

**American Association of University
Teachers of Insurance**

American Economic Association

American Farm Economic Association

American Finance Association

American Marketing Association

American Statistical Association

Biometric Society, ENAR

Catholic Economic Association

Econometric Society

Industrial Relations Research Association

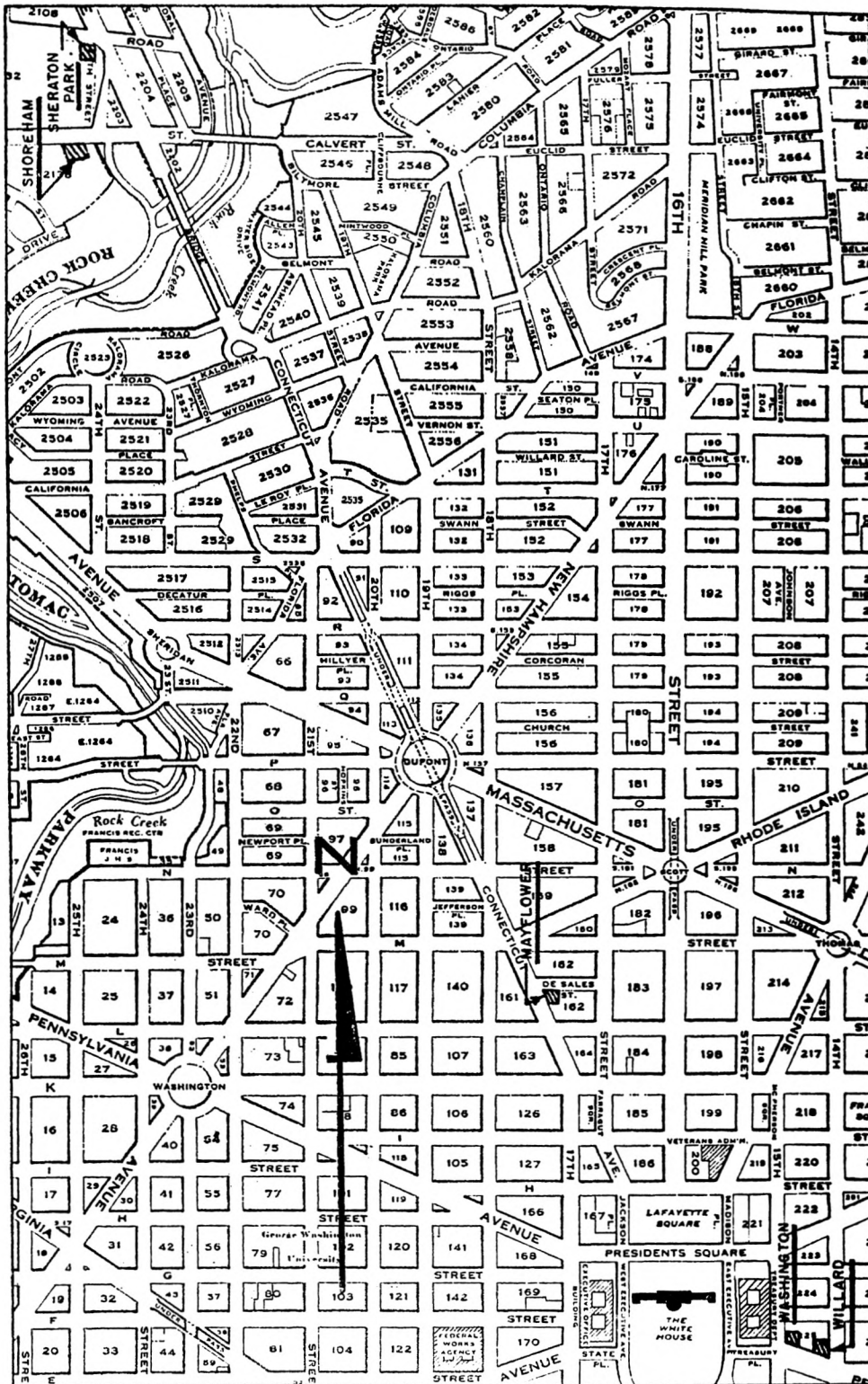
Institute of Mathematical Statistics

Regional Science Association

ALLIED

SOCIAL SCIENCE ASSOCIATIONS

Washington, 1959



ALLIED SOCIAL SCIENCE ASSOCIATIONS

JOINT PROGRAM

American Association of University Teachers of Insurance (AAUI)

American Economic Association (AEA)

American Farm Economic Association (AFEA)

American Finance Association (AFA)

American Marketing Association (AMA)

American Statistical Association (ASA)

Biometric Society, ENAR (BS)

Catholic Economic Association (CEA)

Econometric Society (ES)

Industrial Relations Research Association (IRRA)

Institute of Mathematical Statistics (IMS)

Regional Science Association (RSA)

Washington

December 27-30, 1959

JOINT PROGRAM
Allied Social Science Associations
Annual Meetings

Washington, D. C., December 27-30, 1959

All sessions and activities are arranged in the summary and in the program in the following manner: first, by day and time of the start of the session; second, by hotel in alphabetical order: Mayflower, Sheraton-Park, Shoreham, Washington, and Willard; and third, by sponsoring association in alphabetical order where feasible. Where a session is sponsored jointly by two or more associations, the sponsors are listed in alphabetical order and placed where the first would occur in this arrangement.

For convenience, the summary lists the session or activity by title only and refers to the page on which the detailed description of the session will be found. The list of participants shows in alphabetical order the names of all persons participating in the program and the page on which the individual is mentioned.

Changes in program have been made up to the time of printing. Users are cautioned that later changes may have occurred in the program.

It may be advisable to check at the information desks of the various associations for possible activities not listed in this program.

General Information

Abbreviation	Association	Headquarters Hotel
AAUTI	American Association of University Teachers of Insurance	Washington
AEA	American Economic Association	Sheraton-Park
AFEA	American Farm Economic Association	Sheraton-Park
AFA	American Finance Association	Sheraton-Park
AMA	American Marketing Association	Willard
ASA	American Statistical Association	Shoreham
BS	Biometric Society, ENAR	Shoreham
CEA	Catholic Economic Association	Sheraton-Park
ES	Econometric Society	Sheraton-Park
IRRA	Industrial Relations Research Association	Mayflower
IMS	Institute of Mathematical Statistics	Shoreham
RSA	Regional Science Association	Sheraton-Park

Registration

All persons attending the meetings are required to register. The registration fee of \$2 will entitle registrants to admission to all meetings (except invitation or fee events) sponsored by any of the participating associations. Registration may be completed at the desks maintained for the purpose at each of the five headquarters hotels, at the hours indicated in the schedule shown below. A member of any association may register at any of the five hotels. However, persons who registered in advance by mail may obtain their badges and programs only at the special registration desk at the Shoreham Hotel.

