion that follows, the arguments found in these FOMC affidavits may be collected into five categories:

- (1) Unfair Speculation: only the large speculator is in a position to benefit from disclosure of the current Directive.
- (2) Inappropriate Market Reaction: current disclosure would cause the market to overreact or to react contrary to the intention of the FOMC; in general, market reaction would be more difficult to predict with current disclosure.

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<sup>23</sup>Axilrod [1971] contains a good discussion of the Directive in the late 1960s. Kier and Wallich [1979] and Poole [1975] contain useful related discussions. An FOMC committee was established in the late 1960s to consider restructuring the Directive in order to make it less vague. At that time, the operative language of the Directive contained only general phrases. The directive committee's report to the FOMC and related discussion are contained in Board of Governors of the Federal Reserve System, Minutes of Federal Open Market Committee, 1970, pp. 405-17. In the mid-1970s, the Directive began to include specific tolerance ranges for money growth and the Federal funds rate.

From 1975 to October 1979 the funds rate range was 125 basis points or less. Since then, except on one occasion it has been 400 basis points or more. Since the fall of 1982, open market operations have been carried out to achieve desired discount window borrowing targets. Borrowed reserve targeting amounts to an indirect method of targeting the funds rate within the tolerance range reported in the Directive. See Goodfriend [1982] and Wallich [1984]. In other words, since the fall of 1982, breaching the funds rate tolerances range reported in the Directive may have been sufficient but has not been necessary to trigger open market interventions. Since the borrowed reserve target is not discussed in it, critical information on short-term policy actions and intentions would remain secret today even with immediate release of the Directive.

- (3) Harm to the Government's Commercial Interest: current disclosure would cause market reactions that would raise the cost of marketing U.S. Treasury debt, and make open market operations more costly.
- (4) Undesirable Precommitment: the FOMC does not wish to precommit its future policy actions and current disclosure of the Directive would tend to precommit the FOMC.
- (5) More Difficult Interest Rate Smoothing: current disclosure would make it more difficult for the FOMC to smooth interest rates.

(1) Unfair Speculation

As mentioned in Point ii of FOMC Reasons for Deferment of Availability, the FOMC has maintained that immediate disclosure would be undesirable because it would allow speculators to gain "unfair profits" in securities trading. This point is made more explicitly in the Holland affidavit:

That participants in the market for U.S. Government securities will use such advance information for speculative purposes is as certain as is the continuing desire for profits by people who invest their money in stocks and bonds....The only persons benefitting from such speculation-induced movements would be the speculators themselves--the public would be harmed through possible frustration of the [FOMC's] efforts to achieve certain monetary policy objectives.<sup>24</sup>

Axilrod's affidavit echoes this point, saying:

There are approximately 25 dealers in Government securities who routinely conduct transactions with the [FOMC's] trading desk at the Federal Reserve Bank of New York, including various stock market firms and several large commercial banks, all of whom buy and sell securities for their own account. These large firms, together with other active market participants, rather than individual members of the public dealing in small amounts of securities would be the primary, if not exclusive, beneficiaries of immediate disclosure of the [FOMC's] actions.<sup>25</sup>

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<sup>24</sup>Holland [1976], p.6.

<sup>25</sup>Axilrod [1975], p. 2. Currently, the Federal Reserve has 36 primary dealers.

Both statements suggest that larger market participants would gain an unfair advantage over smaller participants if the FOMC disclosed its policy decisions immediately. The implication is that the FOMC protects the small investor by not disclosing its current Directive.

(2) Inappropriate Market Reaction

Point iii of the FOMC's Reasons for Deferment of Availability argues that immediate disclosure would "result in unnecessary or unwarranted disturbances in the securities market." This statement is not explicit about the type of disturbances nor does it spell out the criterion under which such disturbances are to be judged unwarranted or unnecessary. However, the argument is made more explicit in a number of places in the Merrill vs FOMC materials. Axilrod's affidavit states:

For example, if market participants believed, after viewing the [FOMC's] ranges, that the odds favor a rise in the Federal funds rate, the market would react immediately in a manner which would tend to push up interest rates by selling securities. Alternatively, if market participants concluded that interest rates would go down as a result of the [FOMC's] policy, the market would react in a manner consistent with that judgment and would, as a result, cause interest rates to go down and prices to go up. Such movements may be contrary to the [FOMC's] intentions and would unduly complicate the ability of the FOMC to carry out policy.

Axilrod's statement indicates clearly that it is an effect on interest rates that would be undesirable. Axilrod does not say whether he believes that the market uses information in the Directive together with knowledge of Federal Reserve behavior to calculate the odds on Federal funds rate movements correctly. However, because financial markets are generally recognized to be highly efficient, it is reasonable to presume that such

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<sup>26</sup>Ibid., p. 3.



calculations are made correctly, conditional on available information. But then one would like to know how market reaction which moves interest rates in a manner implied by the FOMC's instructions to its Account Manager could be undesirable or contrary to FOMC intentions.

