Forecasting and Recognizing Business Cycle Turning Points

RENDIGS FELS
and
C. ELTON HINSHAW

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Contents

Acknowledgments xiii
Foreword xv

Part I: The Recognition Patterns of Business Analysts,
by Rendigs Fels

I-1 Introduction 3
I-2 Dates of Peaks and Troughs 5
I-3 The 1920’s 8
I-4 1948–61: Accuracy of Dating 13
I-5 1948–61: Degree of Certainty 19
I-6 The Recognition Pattern: A Chronological Review 24
I-7 False Warnings 35
I-8 Recognition Methods 38
I-9 Conclusions 47
Appendix I 49

Part II: The Recognition Pattern of the Federal Open
Market Committee, by C. Elton Hinshaw

II-1 Introduction 61
II-2 Procedure 63
II-3 The FOMC’s Recognition Pattern: A Chronological
Review 72
II-4 The FOMC’s Recognition Pattern and Policy Decisions 115
II-5 Conclusions 121
Appendix II 124
Index 129
Tables

I-1 Alternative Dates of Business Cycle Peaks and Troughs, 1919–61
I-A Recognition of Business Cycle Peaks and Troughs, 1919–29, Six Forecasting Services
I-B Accuracy of Dating Cyclical Peaks and Troughs, 1948–61
I-C Degree of Certainty of Forecasts of Cyclical Peaks and Troughs, 1948–61
I-D Comparison of Scores for Accuracy of Dating at Four Peaks and Four Troughs, 1948–61
I-E Comparison of Scores for Degree of Certainty at Four Peaks and Four Troughs, 1948–61
I-F Recognition Scores in Vicinity of 1957 Peak: Comparison of Indicators Approach with Eclectic Approach
I-G Recognition Scores in Vicinity of 1958 Trough: Comparison of Indicators Approach with Eclectic Approach
I-H Recognition Scores in Vicinity of 1960 Peak: Comparison of Indicators Approach with Eclectic Approach
I-I Recognition Scores in Vicinity of 1961 Trough: Comparison of Indicators Approach with Eclectic Approach
I-J Rankings of Eight Analysts According to Their Mean Certainty Score at Eight Cyclical Turns

II-1 The Beginning Date of Recognition by the FOMC
II-2 Comparison of Recognition and Confirmation Lags Between the FOMC and Business Analysts
II-3 FOMC Policy Changes and Certainty Scores in the Vicinity of Postwar Turns
II-4 Summary of FOMC Policy Changes and Certainty Scores
II-5 FOMC Average Certainty Scores at Dates of Policy Changes
\textit{Tables}

II-A FOMC Certainty Scores in the Vicinity of Cyclical Turns 124

II-B FOMC Certainty Scores for All Months: January 1947 Through December 1960 125

II-C Certainty Scores of Individual Comments at FOMC Meetings in the Vicinity of the 1960 Peak 127
Charts

I-1 Five Aggregate Series, 1948–63
I-2 Recognition of Peaks and Troughs, Six Forecasting Services, 1919–29: Direction of Change
I-3 Correctness of Forecasts Made in the Vicinity of Peaks and Troughs, Six Forecasting Services, 1919–29
I-4 Accuracy of Dating Cyclical Peaks and Troughs, Ten Analysts, 1948–61
I-5 Degree of Certainty of Forecasts of Cyclical Peaks and Troughs, Ten Analysts, 1948–61
I-6 Comparison of Scores for Accuracy of Dating at Four Peaks and Four Troughs, 1948–61
I-7 Comparison of Scores for Degree of Certainty at Four Peaks and Four Troughs, 1948–61
I-8 Recognition Scores in the Vicinity of the 1957 Peak: Comparison of Indicators Approach with Eclectic Approach
I-9 Recognition Scores in the Vicinity of the 1958 Trough: Comparison of Indicators Approach with Eclectic Approach
I-10 Recognition Scores in the Vicinity of the 1960 Peak: Comparison of Indicators Approach with Eclectic Approach
I-11 Recognition Scores in the Vicinity of the 1961 Trough: Comparison of Indicators Approach with Electric Approach