Hotel	Days and Hours of Registration					Registration Desk Location
	Saturday Dec. 26	Sunday Dec. 27	Monday Dec. 28	Tuesday Dec. 29	Wednesday Dec. 30	
Sheraton-Park	8 a.m.- 6 p.m.	8 a.m.- 6 p.m.	8 a.m.- 6 p.m.	8 a.m.- 12 Noon	Lobby adjacent to Continental Room
Shoreham	4 p.m.- 8 p.m.	8 a.m.- 6 p.m.	8 a.m.- 6 p.m.	8 a.m.- 6 p.m.	8 a.m.- 12 Noon	West Lobby Foyer
Willard	*5 p.m.- 9 p.m.	8 a.m.- 5 p.m.	8 a.m.- 2 p.m.	10th Floor Foyer
Mayflower	8 a.m.- 6 p.m.	8 a.m.- 6 p.m.	Promenade
Washington	8 a.m.- 6 p.m.	8 a.m.- 6 p.m.	Lobby

* Main Ballroom

Information Desk

These are located at the same places as the Registration Desks. However, while a person may register for any association at any hotel, the information desk for each association is located only at the convention headquarters hotel for that association.

Employment Register

By arrangement with the American Economic Association, American Statistical Association, Industrial Relations Research Association and Institute of Mathematical Statistics, the United States Employment Service and its State agencies have established placement centers in the Bird Cage Walk, Shoreham Hotel, and on the balcony over the main ballroom, Sheraton-Park Hotel, for all registrants.

Hours are from 9:00 a.m. to 6:00 p.m., except Sunday, December 27, when they will be open from noon until 6:00 p.m. Information on hard-to-fill job openings will also be posted on bulletin boards near the registration areas.

Association members who filed applications or orders with local offices of their State Employment Service prior to the meetings *must* report their convention addresses in person to the appropriate placement center. Others should file applications or orders at the earliest practicable moment. Confidentiality will be respected if desired.

Active applications and orders will be returned to local offices after the sessions end.

An academic placement center for the American Marketing Association is located in the Grand Ballroom Foyer of the Willard Hotel.

Press Services

Services and facilities for the convenience of press representatives are available in the press room of the Sheraton Hall, at the Sheraton-Park Hotel, for meetings of the American Economic Association, American Farm Economic Association, American Finance Association, Catholic Economic Association, Econometric Society, and Regional Science Association. Press services for meetings of the American Statistical Association, Biometric Society (ENAR) and Institute of Mathematical Statistics are located in the press room at the Hotel Shoreham, which also serves as a central point for general information for the press on the meetings of all twelve participating associations. Press services are also provided at the Hotel Mayflower by the Industrial Relations Research Association; at the Hotel Willard by the American Marketing Association; and at the Hotel Washington by the American Association of University Teachers of Insurance. To the extent that abstracts or complete texts of papers scheduled for presentation at any of the meetings are available for distribution to the press, they may be picked up either at the headquarters hotel of the sponsoring association or in the general press room at the Hotel Shoreham.

Tours

Guided tours of the IBM Space Building, located at 2000 Massachusetts Avenue, N.W., will be held daily from 9 a.m. to 5 p.m. on the 28th, 29th and 30th of December. (The IBM Center will not be open on the 26th and 27th of December and no tours will be conducted on December 31.) The Center carries on tracking of satellites and other space objects. It also contains a satellite, rocket, and tracking exhibit.

Tours of all or any of the national headquarters of the Machinists Union, the Teamsters Union, and the AFL-CIO may be arranged at the registration desk in the Mayflower Hotel.

The Bureau of the Census will hold open house for visitors from 9:00 a.m. to 5:00 p.m., December 28 to 30. In addition to special exhibits, there will be guided tours of UNIVAC, FOSDICK and other activities.

Special and Fee Events

Special and fee events are listed in the main body of the program and in the daily summary in their appropriate chronological places. *Events for which a fee is charged or for which attendance is by invitation are identified by asterisks.* Tickets for association-sponsored breakfast, luncheon, and dinner meetings may be obtained at the information desk of the sponsoring association. They should be purchased at time of registration to facilitate arrangements.

NEW SOUTH-WESTERN TITLES

• See these 1959 titles at our exhibit

- PERSONNEL MANAGEMENT by Chruden and Sherman
- LABOR ECONOMICS AND INDUSTRIAL RELATIONS
by Yoder and Heneman
- INTERNATIONAL TRADE (Theory, Policy, Practice)
by Kramer, d'Arlin, and Root
- INTERNATIONAL MARKETING by Kramer
- MONEY AND BANKING, Second Edition, by Klise
- INTRODUCTION TO BUSINESS, Fourth Edition, by Glos and Baker
- BUSINESS POLICIES AND MANAGEMENT, Fourth Edition
by Newman and Logan
- OFFICE MANAGEMENT, Fourth Edition, by Neuner
- REAL ESTATE, Second Edition, by Unger

• Scheduled for Spring, 1960

- BASIC ECONOMICS by Hailstones
- GOVERNMENT AND BUSINESS by Anderson
- BUSINESS FLUCTUATIONS AND FORECASTING, Second Edition
by Dauten
- READINGS IN MARKETING by Walters, Snider, and Sweet
- INTRODUCTION TO ECONOMETRICS by Brennan
- READINGS IN MARKETING RESEARCH by Holmes

SOUTH-WESTERN PUBLISHING CO.

(Specialists in Business and Economic Education)