As mentioned above, the Directive usually contains two major pieces of information: (1) tolerance ranges for M1, M2, and the Federal funds rate and (2) verbal guidance for the Account Manager. The verbal guidance seems imprecise and vague, instructing the Account Manager to maintain

'conditions consistent with moderate growth in monetary aggregates over the months ahead,' [or] 'conditions consistent with more rapid growth in monetary aggregates over the months ahead than has occurred in recent months,' [or] 'some easing in bank reserves and money market conditions, provided that the monetary aggregates do not appear to be growing excessively.'<sup>27</sup>

As Governor Holland put it:

Such phrases are terms of art that have meaning when read by knowledgeable market participants. These participants are students of past Policy Records and Directives and would often be able, from the Directive alone, to reach an educated guess as to what the tolerance ranges are. Speculative inclinations would encourage at least some market participants to enter the market on the basis of these guesses. The FOMC's objective of gradual change, while appraising market developments <sup>on</sup> the basis of incoming information, would be frustrated.<sup>28</sup>

Elsewhere, Sternlight writes:

Moreover, it should be appreciated that full disclosure of the domestic policy directive is still not "perfect information" as to precisely what the Open Market Desk will do--and indeed it is possible at times that disclosure of the directive would be more misleading to the market than no information at all. The bare directive, by itself, simply

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<sup>27</sup>Holland [1976], p. 8.

<sup>28</sup>Ibid.

defines desired monetary growth rates and sets the broad limits for the Federal funds rate.<sup>29</sup>

In short, the FOMC argued that because the Directive must be inherently vague and cannot always be accurately interpreted, full disclosure of the Directive would provide, at best, imperfect information and might be more misleading to the market than no information at all. In a related point, Governor Holland also worried that

...speculators--who cannot predict, as accurately as can the FOMC, future market conditions to which the Directive would apply--might very well incorrectly predict the Manager's actions after reading the FOMC's Directive and Policy Record, and consequently act in the market in a manner inconsistent with the FOMC's objectives.<sup>30</sup>

Finally, Governor Partee expresses more general concern:

The FOMC, which has no experience gauging the effect upon its policy of such 'announcement effects' produced by knowledge of the currently operative directive, will be forced to experiment with the effect upon its policy of such new procedures that would be mandated by court-ordered disclosure of the current directive. More frequent interventions in the market may be required. Moreover, the FOMC's ability to formulate effective policy by accurately predicting market reactions in response to actions taken under particular policies would be diminished.<sup>31</sup>

This last statement makes two separate points. The first is that since the FOMC's experience has been acquired entirely in a policy environment without disclosure, the FOMC would not be able, at least initially, to predict how the market would respond to its actions in a regime requiring prompt disclosure. The second point is that disclosure might require a change in operating procedure. The FOMC views disclosure as an additional constraint

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<sup>29</sup> Sternlight [1980], p. 6.

<sup>30</sup> Holland [1976], p. 5.

<sup>31</sup> Partee [1980], p. 26.

on its conduct of monetary policy, possibly even ruling out the effectiveness of some operating strategies that have been followed historically.

(3) Harm to the Government's Commercial Interest

Under Point v of its Reasons for Deferment of Availability, the FOMC argued that release should be delayed where immediate disclosure would "interfere with the orderly execution of the objectives or policies of other Government agencies." The Federal Reserve's most important role vis-a-vis other government agencies is as fiscal agent for the U.S. Treasury. As mentioned in Section II, the FOMC's argument that disclosure would harm the commercial interests of the U.S. Treasury was ultimately the one that won the case. This argument was presented to the U.S. Supreme Court as follows:

Disclosure of the Directive and tolerance ranges during the period of their effectiveness would make borrowing operations more costly for the government by imposing substantial additional expenses on its debt financing. The Department of the Treasury relies heavily on dealers in government securities to help distribute its offerings. In fulfilling their obligation to make regular markets, these dealers stand ready, on request, to quote firm bid and offer prices on government securities and to do business at these prices. As a result of the sharper fluctuations in interest rates that would inevitably occur from early release of the Directive and tolerance ranges, risks to dealers underwriting these securities as well as to the ultimate purchasers of the securities (in the form of a greater chance to incur capital losses on fixed-income assets) would be increased. This increase in risk would be accompanied by an increase in yields to compensate the risk-takers. Although it obviously is impossible to predict the magnitude of this increase, the FOMC's staff has estimated that these additional borrowing costs could approach \$300 million annually, given the publicly held marketable debt of approximately \$350 billion. This amounts to an increase of but eight basis points (.08 percent) in the rate of interest on account of the increased market volatility.<sup>32</sup>

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<sup>32</sup>Federal Open Market Committee...[1978], pp. 28-9.

In addition to arguing that disclosure would raise the Treasury's borrowing costs as a result of increased interest rate variability, the FOMC also argued under Point iv of Reasons for Deferment of Availability that information could be withheld if its release would "make open market operations more costly." As stated by Governor Partee:

The FOMC conducts open market operations primarily in order to accommodate the needs of the economy and to promote economic stability. However, it operates in the open market in the same way as any other market participant and it consequently experiences profits and losses like any other market participant. The Federal Reserve System's net profits are paid into the U.S. Treasury. While the operations are not conducted primarily to maximize those profits, the FOMC and its Account Manager have a high responsibility in the public interest in managing these resources in the market place. It will thus sell securities at the best price that would be acceptable to any private seller at the particular time that it has determined to sell in furtherance of its monetary policy objectives. Likewise, it will competitively bid for the most reasonable price available on securities that it has determined to purchase. As with any securities market, the prices at which transactions are made will vary not only on the basis of the general supply and demand situation at the particular time, but also the price will vary between individual market participants depending on the needs of the seller's portfolio. To the extent that speculators anticipate the actions of the Account Manager, they will tend to buy when they expect the Manager to buy, in order to profit from any increase in prices occasioned by the Manager's actions; and they will sell when they expect the Manager to sell, in order to minimize losses resulting from lower prices occasioned by the Manager's selling. Such increased contemporaneous competition may well require the Manager to pay a higher price when he buys securities, and to accept a lower price when he sells, than would otherwise be necessary.<sup>33</sup>

