

My experience as a member of the FOMC left me with a strong feeling that the theoretical fiction that monetary policy is made by a single individual maximizing a well-defined preference function misses something important. In my view, monetary theorists should start paying attention to the nature of decisionmaking by committee, which is rarely mentioned in the academic literature.

—Alan Blinder, *Central Banking in Theory and Practice*

In the United States, monetary policy decisions are made by the Federal Reserve's Federal Open Market Committee (FOMC), which consists of the seven members of the Board of Governors and the presidents of the twelve district Federal Reserve Banks. Since any decision made by the FOMC must reflect some aggregation of the preferences of these committee members, the actions and interactions of individuals on the committee could have important consequences for monetary policy. In this book, we investigate the policy preferences of individual FOMC members and describe the manner in which those preferences are aggregated to produce policy outcomes. Thus, a focus on individuals is the distinguishing feature of our work.

1.1 Evidence from Historical Records: Individual-Level Data and Analysis

FOMC decisions are formally made by majority vote, and voting records provide an important part of the information available on individuals' monetary policy preferences. Voting records are limited in significant ways, however. Votes reflect only a qualitative preference relative to the adopted policy; recorded votes do not allow us to

observe individuals' desired policy settings. Perhaps more important, FOMC members rarely dissent in formal votes on policy directives. Thus, even when there are disagreements within the committee, evidence of these disagreements may not show up in voting records.

Alternative data sources are available that provide a far richer description of FOMC members' policy preferences. From 1936 to March 1976, the FOMC's deliberations at each of its meetings were described in documents called the *Memoranda of Discussion*. The *Memoranda* provide edited summaries of statements made by each committee member in the "policy go-around" preceding the adoption of a formal directive to guide the conduct of policy. Although preparation of the *Memoranda* ceased in 1976, the FOMC continued to tape-record and transcribe its deliberations. Using the *Memoranda* and *Transcripts*, we have been able to code information about committee members' policy preferences that is more detailed than the information contained in formal voting records. Specifically, these documents often reveal individuals' desired policies in the form of quantitative targets for a policy instrument. On those occasions when members are not so precise, qualitative indications of policy preferences can be observed. We have developed procedures for coding these qualitative descriptions of preferences as well as the more numerous quantitative preference statements. The description and presentation of the resulting data sets represent a major contribution of this book.

Econometric techniques that we develop and apply are also distinctive. Empirical descriptions of monetary policy behavior have often been presented in the form of reaction functions—regression equations that explain the setting of a policy instrument with variables that describe prevailing economic and political conditions. In our approach, we retain the reaction function as a tool, but our econometric procedures are especially designed for estimating individual FOMC members' reaction functions based on the descriptions of their preferences—both quantitative and qualitative—that they offer during committee meetings.

Our unique data sets and estimation methods enable us to pursue issues that have not previously been explored in the literature. In particular, we are able to examine hypotheses about monetary policy decisions that involve differences *across* members of the FOMC, and we can study the mechanisms by which individual policy preferences are aggregated into a committee decision. For example, it is generally recognized that the chairman of the Board of Governors is more pow-

erful than other committee members, but we are able to provide a quantitative assessment of the chairman's power.

Finally, we are able to buttress and supplement our econometric investigation with anecdotal evidence from the original textual records. Our primary purpose in reading the *Memoranda* and the *Transcripts* was to produce data for use in analytical work, but we have also found that a narrative approach to interpreting those documents can be revealing. Anecdotal material is often used to supplement analytical evidence and serves as the primary source of evidence in discussions of how political pressures figure into FOMC deliberations and the relevance of the time inconsistency problem as an explanation for the rise of inflation in the 1970s.

1.2 Organization of the Book

In chapter 2, we provide background information on the structure and functions of the Federal Reserve, and in chapter 3, we review the academic literature dealing with monetary policy and Federal Reserve decision making. These discussions cover institutional detail and offer theoretical and empirical contexts that are useful for understanding our analyses.