Cincinnati 27; New Rochelle, N.Y.; Chicago 5; San Francisco 3; Dallas 2

SUMMARY OF JOINT PROGRAM, ALLIED SOCIAL SCIENCE ASSOCIATIONS, ANNUAL MEETINGS, DEC. 27-30, 1959

Sunday, December 27

Time and Hotel	Sponsor	Session or Activity Title	Page
10:00 a.m. Shorcham	ASA	Some Special Studies Based on Recent Censuses	19
Shorcham	ASA, BS	Design of Experiments—I	19
Shorcham	IMS	Contributed Papers—I	20
Shorcham	IMS	Contributed Papers—II.....	20
12:30 p.m. Sheraton-Park	AEA	* Luncheon, Joint Council on Economic Education	20
1:00 p.m. Shorcham	AFA, ASA	The Securities Market	20
Shorcham	ASA	Data Evaluation Processes	20
Shorcham	ASA	Regional and National Accounts	21
Shorcham	ASA, BS, IMS	Multivariate Analysis—I	21
Shorcham	ASA	Statistics in Some Aspects of Meteorology ...	21
2:00 p.m. Sheraton-Park	AEA	Meeting of Joint Council on Economic Education	22
Shorcham	IMS	Wald Lecture—I	22
3:00 p.m. Shorcham	ASA	Role of Statisticians and Statistical Methodology in Medical Research	22
Shorcham	IMS	Recent Work on the Theory of Dams	22
Mayflower	IRRA	Executive Board Meeting, Industrial Relations Research Association	22
4:00 p.m. Shorcham	AFA, ASA	Aspects of Stock Ownership in United States Corporations	23
Shorcham	ASA	Studies in Honor of William Fielding Ogburn, 1886-1959	23
Shorcham	ASA	Labor Force Measurement and Interpretation ..	24
Shorcham	ASA	Retraining of Statisticians	24
Shorcham	BS	Meeting of Regional Advisory Board, Biometric Society (ENAR)	24
Shorcham	IMS	Invited Papers—I	25
Shorcham	IMS	Contributed Papers—III	25

* Fee or Invitation Event

Sunday—con.

<i>Time and Hotel</i>	<i>Sponsor</i>	<i>Session or Activity Title</i>	<i>Page</i>
6:00 p.m. Sheraton-Park	AEA	* Dinner Meeting, Executive Committee, American Economic Association	25
Shoreham	ASA	* Dinner Meeting, Board of Directors and Council, American Statistical Association	25
7:30 p.m. Sheraton-Park	CEA	Right-to-Work Laws and Freedom—I	25
8:00 p.m. Sheraton-Park	AFEA	Meeting of Executive Committee, American Farm Economic Association	25
Shoreham	ASA	Innovations in Statistical Research in Social Science	26
Shoreham	ASA, RSA	Statistical Techniques in Regional Analysis	26
Shoreham	IMS	1959 Council Meeting, Institute of Mathematical Statistics	26
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Monday, December 28

8:00 a.m. Shoreham	ASA	* Breakfast Meeting of Chapter Presidents and Secretaries and District Representatives	31
Washington	AAUTI	* Breakfast and Social Hour: Chartered Life Underwriters—Chartered Property & Casualty Underwriters	31
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Shoreham	BS	Contributed Papers—I	32
9:00 a.m. Sheraton-Park	CEA	Right-to-Work Laws and Freedom—III	32
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9:30 a.m. Mayflower	IRRA	The Incidence of Persistent Unemployment....	33
Mayflower	IRRA	Health Plans in Collective Bargaining: Responsibilities of Management and Labor for Medical Care	33

* Fee or Invitation Event.

Monday—con.

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Sheraton-Park	AFA	Monetary Policy and the Financing Problems of State and Local Governments	35
Sheraton-Park	RSA	Local, Regional, and National Impact of Disarmament	35
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10:30 a.m. Sheraton-Park	CEA	Right-to-Work Laws and Freedom—IV	36
Shoreham	ASA	International Measurement and Analysis of Savings	37
Shoreham	ASA	Place of the 1960 Census in the Evolution of Important Census Concepts	37
Shoreham	ASA, BS, IMS	Multivariate Analysis—II	37
Shoreham	ASA, BS	Statistical Methods in Human Genetics	38
Shoreham	ASA	Screening Data and Direct Search by Means of Electronic Computers	38
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Willard	AMA	* Luncheon Session: International Marketing Research	39
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* Fee or Invitation Event.

Monday—con.

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Monday—con.

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* Fee or Invitation Event.

Tuesday, December 29

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* Fee or Invitation Event.

Tuesday—con.

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* Fee or Invitation Event.

Tuesday—con.

<i>Time and Hotel</i>	<i>Sponsor</i>	<i>Session or Activity Title</i>	<i>Page</i>
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* Fee or Invitation Event.

Tuesday—con.

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Wednesday, December 30

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* Fee or Invitation Event.

Wednesday—con.			
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6:00 p.m. Sheraton-Park	AEA	* Dinner Meeting, Executive Committee, American Economic Association	99

* Fee or Invitation Event.

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1959 *672 pages* *\$6.75 list*

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JOINT PROGRAM
SUNDAY, DECEMBER 27

10:00 a.m., SHOREHAM, Club Room (ASA)

SOME SPECIAL STUDIES BASED ON RECENT CENSUSES

Chairman: Howard C. Grieses, Bureau of the Census

Measures of Product Concentration, 1947 and 1954—Developed From Census Materials

Ralph Nelson, National Bureau of Economic Research

The Analysis of Price-Cost Behavior, Based on the Census of Manufacturers

Richard Ruggles, Yale University

Uses of Census Information on Real Estate Values for Economic Analysis

Robert F. Drury, Bureau of the Census

Discussants: Morris A. Adelman, Massachusetts Institute of Technology

Frank A. Hanna, Duke University

George W. Mitchell, Federal Reserve Bank of Chicago

10:00 a.m., SHOREHAM, Park Room (ASA, BS)

DESIGN OF EXPERIMENTS - I

Chairman: Oscar Kempthorne, Iowa State University

The Relationship Between Covariance and Individual Curvature Analyses of Experiments With Background Trends

C. P. Cox, Iowa State University

Testing Homogeneity of Regression Coefficients in a One-Way Analysis of Variance

D. S. Robson and G. F. Atkinson, Cornell University

The Need for Experimental Design Research for Non-Linear Trends in Medical Biology

M. E. Turner, Medical College of Virginia

10:00 A.M., SUNDAY

10:00 a.m., SHOREHAM, Tamerlane Room (IMS)

CONTRIBUTED PAPERS - I

10:00 a.m., SHOREHAM, West Ballroom (IMS)

CONTRIBUTED PAPERS - II

12:30 p.m., SHERATON-PARK, Adams Room (AEA)

***LUNCHEON: JOINT COUNCIL ON ECONOMIC EDUCATION**

1:00 p.m., SHOREHAM, Club Room (AFA, ASA)

THE SECURITIES MARKET

Chairman: Edmund A. Mennis, Wellington Fund

Stock Prices and Capital Evaluation

Allan Greenspan, Townsend, Greenspan & Co.

A Critical Evaluation of Stock Market Indexes

Robert W. Storer, Manufacturers National Bank of Detroit

Discussants: Eugene Banks, Brown Brothers, Harriman & Co.
Robert Kavesh, New York University
David Eiteman, University of California, Los Angeles

1:00 p.m., SHOREHAM, Terrace Banquet Room (ASA)

DATA EVALUATION PROCESSES

Chairman: Leslie Kish, Survey Research Center

Response Error

Morris H. Hansen, William N. Hurwitz, and Max Bershad, Bureau of the Census

Comparative Analyses: Comparing Health Statistics From Record Sources and From Household Interviews

O. K. Sagen, Ruth E. Dunham, and Walt R. Simmons, U. S. National Health Survey

Discussant: William G. Cochran, Harvard University

* Fee or Invitation Event.