The argument is, in effect, that immediate release of the Directive amounts to publicizing at least a part of the FOMC's market trading strategy which

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<sup>33</sup>Partee [1980], pp. 27-8.

would, in turn, allow the market to better anticipate its moves and thereby make open market operations more costly.<sup>34</sup>

(4) Undesirable Precommitment

At one point in the case, FOMC attorneys argued that the Directive should not be released because the FOMC cannot be precommitted to it over time, even from one FOMC meeting to the next, for the following reason:

Immediate release of the domestic policy directive would not, however, remove uncertainty with regard to future FOMC actions, or with regard to the future course of interest rates....Moreover, market conditions are constantly changing. The FOMC cannot be certain about what precise actions it will need to take at any future time, or the timing of those actions.<sup>35</sup>

It is not clear whether it is infeasible to include in the Directive adjustment procedures for the policy instrument contingent on receipt of new information in the future, or whether the FOMC simply does not want to operate with a well-specified contingency plan.

A recent letter from Chairman Volcker to Walter Fauntroy, Chairman of the Subcommittee on Domestic Monetary Policy, U.S. House of Representatives contains material bearing on this issue. Although this material is not part of the Merrill case records, it seems to elaborate and clarify the point made above. Chairman Volcker wrote:

The heart of the problem, as I see it, is that markets constantly are trying to anticipate what might happen in the future. They would like the Federal Reserve to in effect "tell" them. But, by the nature of things, we cannot. Our own operations in the market from day to day are dependent upon future events--some technical, some not--that we cannot reliably forecast with accuracy. One danger in immediate

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<sup>34</sup>Strictly speaking, the Directive spells out relatively loose constraints on open market operations. It leaves open market strategy in large part unspecified. See footnote 23.

<sup>35</sup>Merrill...[February 1981], pp. 10-11.

release of the directive is that certain assumptions might be made that we are committed to certain operations that are, in fact, dependent on future events, and these interpretations and expectations<sup>36</sup> would tend to diminish our needed operational flexibility.

Chairman Volcker apparently feels that the public would not be able to interpret the Directive as a contingency plan, and that the FOMC would find it difficult to follow a contingency plan if it were made public.

(5) More Difficult Interest Rate Smoothing

A frequently stated FOMC rationale for secrecy in the case was the argument that disclosure would cause more abrupt changes in interest rates. The FOMC clearly favors smoother behavior of interest rates in two senses. When a persistent change in the level of interest rates is desired, the FOMC prefers to bring about the change gradually. On the other hand, when the general level of interest rates is viewed as appropriate, the FOMC generally prefers to smooth transitory interest rate movements.

As stated in Governor Partee's affidavit:

The abrupt changes that market participants forewarned of the FOMC's goals might bring about would often be inconsistent with the FOMC's policy of permitting or encouraging gradual rather than precipitous change. Disclosure of the current directive would raise the real risk that the entire market would move with a single purpose based on accurate knowledge of the short-run objectives of the market's largest participant, the FOMC...<sup>37</sup>

Governor Partee is apparently worried about the abrupt impact on interest rates and security prices, not on reserves. This concern is echoed in Governor Holland's quote on page 14.

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<sup>36</sup>Volcker [1984].

<sup>37</sup>Partee [1980], p. 22.

Arguing on the basis of the Partee affidavit, attorneys for the FOMC said succinctly that "one reason why the FOMC seeks to keep its directives secret is to prevent wild short-term swings in interest rates."<sup>38</sup>

Elsewhere, they argued:

The market's uncertainty regarding the precise points at which the FOMC's Manager may intervene in the market is itself a tool of monetary policy. To the extent that different conclusions are drawn about the FOMC's short-term policy from differing interpretations of the significance of the Manager's actions, there is a buffering force which moderates the reaction of the market to perceived changes in FOMC policy. Disclosure of the directive would not eliminate such uncertainty, since the FOMC could change an objective rather than intervene in the market to maintain that objective when, for example, the monetary aggregates reach the upper or lower limit of the objective identified in the domestic policy directive. Nevertheless, dealers trading with knowledge of the current short-term objectives would act in such a way as to drive the Federal funds rate toward one pole or the other of the acceptable range stated in the current domestic policy directive for that rate. Such action would most often be inconsistent with the open market policy being implemented by the FOMC at the time.<sup>39</sup>

In short, the FOMC values secrecy because it is thought to promote interest rate stability.

#### IV. CRITIQUE OF FOMC ARGUMENTS FOR SECRECY

In this section, the five FOMC rationales for secrecy are evaluated on the basis of economic theory. Financial market participants are assumed to maximize expected utility, to form expectations rationally, and to use information efficiently. In addition, security prices are assumed to be determined in competitive equilibrium. These simple and reasonable

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<sup>38</sup>Merrill...[February 1981], p. 22.

<sup>39</sup>Ibid., p. 12.

assumptions about financial market behavior provide the basis for the comment below.