In chapter 4, we explore data on FOMC voting that has often been used in past studies of internal Fed decision making. We begin by describing a method for using voting data to estimate reaction function parameters for individual FOMC members; we then provide two applications of this method to data from the 1966–1996 period. First, we produce a ranking of eighty-three members from that era on a dimension ranging from “easiest” to “tightest.” Our rankings are based on an analysis of individuals' behavior in a framework that controls for the state of the economy and the stance of monetary policy over time. Second, we investigate how models of political influence on the Federal Reserve can be extended to incorporate information on the policy preferences of individual FOMC members. We investigate whether governors appointed by Republican and Democratic presidents systematically differ in their monetary policy preferences and assess the relative importance of the power of appointment and direct pressure as channels of influence for U.S. presidents who want to sway the FOMC. We also investigate whether tendencies to favor preelection ease differ by partisan heritage: are Republican-appointed governors, for example, more likely to favor preelection stimulus when the incumbent

president is a Republican? Voting data are useful for investigating issues like these, which require long sample periods in order to observe multiple election cycles and instances of partisan change.

In chapter 5, we describe two original data sets we have constructed using the *Memoranda* and the *Transcripts*: one for the 1970–1978 period when Arthur Burns served as Fed chairman and another for the 1987–1996 portion of Alan Greenspan’s tenure as chairman. We discuss the important attributes of the source data and the coding schemes we developed for translating verbal descriptions into quantitative and qualitative measures of policy preferences for individual FOMC members. We also highlight differences in operating procedures and committee decision-making practices between the Burns and Greenspan years.

In chapter 6, we explain how the data sets described in chapter 5 can be used to estimate monetary policy reaction functions for individual FOMC members who served under Burns or Greenspan. We then investigate differences in policy perspectives across members. To do so, we estimate reaction functions for the FOMC as a whole and its individual members; we also test whether each individual is statistically different from the committee on which that member served. We use the estimates to characterize the theoretical perspectives that might underlie individuals’ policy preferences. For the Burns era, we focus particular attention on the monetarist perspective advocated by representatives from the Federal Reserve Bank of St. Louis. For the Greenspan era, we emphasize the distinctive views of those who were staunch advocates of gearing policy to achieving and maintaining price stability.

In chapter 7, we use the Burns era data set (described in chapter 5) to investigate decision making by the FOMC in the 1970s, focusing on the competing pressures of majority rule, consensus building, and the power of the chairman. We initially describe how the data we have collected can be used to construct complete “preference profiles” for each FOMC meeting held during the Burns years (a preference profile consists of a listing of desired settings for the federal funds rate for all members of the committee). Using this set of preference profiles, we then empirically link individuals’ policy preferences to adopted policies, employing generalized versions of the median voter model and alternative specifications. Our analysis characterizes the aggregation of preferences within the committee and quantitatively assesses the weight of the chairman in this process.

In chapter 8, we use the Greenspan era data set (described in chapter 5) to construct complete preference profiles for each FOMC meeting held between August 1987 and December 1996. We then examine committee decision making during this period. Because Greenspan's proposed policy was almost always adopted, and because the median committee member preference and Greenspan's preference almost always coincided, econometric procedures cannot be used to directly estimate the relative power shares of the chairman and the committee. Nevertheless, we are able to investigate the influence of the chairman's proposals on the stated preferences of individual committee members within a given meeting, and we consider how differences of opinion between Greenspan and other members within one meeting might influence the chairman's policy proposal at the next meeting.

Most of the work in this book is econometric and analytical. In reading the *Memoranda* and the *Transcripts*, however, we have gained an appreciation for their content that goes beyond formal data coding. In chapters 9 and 10, we offer a noneconometric description of the content of these records as it relates to the academic literature on monetary policymaking. In chapter 9, we rely on anecdotal evidence to document political pressures exerted on the Fed and recognized by FOMC members in their deliberations during the Burns and Greenspan eras. In chapter 10, we again use anecdotal evidence to buttress an argument in favor of time inconsistency theory as an explanation for the "Great Inflation" of the 1970s. We also contend that time inconsistency analysis can account for the subsequent decline in inflation that occurred in the 1980s and 1990s.

Finally, in chapter 11, we summarize the key contributions and results presented in this book. We also describe important questions that remain for future research and discuss some of the implications of our work for central banking institutions.