1:00 P.M., SUNDAY

1:00 p.m., SHOREHAM, Palladian Room (ASA)

REGIONAL AND NATIONAL ACCOUNTS

Chairman: Harvey S. Perloff, Resources for the Future, Inc.

Possible Relations Between National and Regional Accounts Systems

Richard Ruggles, Yale University and Nancy D. Ruggles, United Nations and Yale University

Regional Accounts: Objectives and Framework

Werner Z. Hirsch, Washington University and Resources for the Future, Inc.

Discussants: Otto Eckstein, Harvard University and Joint Economic Committee

Charles Schwartz, International Monetary Fund

1:00 p.m., SHOREHAM, Tamerlane Room (ASA, BS, IMS)

MULTIVARIATE ANALYSIS - I

Chairman: S. S. Wilks, Princeton University

Multivariate Chebyshev Type Inequalities

Albert W. Marshall, Stanford University

Some Applications of Multivariate Chebyshev Inequalities

I. Olkin, Michigan State University

A Representation of the Wishart Matrix

R. A. Wijsman, University of Illinois

1:00 p.m., SHOREHAM, Park Room (ASA)

STATISTICS IN SOME ASPECTS OF METEOROLOGY

Chairman: Marvin Zelen, National Bureau of Standards

Some Meteorological Factors in the Design of Weather Modification Experiments

Franklin Newhall, U. S. Department of Agriculture

Problems and Progress in Weather Modification Experiments

Glenn Brier and Herb Thom, U. S. Weather Bureau

Discussants: Oscar Kempthorne, Iowa State University
Max Woodbury, New York University

2:00 P.M., SUNDAY

2:00 p.m., SHERATON-PARK, Hamilton Room (AEA)

MEETING OF JOINT COUNCIL ON ECONOMIC EDUCATION

2:00 p.m., SHOREHAM, West Ballroom (IMS)

WALD LECTURE - I

Chairman: K. L. Chung, Syracuse University

Balanced and Group Divisible Designs

R. C. Bose, University of North Carolina

3:00 p.m., SHOREHAM, Terrace Banquet Room (ASA)

SPECIAL INVITED ADDRESS

Chairman: Rensis Likert, Institute for Social Research

Role of Statisticians and Statistical Methodology in Medical Research

James A. Shannon, Director, National Institutes of Health

3:00 p.m., SHOREHAM, West Ballroom (IMS)

SPECIAL INVITED ADDRESS

Chairman: Herman Chernoff, Stanford University

Recent Work on the Theory of Dams

W. L. Smith, University of North Carolina

3:00 p.m., MAYFLOWER, Virginia Room (IRRA)

EXECUTIVE BOARD MEETING, INDUSTRIAL RELATIONS RESEARCH ASSOCIATION

4:00 P.M., SUNDAY

4:00 p.m., SHOREHAM, Club Room (AFA, ASA)

ASPECTS OF STOCK OWNERSHIP IN UNITED STATES CORPORATIONS

Chairman: Vito Natrella, Securities and Exchange Commission

The Decade Ahead in Share Ownership Research

Jonathan Brown, New York Stock Exchange

Investment Companies—Their Investments and Investors

Harold S. Oberg, National Association of Investment Companies

Share Ownership Research at General Electric

Horace J. DePodwin, General Electric Co.

Discussants: Irwin Friend, University of Pennsylvania

Daniel H. Brill, Board of Governors of the Federal Reserve System

4:00 p.m., SHOREHAM, Palladian Room (ASA)

STUDIES IN HONOR OF WILLIAM FIELDING OGBURN, 1886-1959

Chairman: Stuart A. Rice, Surveys and Research Corp.

Quantitative Methods in Sociology

George A. Lundberg, University of Washington

Type of Family and Type of Economy

Meyer F. Nimkoff and R. Middleton, Florida State University

Age Differentials in Internal Migrations by Regions and Decades, 1870-1950

Dorothy Swaine Thomas, University of Pennsylvania

Discussant: A. J. Jaffe, Columbia University

4:00 P.M., SUNDAY

4:00 p.m., SHOREHAM, Park Room (ASA)

LABOR FORCE MEASUREMENT AND INTERPRETATION

Chairman: Gladys L. Palmer, University of Pennsylvania

Recent Changes in Programs for Labor Force Measurement

Margaret E. Martin, Bureau of the Budget

Cyclical Changes in Employment and Unemployment

Seymour L. Wolfbein, Department of Labor

Factors in Labor Force Growth

Gertrude Bancroft, Bureau of Labor Statistics

New Aspects of Puerto Rican Migration

Robert O. Carlton, Puerto Rican Planning Board

Discussants: George P. Shultz, University of Chicago
James W. Knowles, Joint Economic Committee Staff

4:00 p.m., SHOREHAM, Tamerlane Room (ASA)

RETRAINING OF STATISTICIANS

Chairman: Carl E. Marshall, Oklahoma State University

The Impact of the "Short Course" Techniques in the Training of Industrial Statisticians

Irving Burr, Purdue University

The Summer Sessions in Public Health and Medical Statistics

Fay Hemphill, National Institutes of Health

The Summer Institutes Supported by the National Science Foundation

Edward C. Bryant, University of Wyoming

The Southern Regional Graduate Summer Sessions in Statistics

Boyd Harshbarger, Virginia Polytechnic Institute

Discussant: William G. Cochran, Harvard University

4:00 p.m., SHOREHAM, North Room (BS)

MEETING OF REGIONAL ADVISORY BOARD, BIOMETRIC SOCIETY (ENAR)

4:00 P.M., SUNDAY

4:00 p.m., SHOREHAM, West Ballroom (IMS)

INVITED PAPERS - I

Chairman: P. P. Billingsley, University of Chicago

On a Problem of Queues With Single Server

L. Takacs, Columbia University

Recent Developments in Inventory Theory

H. Scarf, Stanford University

Semi-Markov Processes—Denumerable State Space

R. Pyke, Columbia University

4:00 p.m., SHOREHAM, South Room (IMS)

CONTRIBUTED PAPERS - III

6:00 p.m., SHERATON-PARK, Franklin Room (AEA)

***DINNER MEETING, EXECUTIVE COMMITTEE, AMERICAN ECONOMIC ASSOCIATION**

6:00 p.m., SHOREHAM, Tamerlane Room (ASA)

***DINNER MEETING OF BOARD OF DIRECTORS AND COUNCIL, AMERICAN STATISTICAL ASSOCIATION**

7:30 p.m., SHERATON-PARK, Burgundy Room (CEA)

RIGHT-TO-WORK LAWS AND FREEDOM - I

Chairman: Prof. Josef Solterer, Georgetown University

John S. Mill on Freedom and Voluntary Association

Prof. Abram L. Harris, University of Chicago

Discussant: Prof. Francis J. Brown, DePaul University

8:00 p.m., SHERATON-PARK (AFEA)

MEETING OF EXECUTIVE COMMITTEE, AMERICAN FARM ECONOMIC ASSOCIATION

* Fee or Invitation Event.