(1) Unfair Speculation

This argument is most easily evaluated along the lines of Grossman and Stiglitz [1980] by considering a competitive equilibrium in the securities market in which some traders (informed) choose to acquire information on FOMC policy and others (uninformed) do not.<sup>40</sup> A key to this model is the observation that security price movements themselves convey information from the informed to the uninformed. When informed traders observe information that the return to a security is going to be high, they bid its price up, and conversely when they observe information that the return is going to be low. The second key point is that price movements convey more information when more traders are informed. Moreover, the informed gain more from trade with the uninformed than vice versa. The informed, on average, buy securities when they are "underpriced" and sell them when they are "overpriced," relative to what they would have been if information were equalized. As security prices become more informative, the difference in their information and hence the magnitude that the informed can gain relative to the uninformed is reduced.

In competitive equilibrium the fraction of the market that is informed, i.e., that engages in Fed watching or purchases Fed watching services, is just large enough so that taking into account the cost of Fed

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<sup>40</sup>The Grossman and Stiglitz model may not be entirely appropriate if the central bank behaves as a dominant trader in the securities or reserves markets.



watching the marginal user is indifferent between Fed watching or employing Fed watching services and not.

This competitive equilibrium framework implies the following:

(1) At the margin, the return to Fed watching must just equal the cost of Fed watching, otherwise it would pay market participants to engage in Fed watching until its marginal value is reduced to its marginal cost. This argument suggests that, contrary to the FOMC's argument, market participants who use Fed watching services cannot earn abnormally high profits. (2) In this model, security price movements convey information from traders using Fed watching services to those not using them. In equilibrium, this information transfer leaves the expected utility of market participants employing Fed watchers equal to the expected utility of those not using Fed watchers. Again, contrary to the FOMC's argument, it is not true that only traders using Fed watching services benefit from them. Rather, it is a feature of competitive equilibrium that all market participants benefit equally, at least at the margin. (3) Release of the Directive would reduce the cost of acquiring information about FOMC policy. This would be socially beneficial in two senses. First, it would raise the informativeness of security prices, which would raise everyone's utility. Second, it would free resources for other uses previously wasted from a social point of view on Fed watching.

(2) Inappropriate Reaction

The FOMC argues that immediate release of the Directive would make policymaking more difficult because the market might react inappropriately to it. For example, the FOMC worries that the Directive might be misconstrued so that the market might move interest rates in an unintended way. The important point here is that the FOMC cannot avoid announcement effects

by delaying release of the Directive. In the absence of the Directive, information from many other sources, e.g., the monetary aggregates, the Federal funds rate, and speeches of Federal Reserve officials, provides announcement effects whether intended or not.<sup>41</sup> Without one specific source for policy information, it is even harder for the FOMC to protect against unintended market reactions. In this regard, the FOMC argues that the Directive is written in "terms of art" that are vague and cannot always be accurately interpreted. But this problem could be dealt with by making the language of the Directive more explicit and intelligible. Finally, if, as Governor Holland claims, the FOMC can predict interest rates more accurately than the market, these predictions could be released together with its Directive to minimize the likelihood of misinterpretation.<sup>42</sup>

The FOMC argues that because it has no experience predicting market response with disclosure of the current Directive, policymaking with disclosure would be difficult. However, because financial markets are efficient, i.e., they form expectations rationally and do not waste information, they probably already infer from currently available information the implications for Federal Reserve policy instruments in the Directive up to a random term. This suggests that the average market response to FOMC policy

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<sup>41</sup>Often the Federal Reserve deliberately signals the market of its intentions, e.g., by announcing open market operations for system or customer account, by changing the discount rate, or by publicly announcing a change in operating procedures as in October, 1979. Although it is related to secrecy, analysis of discretionary signaling is beyond the scope of this paper.

<sup>42</sup>On the basis of an explicit rational expectations model, Barro [1976], p. 25, argues that the FOMC should publicize its superior information.

actions would not be changed radically with disclosure.<sup>43</sup> Because the market's response would no longer involve guesswork, disclosure would tend to tie the response more closely to policy and thereby make policy effects more predictable from the FOMC's point of view. Moreover, inexperience is always a problem in changing policy regimes. It was presumably a problem after the Accord in 1951, after the 1968 move to lagged reserve requirements, after the 1979 move to nonborrowed reserve targeting, and after the 1984 return to contemporaneous reserve requirements. It is not clear that inexperience would be any more of an impediment in the case of releasing the current Directive.

(3) Harm to the Government's Commercial Interest

The FOMC argues that concealment of its open market strategy reduces operating costs for two reasons. First, concealment is said to reduce short-term interest rate fluctuations and the risk borne by dealers distributing Treasury offerings, thereby reducing the U.S. Treasury's borrowing costs. Second, concealment is said to reduce contemporaneous competition with the Account Manager in the market, allowing the Federal Reserve to carry out open market operations more cheaply.

The FOMC's argument assumes that by keeping secret its strategy it can prevent the market from guessing what its strategy is. Concealment is infeasible to the extent that net open market operations over reserve statement periods or longer are closely related to macroeconomic objectives

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<sup>43</sup>O'Brien [1981 and 1984] has estimated empirically the information value of immediate disclosure of the Directive to be relatively insignificant. Of course, apart from the reason advanced in the text, this could be because the Directive only loosely constrains open market strategy. See footnote 23.

and based on information available simultaneously to the market and the Federal Reserve. Even if concealment were feasible, the market has incentive to form expectations of FOMC policy rationally. Consequently, the market's expectation of FOMC policy actions is probably correct on average and forecast errors of money market variables can only be increased by withholding policy information. This raises the risk that the market will buy securities at prices that are over- or under-valued relative to FOMC intentions. Therefore, secret policy would seem to raise the risk associated with purchasing and holding Treasury securities and thereby raise the Treasury's borrowing costs.