II-1 Certainty Scores for the November 1948 Peak
II-2 Certainty Scores for the October 1949 Trough
II-3 Certainty Scores for the July 1953 Peak
II-4 Certainty Scores for the August 1954 Trough
II-5 Certainty Scores for the July 1957 Peak
II-6 Certainty Scores for the April 1958 Trough
II-7 Certainty Scores for the May 1960 Peak
II-8 FOMC Certainty Scores for Postwar Peaks and Troughs
II-9 FOMC and Business Analysts Certainty Scores for Four Postwar Peaks
II-10 FOMC and Business Analysts Certainty Scores for Three Postwar Troughs
II-11 Certainty Scores at Seven Business Cycle Turns: FOMC
II-12 Certainty Scores at Seven Business Cycle Turns: Mean of Eight Analysts
II-13 Certainty Scores at Seven Business Cycle Turns: “Best” of Eight Analysts
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The study of short-term forecasting, of which this is a part, was supported by grants to the National Bureau from Whirlpool Corporation, General Electric Company, Ford Motor Company Fund, U.S. Steel Corporation, and the Relm Foundation, as well as by other funds of the National Bureau.
The two papers included in this volume appraise the past performance of selected organizations in recognizing peaks and troughs of business cycles. We normally use the word "recognizing" to mean the entire pattern beginning with the vague early awareness that analysts ordinarily develop of an impending cyclical turn through the successive stages of increasing certainty until they finally become sure that a turn has definitely occurred. At times, however, we find it useful to select a single point in the pattern, in which case we use as the criterion for recognition the time at which the analysts first decide that a turning point is more probable than not. In this narrower sense of the term, recognition may come either before or after business peaks and troughs.

Our papers are part of a larger project conducted at the National Bureau of Economic Research under the direction of Victor Zarnowitz, a project concerned with appraising short-term business forecasts. The process of recognition in the broad sense begins some time before cyclical turns and ends some time afterward. The part of it that precedes peaks and troughs involves forecasting on anybody's definition of the latter term. But the part that follows peaks and troughs involves forecasting also. To assert several months after the event that a cyclical peak has occurred is to forecast that the decline in business will continue long enough and far enough to qualify as a business cycle contraction.

My paper, besides a brief analysis of a previous study of recognition in the 1920's by Garfield V. Cox, is concerned with the forecasting record of ten publications in the vicinities of the eight peaks and troughs between 1948 and 1961. Hinshaw's paper, which is a revision of his Ph.D. dissertation at Vanderbilt University, appraises the recognition of cyclical turns by the Federal Open Market Committee for the seven cyclical turns between 1948 and 1960. Since Hinshaw did not have access to the Committee's minutes for 1961, he was unable to include the trough that occurred in that year. His standard for evaluating the FOMC's recognition record is the performance of eight of the publications in my study for the seven peaks and troughs in question.
Either paper can be read independently of the other. Since each paper ends with a section summarizing its conclusions, I shall only mention here a few highlights. Recognition in the narrow sense (the earliest time at which forecasters become convinced that a turn is more likely than not) was achieved by the eight principal publications in my study one month before troughs and three months after peaks on the average. There is little evidence that users of the leading indicators of the NBER recognized turns faster than other forecasters. Neither does the evidence reviewed by Hinshaw suggest that the FOMC's recognition record was particularly better than the others. A brief note on Hinshaw's subject by Mark H. Willes recently appeared in the *Journal of Finance*.

Although Willes found a somewhat longer recognition lag for the FOMC than Hinshaw, the conclusions of the two studies are similar.

After this report went to press, some further research was undertaken with respect to false signals. Preliminary results indicate a need to modify some of our conclusions.

A stern test of forecasters' skill in recognizing turning points occurs in those years when the American economy experiences a hesitation or pause that does not quite qualify as a business cycle contraction. Such hesitations occurred in 1947, 1951, 1956, 1962, and 1967. To avoid recognition of turns that do not occur is just as much the mark of a good forecaster as to recognize genuine turns promptly.

Although our work on these periods is not yet completed, the results so far suggest the following conclusions:

1. None of the forecasters in my sample deserves to be called the "best." The publication labeled "best" in the various charts had the highest scores for accuracy of dating at both peaks and troughs and the highest scores for degree of certainty at troughs, though not at peaks. But it tended to sound false alarms more frequently than the rest.

2. Those relying heavily on business cycle indicators tended to give more false signals than the others. This finding adds to the evidence that an eclectic approach to recognition is desirable.

3. The preliminary results of the investigation of false signals by the publications in my sample indicate that, if the FOMC is regarded as a

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single forecaster, its recognition record is better than Hinshaw thought.\(^2\) Hinshaw studied the FOMC for false signals during the entire period 1947–60. During that time, there was not a single instance of a false alarm. On the other hand, false alarms are by no means rare in the publications of my sample. By virtue of its consistently good performance, the FOMC can be judged as one of the best of the eleven studied by Hinshaw and myself. Whether its record, in the words of Brunner and Meltzer, "can only be regarded as splendid" is for others to judge.

\(^2\) If, however, the scores of the FOMC are regarded as averages of all those taking part in its discussions, then the relevant comparison is with the average of the publications in my sample. On this basis, the record of the FOMC is not obviously superior to that of the publications in my sample. Although in the cases of at least three of my ten, a single individual was mainly, if not entirely, responsible for the forecasts, there is a presumption that in the other cases the forecast was made by a small group. Thus, what is the proper comparison to make is not clear.