8:00 P.M., SUNDAY

8:00 p.m., SHOREHAM, Park Room (ASA)

INNOVATIONS IN STATISTICAL RESEARCH IN SOCIAL SCIENCE

Chairman: Margaret Jarman Hagood, U. S. Department of Agriculture

Use of Computers in Analyses of Social Organization

James S. Coleman, Johns Hopkins University

Some Statistical Problems in an Organization Research Project

Harrison White, University of Chicago

The Computer in Analysis of Social Statistics

Joseph F. Daly, Bureau of the Census

8:00 p.m., SHOREHAM, Club Room (ASA, RSA)

STATISTICAL TECHNIQUES IN REGIONAL ANALYSIS

Chairman: Joseph L. Fisher, Resources for the Future, Inc.

A Statistical and Analytical Technique for Regional Analysis

Edgar S. Dunn, University of Florida

Minimum Requirements Approach to Urban Economic Base

Edward L. Ullman and Michael Dacey, University of Washington

Discussants: Edgar M. Hoover, Pittsburgh Regional Planning Association

Richard Muth, University of Chicago

David Bramhall, University of Pennsylvania

8:00 p.m., Shoreham, North Room (IMS)

1959 COUNCIL MEETING, INSTITUTE OF MATHEMATICAL STATISTICS

9:00 p.m., SHERATON-PARK, Burgundy Room (CEA)

RIGHT-TO-WORK LAWS AND FREEDOM - II

Chairman: Very Rev. Msgr. George G. Higgins, Social Action Department, National Catholic Welfare Conference

Right-to-Work Laws and the Freedom of Collective Bargaining

Dean James M. Hart, DePaul University

Discussant: Rev. Louis J. Twomey, S.J., Loyola University (New Orleans)

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PUBLICATIONS

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Price to be announced*

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by E. A. J. JOHNSON, *Johns Hopkins University* and HERMAN E. KROOSS, *New York University*

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Published 1959*

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Robert H. Wessel, *University of Cincinnati*

• Edward R. Willett, *Northeastern University*

Nonmathematical and nonsymbolic in content and approach, this work stresses basic ideas rather than formulas and derivations. 1959

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8:00 a.m., SHOREHAM, Tamerlane Room (ASA)

***BREAKFAST MEETING OF CHAPTER PRESIDENTS AND
SECRETARIES AND DISTRICT REPRESENTATIVES**

8:00 a.m., WASHINGTON, Washington Room (AAUTI)

***BREAKFAST AND SOCIAL HOUR: CHARTERED LIFE UN-
DERWRITERS—CHARTERED PROPERTY AND
CASUALTY UNDERWRITERS**

8:30 a.m., SHOREHAM, Main Ballroom (ASA)

**STATISTICAL NEEDS FOR CONSTRUCTION AND MORTGAGE
FINANCE**

Chairman: George B. Hurff, *University of Florida*

The Construction Statistics Program

Elmer Bratt, *Lehigh University*

The Present Status of Statistics Dealing With Construction Finance

Saul B. Klamann, *National Association of Mutual Savings Banks*

**Better Construction Statistics Through Intense Efforts at the State
Level**

Carter C. Osterbird, *University of Florida*

Discussants: Samuel J. Dennis, *Bureau of the Census*
George B. Hurff, *University of Florida*

8:30 a.m., SHOREHAM, Park Room (ASA, BS)

DESIGN OF EXPERIMENTS - II

Rectangular Lattices for $v = pkn$ in Incomplete Blocks of Size k

W. T. Federer, *Cornell University*

Designs of Type B'

George Box, *Princeton University*

The Statistical Evaluation of Test Methods

John Mandel, *National Bureau of Standards*

Discussant: H. O. Hartley, *Iowa State University*

* Fee or Invitation Event.

8:30 A.M., MONDAY

8:30 a.m., SHOREHAM, Club Room (ASA)

CONTRIBUTED PAPERS

Sampling With Unequal Probabilities Without Replacement

H. O. Hartley and J. N. K. Rao, Iowa State University

Empirical Analysis of Segregation Indexes

Karl E. Tauber, Department of Health, Education, and Welfare

An Evaluation of Social Area Indices

James M. Beshers, Purdue University

Game Theory and Voting Behavior

Jack Sawyer and Duncan MacRae, Jr., University of Chicago

8:30 a.m., SHOREHAM, North Room (BS)

CONTRIBUTED PAPERS - I

Role of Sex-Linked Genes in Quantitative Inheritance and Related Topics

N. R. Bohidar, Iowa State University

Hospital Blood Requirements

G. Stanley Woodson, Commission on Professional Hospital Activities, Ann Arbor, Michigan

Protection and Infection Rates in (Influenza and Adenovirus) Vaccine Evaluations

W. T. Stille, Navy Medical Research

9:00 a.m., SHERATON-PARK, Franklin Room (CEA)

RIGHT-TO-WORK LAWS AND FREEDOM - III

Chairman: Rev. Thomas J. McDonagh, University of Notre Dame

Right-to-Work Laws and Freedom of the Employer

George R. Donahue, Catholic Employers, Managers and Technologists Study Group

Discussant: Leslie E. Woods, Raytheon Manufacturing Company

9:00 a.m., SHOREHAM, West Ballroom (IMS)

WALD LECTURE - II

Chairman: W. Hoeffding, University of North Carolina

Orthogonal Squares and Orthogonal Arrays

R. C. Bose, University of North Carolina

9:00 A.M., MONDAY

9:00 a.m., WILLARD, South Ballroom (AMA)

THE FEDERAL GOVERNMENT'S ROLE IN MARKETING: RECENT DEVELOPMENTS

Chairmen: J. Allan Cook, University of Maryland

A. Rex Johnson, George Washington University

Promoting Better Marketing for Small Business

Wilford L. White, Director, Office of Management and Research Assistance, Small Business Administration