The weakness of the FOMC's arguments in this regard is illustrated by the Federal Reserve's response to the controversy over market reaction to the weekly money stock numbers. In the years that the Federal Reserve has targeted the money stock, the market has understood that, on average, an unexpected increase (decrease) in the weekly money stock is followed by an increase (decrease) in the Federal funds rate. The covariation was particularly large following October 1979.<sup>44</sup> The FOMC has never made its current Directive public, yet the market has been able to infer its policy intentions for the funds rate by observing weekly money numbers.

The Federal Reserve recognized this leak in its ability to systematically keep secret its short-term intentions for the funds rate. In April 1981 it invited comment on the desirability of continuing to report money stock data on a weekly basis. The Federal Reserve has pointed out that weekly numbers are extremely noisy and poor indicators of underlying

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<sup>44</sup> See Cornell [1983 and 1985].

trends. But it has also realized that monthly release, for example, would lead banks to pool their deposit numbers to arrive at a substitute weekly number anyway.<sup>45</sup> Moreover, it has realized that, at best, delayed release would only postpone and concentrate market reaction.<sup>46</sup> Consequently, the Federal Reserve has continued to release weekly money numbers.

Although open market strategy is not likely to be concealable longer than reserve statement periods, concealment does seem feasible for open market operations responding to very short-term disturbances within reserve statement periods. Consider open market operations carried out to offset market factors affecting reserve supply, e.g., currency, float, Treasury balances, borrowed reserves, or the latest information on reservable deposits. Although the Federal Reserve collects such information throughout the statement period, the information is not released until after the reserve statement period is over. Data on open market operations is released with a delay as well. Consequently, by concealing its information on market factors affecting reserve supply, the Federal Reserve would seem to be able to conceal its short-term interventions in the securities market sufficiently to reduce contemporaneous market competition, and reduce trading costs as it claims. Mechanisms by which a monetary authority could profit from trading on private information are discussed in Section V.3.

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<sup>45</sup>In fact, even though the Fed releases M1 weekly, companies such as Money Market Services privately collect M1 deposit data prior to its official release.

<sup>46</sup>See Volcker [1981].

(4) Undesirability of Precommitment

The FOMC argues implicitly that the Directive is necessarily a complicated contingency plan that would be difficult to make explicit for immediate release. Reluctance to release the current Directive is probably not due to the FOMC's lack of a contingency plan or a systematic policy procedure. The FOMC has operated for decades and has implicitly adopted procedures by which it moves its policy instrument systematically in response to incoming information about the economy. In other words, whether or not it has been made public, the FOMC has followed a systematic policy procedure implicitly. If the procedure must be adjusted from time to time, it seems reasonable that these adjustments could wait for monthly FOMC meetings. Moreover, it seems unlikely that financial markets would have difficulty correctly interpreting a contingent Directive. Financial instruments with complicated contingent payoffs are understood and widely traded in financial markets.

The FOMC's reluctance to publicize its systematic policy procedure is understandable. Publicity would reduce the cost of becoming informed and thereby increase the intensity of debate about policy. The FOMC would be more uncomfortable because it would be less costly for the public to check outcomes against intentions. In a more highly politicized environment it might be more difficult to follow through on a contingent policy procedure. In short, an argument can be made that secrecy makes it more difficult for particular political groups to pressure the Federal Reserve regarding current policy actions. Thus secrecy can provide a useful means of insulating the Federal Reserve from short-term political pressures.<sup>47</sup>

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<sup>47</sup>Downs [1957], p. 62, argues that "uncertainty masks the dilemmas  
(Footnote Continued)

Although with secrecy, it is impossible to verify whether this is true or not.

(5) More Difficult Interest Rate Smoothing

The FOMC argues, in essence, that it needs to conceal the current Directive in order to smooth interest rates more effectively. Dotsey [1985] finds that nondisclosure of current reserve targets can reduce unconditional Federal funds rate variability. However, secrecy raises the funds rate forecast error from the market's point of view, so the market prefers disclosure.<sup>48</sup>

McCallum [1981] demonstrates theoretically in a rational expectations model the feasibility of an adjustable nominal interest rate peg. On the basis of McCallum's work, the FOMC could perfectly smooth the funds rate between FOMC meetings by pegging it. The peg could be adjusted at FOMC meetings as desired. Goodfriend [1984] analyses consequences of nominal interest rate smoothing for other policy objectives. He shows that interest rate smoothing must increase the price level forecast error variance and/or the variance of expected inflation, so interest rate smoothing tends to create macroeconomic instability.

If interest rate smoothing can be achieved with secrecy or with an explicit adjustable funds rate peg, it is important to understand the mechanisms by which these alternatives work in order to choose between them.

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(Footnote Continued)

which society would face if it had to confront its diversity squarely." In this view, secrecy could confer a social benefit because it makes consensus politics work more smoothly and with less cost.

<sup>48</sup>While the FOMC constructs reserve targets based on the Directive's money target, those reserve targets are not discussed in the Directive. So strictly speaking, the sort of secrecy studied by Dotsey would not be overcome with immediate disclosure of the Directive.

Apart from issues of feasibility and efficiency of alternative methods of interest rate smoothing, the net social benefit of interest rate smoothing per se needs to be investigated formally.

#### V. RECENT THEORETICAL WORK RELATED TO THE SECRECY ISSUE

A number of theoretical papers related to the secrecy issue have appeared in recent years. A few of these are discussed in this section, focusing on conditions necessary to rationalize government withholding of policy information from the public. The discussion deals consecutively with papers on monetary policy, regulation of information production, and a dominant trader with private information.