Marketing Agricultural Surpluses

O. V. Wells, Administrator, Agricultural Marketing Service, U. S. Department of Agriculture

Federal Regulation of Competitive Practices

Sigurd Anderson, Commissioner, Federal Trade Commission

9:30 a.m., MAYFLOWER, East Room (IRRA)

THE INCIDENCE OF PERSISTENT UNEMPLOYMENT

Chairman: Eveline Burns, New York School of Social Work, Columbia University

The Incidence of Persistent Unemployment

William H. Miernyk, Director, Bureau of Business and Economic Research, Northeastern University

Discussants: Robert L. Aronson, Cornell University

W. L. Ginsburg, U.A.W.

Jacob J. Kaufman, Pennsylvania State University

Myron S. Silbert, Federated Department Stores, Cincinnati

9:30 a.m., MAYFLOWER, Williamsburg Room (IRRA)

HEALTH PLANS IN COLLECTIVE BARGAINING: RESPONSIBILITIES OF MANAGEMENT AND LABOR FOR MEDICAL CARE

Chairman: Anne Somers, Haverford College

A Labor View

I. S. Falk, Consultant on Health Services, United Steel Workers of America

A Management View

John I. Snyder, Jr., President and Chairman of the Board, U. S. Industries, Inc. (and Co-Chairman of Foundation of Employee Health, Medical Care, Welfare, Inc.)

Discussants: Harry Becker, Blue Cross Association

Theodore Ellsworth, Institute of Industrial Relations, University of California, Los Angeles

Sander Wirpel, Inland Steel Corp.

9:30 a.m., SHERATON-PARK, Continental Room (AEA)
STANDARDS FOR THE PERFORMANCE OF OUR ECONOMIC SYSTEM

Chairman: Frank H. Knight, University of Chicago

Changing Standards of Economic Performance

Donald J. Dewey, Duke University

A Critique of Existing and Proposed Standards

Tibor Scitovsky, University of California, Berkeley

Discussants: Vincent W. Bladen, University of Toronto

Kenneth E. Boulding, University of Michigan

Henry M. Oliver, Indiana University

9:30 a.m., SHERATON-PARK, Caribar Room (AEA)

REDUCING IMPEDIMENTS TO FOREIGN TRADE

Chairman: Howard S. Piquet, Library of Congress

Employment Effects of Unilateral Reductions in U. S. Tariffs

Walter S. Salant, Brookings Institution

Trade Barriers and National Security

Willard L. Thorp, Amherst College

A Canadian Looks at American Trade Policy

John J. Deutsch, Queen's University, Ontario

Discussants: Daniel Marx, Jr., Dartmouth College

Ingvar Svennilson, University of Stockholm

Jay W. Wiley, Purdue University

9:30 a.m., SHERATON-PARK, Ballroom (AEA, ES)

THE PROBLEM OF ACHIEVING AND MAINTAINING A STABLE PRICE LEVEL

Chairman: G. L. Bach, Carnegie Institute of Technology

Analytical Foundations for Anti-Inflation Policy

Paul A. Samuelson and Robert M. Solow, Massachusetts Institute of Technology

What About Wage-Push?—Analysis and Policy Implications

Lloyd G. Reynolds, Yale University

What Can We Learn From Foreign Experiences?

Arthur W. Marget, Board of Governors of the Federal Reserve System

Discussants: Lester V. Chandler, Princeton University

Abba Lerner, Michigan State University

Joseph A. Pechman, Committee for Economic Development

9:30 a.m., SHERATON-PARK, Exhibit Hall (AFEA, ES)

THE LOW INCOME PROBLEM IN AGRICULTURE

Chairman: George G. Judge, University of Illinois

Measurements of Low Income in Agriculture as Problems of Under-Employment and Economic Development

Robert B. Glasgow and William E. Hendrix, U. S. Department of Agriculture

Economic Development and the Demand and Supply Relations for Labor to American Agriculture

G. Edward Schuh, Purdue University

Agricultural Adjustment and Under-Employment in Agriculture

Charles E. Bishop, North Carolina State College

Discussants: George K. Brinegar, University of Connecticut

Frank G. Jarrett, Michigan State University

9:30 a.m., SHERATON-PARK, Burgundy Room (AFA)

MONETARY POLICY AND THE FINANCING PROBLEMS OF STATE AND LOCAL GOVERNMENTS

Chairman: George W. Mitchell, Federal Reserve Bank of Chicago

State-Local Response to Changing Credit Conditions: The Institutional Obstacles

Dick Netzer, Federal Reserve Bank of Chicago

An Empirical Study of the Impact of Monetary Policy on State and Local Governments

Frank E. Morris, Investment Bankers Association of America

Discussants: Thomas G. Gies, University of Michigan

Allen D. Manvel, Bureau of the Census

Benjamin U. Ratchford, Duke University

9:30 a.m., SHERATON-PARK, Adams-Hamilton Room (RSA)

LOCAL, REGIONAL AND NATIONAL IMPACT OF DISARMAMENT

Chairman: Victor Roterus, U. S. Department of Commerce

Panel: Charles L. Leven, University of Pennsylvania

Alfred C. Neal, Committee for Economic Development

Solomon Barkin, Textile Workers of America

Emile Benoit, Columbia University

Walter Isard, University of Pennsylvania

9:30 a.m., SHERATON-PARK, Madison Room (ES)

PROPERTIES OF SIMULTANEOUS EQUATION PARAMETER ESTIMATORS

Chairman: Harvey M. Wagner, Stanford University

On the Finite Sample Distributions of Maximum-Likelihood Estimates of Coefficients in a Structural Equation

Robert L. Basmann, General Electric Company

The Small Sample Properties of Simultaneous Equation Estimators: A Systematic Examination of the Parameter Space

Robert Summers, The Rand Corporation and University of Pennsylvania

Specification Errors and Estimates of Economic Parameters

William A. Neiswanger and Thomas W. Yancey, University of Illinois

Discussant: T. W. Anderson, Columbia University

9:30 a.m., WASHINGTON, North Room (AAUTI)

CURRENT DEVELOPMENTS AND PROBLEMS IN INSURANCE

Chairman: John S. Bickley, Professor of Insurance, University of Texas

Health Insurance

Robert R. Neal, General Manager, Health Insurance Association of America

Social Insurance

Robert J. Myers, Chief Actuary, Social Security Administration, Department of Health, Education, and Welfare

Property Insurance

Ambrose B. Kelly, General Counsel, Associated Factory Mutual Fire Insurance Companies.

Life Insurance

Eugene M. Thore, Life Insurance Association of America

10:30 a.m., SHERATON-PARK, Franklin Room (CEA)

RIGHT-TO-WORK LAWS AND FREEDOM - IV

Chairman: Prof. John J. Hooker, Catholic University of America

Right-to-Work Laws and Freedom of the Union

Rev. Leo C. Brown, S.J., St. Louis University

Discussant: Brother Cornelius Justin, F.S.C., Manhattan College

10:30 a.m., SHOREHAM, Main Ballroom (ASA)

INTERNATIONAL MEASUREMENT AND ANALYSIS OF SAVINGS

Chairman: Irwin Friend, University of Pennsylvania

India

P. S. Lokanathan, National Council of Applied Economic Research

Mexico

Frank Tamagna, American University

United States

R. W. Goldsmith, National Bureau of Economic Research and New York University

Discussants: James Morgan, University of Michigan

Stanley Sigel, Board of Governors of the Federal Reserve System

10:30 a.m., SHOREHAM, Blue Room (ASA)

PLACE OF THE 1960 CENSUS IN THE EVOLUTION OF IMPORTANT CENSUS CONCEPTS

Chairman: Robert W. Burgess, Bureau of the Census

Where We Stand in the Urban-Rural and Farm Residence Concepts

Henry D. Sheldon, Bureau of the Census

The New Household Concept and How It Affects Other Groups Enumerated

Paul D. Glick and Beulah Washabaugh, Bureau of the Census

Components of Change in the Nation's Housing Inventory in Relation to the 1960 Census

F. S. Kristoff, Bureau of the Census

10:30 a.m., SHOREHAM, North Room (ASA, BS, IMS)

MULTIVARIATE ANALYSIS - II

Chairman: R. L. Anderson, North Carolina State College

Sequential Chi-Square and T² Tests

J. E. Jackson, Eastman Kodak Company and R. A. Bradley, Florida State University

Multivariate Correlation Models With Mixed Discrete and Continuous Variables

R. F. Tate, University of Washington

Analysis of Multi-Factor Multi-Response Experiments With Mixed Factor and Response Types

S. N. Roy, University of North Carolina

10:30 a.m., SHOREHAM, Palladian Room (ASA, BS)

STATISTICAL METHODS IN HUMAN GENETICS*Chairman:* Norman C. Severo, University of Buffalo**Methodology of Twin Studies**

Richard H. Osborne, Sloan-Kettering Institute, and Oscar Kempthorne, Iowa State University

A Statistical Model for Diagnosing Zygosity by Ridge-Count

Donald Richter, University of Minnesota, and Seymour Geisser, National Institutes of Health

A Differential Method of Estimating Type Frequencies in Triplets and Quadruplets

Gordon Allen, National Institutes of Health

Discussants: Abraham Lilienfeld, Johns Hopkins University
Allyn Kimball, Oak Ridge National Laboratory

10:30 a.m., SHOREHAM, Park Room (ASA)

SCREENING DATA AND DIRECT SEARCH BY MEANS OF ELECTRONIC COMPUTERS**A Screening Program for the IBM 704**

Milton Terry, Bell Telephone Laboratories

Discussants: Jack Moshman, Corporation for Economic and Industrial Research
Fred Mosteller, Harvard University

10:30 a.m., SHOREHAM, West Ballroom (IMS)

INVITED PAPERS - II*Chairman:* David Duncan, University of North Carolina**Multiple Decision Rules Which Control All Kinds of Errors**

W. J. Hall, University of North Carolina

Remarks About a Paired Comparison Model

G. Noether, Boston University

Ranks Tests of Locally Most Powerful Type

H. Uzawa, Stanford University

10:30 a.m., SHOREHAM, Tamerlane Room (IMS)

INVITED PAPERS - III*Chairman:* E. Lukacs, Catholic University**The Spectral Theory of Operators in a Hilbert Space and Its Application to the Derivation of Some Statistical Theorems**

E. J. Hannan, Canberra University College, Australia

On Explicit Solutions to Problems of Linear Prediction and Regression Analysis of Continuous Parameter Time Series

E. Parzen, Stanford University

10:45 a.m., WILLARD, Cabinet Room (AMA)

THE DEPTH INTERVIEW AS A RESEARCH TOOL*Chairman:* Richard R. Mead, University of Southern California**Promises and Pitfalls of the Depth Interview**

Wallace Yoder, University of Indiana

Depth Interviews in Action—A Case Study

Clark L. Wilson, Batten, Barton, Durstine and Osborne

10:45 a.m., WILLARD, South Ballroom (AMA)

THE ADVERTISING PRACTITIONER ANSWERS THE ADVERTISING TEACHER'S QUESTION: "WHAT PRODUCT DO YOU WANT US TO TURN OUT?"*Chairman:* William L. Doremus, New York University*Speakers:* Harriet Raymond, Celanese Corporation of America

Samuel Thurm, Lever Brothers Co.

Russell Schneider, McCann-Erickson, Inc.

W. Hunter Simpson, International Business Machine Corporation

12:30 p.m., GUSTI'S RESTAURANT, 1837 M St., N.W. (IRRA)

LUNCHEON MEETING, Cornell Alumni of the Industrial and Labor Relations SchoolSpeaker:* Dean John W. McConnell

12:30 p.m., WILLARD, Grand Ballroom (AMA)

LUNCHEON SESSIONChairman:* James Hagler, Harvard University**International Marketing Research**

Harry Kearns, Assistant Secretary of Commerce for International Affairs

12:30 P.M., MONDAY

12:30 p.m., SHERATON-PARK, Continental Room (CEA)

***LUNCHEON SESSION**

Chairman: Prof. Charles J. Walsh, Fordham University

Presidential Address: Right-to-Work Laws and the Common Good
Rev. Jerome L. Toner, O.S.B., St. Martin's College

Greetings

The Most Rev. Patrick A. O'Boyle, Archbishop of Washington

12:30 p.m., SHOREHAM, Terrace Banquet Room (AEA, ASA)

***LUNCHEON SESSION: THE ECONOMIC OUTLOOK**

Chairman: Martin R. Gainsbrugh, National Industrial Conference Board

The Economic Outlook for 1960

Paul W. McCracken, University of Michigan

The Balance of Trade Outlook

Donald F. Heatherington, National Foreign Trade Council

12:30 p.m., WASHINGTON, Washington Room (AAUTI)

***LUNCHEON SESSION**

Chairman: Dan M. McGill, University of Pennsylvania

Social Insurance: A Prospective View

Arthur S. Flemming, Secretary of Health, Education, and Welfare

1:30 p.m., SHERATON-PARK, Hamilton Room (ES)

ECONOMIC THEORY - I

The Existence of Competitive Equilibrium

Frank H. Hahn, University of California, Berkeley, and University of Birmingham

Monopolistic Competition and General Equilibrium

Takashi Negishi, Stanford University

Stationary Ordinal Utility and Timing Preference

Tjalling C. Koopmans, Yale University

* Fee or Invitation Event.