##### (1) Monetary Policy

Cukierman and Meltzer [1985] present a model of monetary policymaking in which the monetary authority is able to choose a degree of policy secrecy. The monetary authority maximizes a Barro and Gordon [1983] objective function in which deviations from price stability are costly, yet inflation surprises are valued. Cukierman and Meltzer generalize the Barro and Gordon objective function by allowing the value attached to surprise inflation to be generated exogenously by an AR1 stochastic process with autocorrelation coefficient  $\rho > 0$ . In addition, monetary authority preferences are private information in the sense that the public cannot observe them directly. The monetary authority is unable to precommit its money stock instrument. However, it is able to precommit to a technology that adds noise to targeted money growth. Consequently, the monetary authority is allowed to choose (1) a function relating targeted money growth to the current value attached to surprise inflation, and (2) a variance of



monetary noise, causing actual money growth to differ randomly from its target.<sup>49</sup>

Cukierman and Meltzer find that for  $\rho > 0$  and a sufficiently high rate of time preference the monetary authority will choose a nonzero noise variance even if perfect control of the money stock is technologically feasible. The noise variance operates entirely through its effect on the public's inflation forecast. Because the monetary authority has incentive to create surprises, its announcements completely lack credibility. Therefore, the public's forecast must be conditioned exclusively on observable policy actions, i.e., money growth. Introducing noise at least initially tends to lengthen the distributed lag on money growth in the public's forecast equation, making the public become more slowly aware of shifts in monetary authority preferences. This, in turn, raises the net benefit to the monetary authority from surprise creation by putting off the induced increase in expected inflation.

With zero noise, the public can completely infer monetary authority preferences by observing money growth realizations alone. The resulting equilibrium is then identical to one in which information on monetary authority preferences is public. Introducing noise therefore

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<sup>49</sup> The monetary authority never has incentive to add noise to its optimum money growth rate at a given point in time. To make noise introduction credible, a technology for precommitting noise must be available. A monetary authority can precommit noise by choosing institutional rules, e.g., reserve requirement rules or discount window procedures, that generate noisy monetary control. Goodfriend [1982] illustrates how such choices affect monetary control noise.

amounts to keeping information on monetary authority preferences and targets secret.<sup>50</sup>

It is useful to highlight three conditions necessary for secrecy to be desirable in this context. First, the monetary authority must value monetary surprises. If it didn't, it would simply choose zero money growth and price stability. What could cause surprises to be valued? Suppose that in spite of agency problems and inefficiencies, the competitive political process maintains a reasonably close correspondence between monetary authority preferences and those of society as a whole. Since individuals prefer minimal forecast errors, the value attached to positive money growth surprises from the monetary authority's, i.e., society's, point of view must stem from a divergence between individual utility maximization and social welfare maximization. Barro and Gordon [1983] stress that a divergence is produced by distortions such as unemployment compensation and income taxation which induce individuals to choose levels of employment and output that are too low from a social point of view.<sup>51</sup> Through the standard

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<sup>50</sup>Secrecy also plays a role in Backus and Driffill [1985], and in Barro [1986]. These papers extend Barro and Gordon [1983] to a situation where there are two types of governments, those that benefit from inflation surprises and those that do not. The public cannot distinguish the types directly. The government that benefits from surprises generally finds it optimal not to reveal its type (by inflating) immediately upon coming into office. Instead it chooses a randomized strategy that allows it to mimic the noninflationary type government for a while. In this sense it chooses to behave secretly. As in Cukierman and Meltzer, randomization disguises preferences, though the mechanism linking randomization to the public's perception of government intentions is less clear in Backus and Driffill, and Barro.

<sup>51</sup>Alternatively, as Barro [1983] points out, the use of surprise inflation as a capital levy on nominally-denominated government obligations is desirable because it lessens the need for distorting income taxes or other types of non-lump-sum taxes. See Phelps [1972], chapter 4, and

mechanism of the expectational Phillips Curve, surprise inflation, reflecting surprise money growth, raises output and is thereby socially beneficial.

Second, monetary authority preferences must be stochastic and serially correlated ( $\rho \neq 0$ ). If not, money would not be helpful in predicting inflation at all. Noise would not affect the public's inflation forecast but would reduce the value of the monetary authority's maximized objective, so it would be undesirable.

Third, the monetary authority's preferences must be partly private information. If preferences were public knowledge, then the public's optimal inflation forecast would be made using preference information alone. Money would be of no additional value in forecasting inflation. Again, since monetary noise would not affect inflation forecasts, and would reduce the value of the maximized objective, secrecy would be undesirable.

The plausibility of social value for monetary policy secrecy in this context is weakened by the following considerations. First, the requirement that the monetary authority's objectives be private information seems inconsistent with the presumption that these objectives correspond to known social objectives. If the correspondence is loosened by agency problems or inefficiencies in the political process, then the private nature of objectives is easier to rationalize. However, it is more difficult to argue that secrecy could be socially valuable in the first place. Second, Cukierman and Meltzer view monetary authority preferences as resulting from a shifting political consensus. This view seems useful in rationalizing

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(Footnote Continued)  
Prescott [1975] for detailed discussion of the efficiency of the natural rate.

both the stochastic and private nature of the preferences. However, it is not clear how shifting political consensus could alter the gap between individually and socially optimal output in order to shift the social value of inflation surprises.

Canzoneri [1985] analyzes consequences for the optimal money supply rule of a monetary authority having private information about money demand disturbances. As in Barro and Gordon [1983], the monetary authority in Canzoneri's model finds departures from price stability costly, but values positive inflation surprises. In contrast to Barro and Gordon, however, Canzoneri's model includes stochastic money demand shocks. Therefore, optimal policy in Canzoneri's model is an activist feedback rule contingent on money demand shocks. The optimal rule targets money growth to yield socially desirable expected inflation, accomodating, to the extent possible, shocks to money demand before they impact on the price level and output.

Canzoneri suggests that if information on money demand shocks were verifiable, Congress could simply legislate the optimal rule and enforce the monetary authority's adherence to it. Precommitment is necessary because the monetary authority has an incentive to cheat, claiming money demand shocks higher than actual as an excuse for creating surprise inflation. The point of Canzoneri's paper is that because the monetary authority's information on money demand shocks is private and unverifiable, such a resolution of the precommitment problem is infeasible.

In practice, Canzoneri's argument that a monetary authority's money demand information is private and unverifiable has merit. A monetary authority's econometric technique for determining money demand shocks is probably no better than the public's; but it typically has earlier access to

data relevant to money demand than the public. For example, the Federal Reserve collects money stock and bank reserve data, constructs a measure of industrial production, and may get price and income data from other agencies earlier than the public.<sup>52</sup> However, this informational advantage could be legislatively overcome by simply separating data collection responsibilities from the monetary authority. Thereby the monetary authority and the public could receive data simultaneously, making money demand shocks verifiable.<sup>53</sup> Contrary to the point Canzoneri emphasizes, namely, that the private nature of money demand information makes the optimal rule infeasible, Canzoneri's paper can usefully be read as describing adverse consequences of allowing the monetary authority to have inside, i.e., secret information.

(2) Regulation of Information Production

King [1984] analyses a non-monetary model in which the government and the public simultaneously observe a signal containing information about future government spending and taxes. Hence, there is no asymmetric information in the model. However, the government chooses the noisiness of the signal, i.e., the extent to which it is fully revealing or completely uninformative.

King shows that full revelation is both individually and socially beneficial when government spending is financed by lump sum taxes. However, when government spending must be financed by proportional taxation on

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<sup>52</sup>Since preliminary data may differ from those that are eventually released, the public is never able to verify the Fed's claimed money demand shocks.

<sup>53</sup>Simultaneous receipt of data would also be necessary for the public to verify that the monetary authority sets its instrument to make expected money equal to the money stock target called for, given the money demand shock.

investment, he shows that even if it is costless, full revelation may no longer be socially optimal. Consider two possibilities, zero and positive spending. If future spending were actually to be zero, there would be no tax, no distortion, and no divergence between individual utility maximization and social welfare maximization. Hence, precise knowledge of this outcome would be socially beneficial. In contrast, knowledge that government spending and investment tax rates were going to be positive would lead individuals to choose less than socially optimal levels of investment. Therefore, if future spending were going to be positive, society would be better off not knowing it. Society is assumed to know the probabilities of spending being positive or zero. As long as positive spending is possible, if investment falls with the probability of the positive spending, the government, acting in society's interest, would choose to make the signal less than fully revealing.

King's example is not a rationalization for secrecy as typically conceived, because it does not involve the government concealing information that it has. Yet it may be considered a secret policy in the sense that the government deliberately keeps information about the future secret both from itself and from society as a whole. In the context of monetary policy, King's sort of secrecy may be thought of as choosing the quality of data that the government collects and releases. Whatever the interpretation of his model, there is always private value to information in the sense that if an individual could obtain more he would surely want it. Consequently, the high cost of preventing individual inquiry would serve as a significant deterrent to any government strategy of suppressing information production.

(3) A Dominant Trader with Private Information

Gould and Verrecchia [1985] model a securities market with a price-setting agent having private information that may be revealed through his choice of price. The price-setter can precommit to garbling whatever value he sets as the appropriate price. They show that if such noise precommitment technology is available, the price-setting agent generally finds it optimal to deliberately randomize his price quote in order to prevent it from perfectly communicating his private information to the market.

Interpreting the price-setting agent as a monetary authority, Gould and Verrecchia's example supports the FOMC's claim that secrecy can reduce the cost of trading in government securities. More generally, it is not necessary for a monetary authority to set and randomize security prices in order to profit from private information. First, it can profit from private information even if it sets bank reserves or the monetary base and lets the market determine security prices. To see how this would work, suppose both temporary and permanent factors drive the Federal funds rate. If the market has information on these only through observations on the funds rate itself, then it would unconditionally forecast every funds rate innovation as somewhat persistent. In this case Treasury bill rates, which are an average of expected future funds rates, would respond identically to current funds rate innovations regardless of the true underlying disturbance. Suppose a monetary authority could trade conditionally on private information about temporary market factors affecting reserves. In offsetting these temporary factors, the monetary authority could buy T-bills at a lower price, or sell them at a higher price, than if it made its

private information public.<sup>54</sup> Note that a monetary authority can profit from private information without using market power.

Second, even when a monetary authority sets interest rates, randomization might not be necessary for it to profit from private information. This could be the case if interest rate adjustments involved temporally differential responses to more than one type of private information.

Profitability of private information from a monetary authority's point of view does not necessarily mean that allowing it to have private information is socially beneficial. To the extent that revenue generated by trading on private information lessens the need for other distorting taxes, it generates a social benefit. But, as should be clear from the above example, a monetary authority profits on private information by fooling the market. Because such fooling increases the market's interest rate forecast error variance, it reduces allocative efficiency. From a revenue point of view, a given quantity of private information used by a monetary authority is socially efficient only if the marginal reduction it generates in dead-weight losses due to other distorting taxes just equals the marginal

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<sup>54</sup>If a monetary authority responds to a single type of private information as in this example, then it must also disguise its net open market interventions so that the market can't infer the private information by directly observing open market operations. In practice a monetary authority could probably disguise its net open market operations by trading indirectly with the market through a group of dealers, who cannot credibly communicate and pool with each other information on their individual trades with the monetary authority.

Maisel [1980], p. 3, and Pierce [1980], p. 2 point out that bond dealers tied to the Federal Reserve Open Market Desk may know directly and immediately what the Desk is doing at essentially zero marginal cost. They are concerned that the absence of public disclosure of FOMC policy may put these dealers in a position to earn economic rents on what, in effect, is insider information. However, by randomizing its trades among dealers, so that none can infer the total net monetary authority trade from his own portion, a monetary authority could prevent dealers from having inside information. In practice, it would be difficult to verify whether such randomization is carried out.



reduction in allocative efficiency due to fooling.

Kihlstrom and Postlewaite [1983] also model a securities market with a dominant trader possessing private information. The dominant trader and a competitive agent representing the rest of the market are differentially endowed with two state-contingent claims to wealth. Both are risk averse. Kihlstrom and Postlewaite imagine the dominant trader receiving information about the future and setting a relative price for the two state-contingent securities. They show that if the dominant trader were to set price to maximize his own utility on the basis of certain knowledge of the future, the market could infer the true future state from the price. It would then know that one of the state-contingent securities was worthless. Hence, complete revelation of the dominant trader's private information makes trade, i.e., insurance, impossible, leaving both the dominant trader and the rest of the market worse off. However, if the dominant trader can precommit himself to not using private information at all, or to randomizing his price if it is contingent on his information, trade is possible and both the dominant trader and the competitive agent are better off.

If the dominant trader is interpreted as a monetary authority in the government securities market, Kihlstrom and Postlewaite appear to provide an example where monetary authority secrecy is socially beneficial, even without tax distortions. Their example extends Hirshleifer's [1971] point to a monopolistic setting. Hirshleifer showed that in a competitive pure exchange economy where individuals may differ in tastes and endowments but agree about probabilities attached to future states, public information is socially valueless. Therefore, if individuals are risk averse, unless everyone has identical risk preferences and endowments, receipt of public information merely creates "distributive risk", reducing expected utility.

Marshall [1974] pointed out, for Hirshleifer's example, that if securities trading can take place prior to receipt of the information, then individuals can insure themselves against the impact of the news before its arrival.<sup>55</sup> For a production economy, where public information arrives before the allocation of productive resources but after efficient hedges can be arranged in a prior securities market, Marshall shows that public information is socially beneficial because it improves allocative efficiency.<sup>56</sup>

Marshall's result goes through if trade in a prior securities market is costless, the market in contingent securities is complete, and security prices are competitively determined. In this case, the equilibrium distribution of portfolios can provide full insurance against future public information. Does this result carry over for a securities market with a dominant trader such as a monetary authority? Yes, if as seems reasonable a monetary authority has market power only over nominal security prices and yields. However, analysis in Grossman and Stiglitz [1980] casts doubt on the other conditions necessary for Marshall's result. They point out that with imperfect and costly information there cannot be as many securities as states of nature, otherwise prices would be fully revealing and individuals would have no incentive to become informed; hence, competitive equilibrium would not exist. Competitive equilibrium can be established only because transactions costs limit the number of securities. On this basis, the impact of public information is not fully insurable and Marshall's argument

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<sup>55</sup> Marshall [1974], pp. 382-84, also contains an extended discussion of issues relating to secrecy.

<sup>56</sup> Marshall [1974], p. 387, also shows implicitly that public information may be socially beneficial in a pure exchange economy with a prior market and differentially informed agents.

may fail. If the distributive risk exceeds the gain in allocative efficiency from release of public information, then some amount of secrecy could be socially beneficial.

## VI. SUMMARY

In recent years, increasing awareness of the importance of monetary policy has focused a great deal of attention on the Federal Reserve. This attention, in turn, has yielded considerable frustration with Federal Reserve secrecy. In addition, public aversion to Federal agency secrecy recently became law in the FOIA. This law gave rise to the Merrill vs FOMC suit, which forced the Federal Reserve, for the first time, to provide a detailed written defense of secrecy.

The heart of this paper consisted of a summary and critique of this written defense. The Federal Reserve's defense yielded valuable insights into the thinking of the FOMC. The critique, based heavily on rational expectations reasoning, supported some FOMC contentions and pointed out some theoretical weaknesses in others. In order to investigate the secrecy issue further, theoretical papers related to the secrecy issue were reviewed. The discussion highlighted a number of potential benefits and costs of central bank secrecy, and identified some conditions under which secrecy could be socially desirable. At best, however, given the inconclusiveness of the theoretical arguments and the presumption that government secrecy is inconsistent with the healthy functioning of a democracy, further work is required to demonstrate that central bank secrecy is socially beneficial. Whether or not this paper leads to a reconsideration of the value of secrecy in monetary policymaking, it will have been successful if it encourages further discussion and analysis of the secrecy issue.

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