1:30 P.M., MONDAY

1:30 p.m., SHERATON PARK, Burgundy Room (AFA, ES)

AGRICULTURAL SUPPLY ANALYSIS

Chairman: Marc Nerlove, University of Minnesota

The State of Agricultural Supply Analysis

Glenn L. Johnson, Michigan State University

Inter-Areal Relations in Supply Response

George S. Tolley, North Carolina State College

Discussants: Glenn T. Barton, U. S. Department of Agriculture
Harold W. Watts, Cowles Foundation, Yale University

1:30 p.m., SHERATON-PARK, Madison Room (ES)

CONSUMER BEHAVIOR

Chairman: Arnold Zellner, University of Washington

The Decomposition of Marginal Utilities

Victor E. Smith, Michigan State University

Biases in Estimating Income-Expenditure Relationships

Jean Crockett, University of Pennsylvania

Time-Series Estimates of Elasticities of Demand for Clothing in the United States

Meyer Burstein, Northwestern University

Discussant: Margaret G. Reid, University of Chicago

1:30 pm., SHERATON-PARK, Caribar Room (ES)

FORECASTING STUDIES

Chairman: Julius Shiskin, Bureau of the Census

On the Appraisal of Cyclical Turning Point Predictors

Arthur M. Okun, Yale University

A Test of the Validity of the Forecasting Results Obtained From the Diffusion Index

Herman O. Steckler, University of California, Berkeley

Discussants: Harry Eisenpress, International Business Machines Corporation
Maurice W. Lee, University of North Carolina

A Checklist of 1959 Books in

THE IRWIN SERIES IN ECONOMICS

Consulting Editor: Lloyd G. Reynolds, Yale University

GENERAL ECONOMICS: A Book of Readings
*Edited by Thomas J. Anderson,
Abraham L. Gitlow, and Daniel E. Diamond*

THE PRACTICE OF COLLECTIVE BARGAINING
By Edwin F. Beal and Edward D. Wickersham

ECONOMICS: PRINCIPLES AND POLICY *By Royall Brandis*
THEORY OF WAGES AND EMPLOYMENT
By Allan M. Carter

GOVERNMENT FINANCE: An Economic Analysis,
Revised Edition *By John F. Due*

ECONOMICS AND MAN
By John S. Gamba and Sidney Wertimer, Jr.

THE AMERICAN ECONOMY:
Principles, Practices, and Policies, *3d Edition*
By C. Lowell Harriss

THE ECONOMIC SYSTEM
By John M. Kuhlman and Gordon S. Skinner

ECONOMIC FLUCTUATIONS: Growth and Stability,
Revised Edition *By Maurice W. Lee*

PUBLIC REGULATION OF BUSINESS *by Dudley F. Pegrum*

MANAGERIAL ECONOMICS:
Decision Making and Forward Planning
By Milton H. Spencer and Louis Siegelman

To Be Published in 1960

COLLECTIVE BARGAINING: Principles and Cases, *3d Edition*
By John T. Dunlop and James J. Healy

ECONOMICS OF TRANSPORTATION, *5th Edition*
By D. Philip Locklin

NATIONAL INCOME ANALYSIS
By Barry N. Siegel

PUBLIC POLICIES TOWARD BUSINESS, *Revised Edition*
By Clair Wilcox

Publishers for:

THE AMERICAN ECONOMIC ASSOCIATION
THE S. S. HUEBNER FOUNDATION FOR
INSURANCE EDUCATION

and

THE PENSION RESEARCH COUNCIL

RICHARD D. IRWIN, INC. • HOMEWOOD, ILL.

2:00 p.m., MAYFLOWER, East Room (AEA, IRRA)

IMPROVING THE UNEMPLOYMENT INSURANCE SYSTEM

Chairman: J. Douglas Brown, Princeton University

Issues in the Improvement of the Federal-State Unemployment Insurance Program

Herman M. Somers, Haverford College

Discussants: Wilbur J. Cohen, University of Michigan
Nelson H. Cruikshank, AFL-CIO
Russell Hibbard, General Motors Corporation
Clark Kerr, University of California
Richard A. Lester, Princeton University

2:00 p.m., MAYFLOWER, Williamsburg Room (IRRA)

THE ECONOMICS OF THE MINIMUM WAGE

Chairman: Isador Lubin, Rutgers University

American Minimum Wage Laws—Their Purposes and Results

Arnold Tolles, Cornell University

Discussants: Peter Henle, AFL-CIO
John M. Peterson, University of Arkansas
Harry Weiss, U. S. Department of Labor

2:00 p.m., SHOREHAM, Palladian Room (ASA, ES)

INTERNATIONAL DEVELOPMENTS IN INPUT-OUTPUT STUDIES

Chairman: W. Duane Evans, Bureau of Labor Statistics

Empirical Studies

Marvin Hoffenberg, Committee for Economic Development

Theoretical Contributions

Wassily W. Leontief, Harvard University

Applications

Robert E. Johnson, Western Electric Company

Prospects for Future Development

Raymond T. Bowman, U. S. Bureau of the Budget

Discussant: John K. Galbraith, Harvard University

2:00 P.M., MONDAY

2:00 p.m., SHOREHAM, Blue Room (ASA)

DEMOGRAPHIC FACTS AND INTERNATIONAL POLITICAL REALITIES

Chairman: Philip M. Hauser, University of Chicago

The Current Westward Expansion of the United States in Political Focus

Irene B. Taeuber, Princeton University

The Problems of Questions Such as Religion and Origins in the Canadian Census

John T. Marshall, Dominion Bureau of Statistics

Population Growth and Social Welfare in South Asia

Nathan Keyfitz, University of Toronto

2:00 p.m., SHOREHAM, Foyer B (ASA)

CONTRIBUTED PAPERS

Estimation in Non-Linear Least Squares Problems

H. O. Hartley, Iowa State University

Truncation and Tests of Hypothesis, II

Irwin Guttman, Princeton University

On a Significance Test of System Reliability

David Rubenstein, General Electric Company

Analysis of Survival Data by Regression Techniques

Scott Krane and R. J. Buehler, Iowa State University

Tables and Factors for Computation of Two-Sided Tolerance Limits for Normal Distributions

A. Weissberg and G. H. Beatty, Batelle Memorial Institute

2:00 p.m., SHOREHAM, North Room (ASA)

STATISTICS-IN-SERVICE TRAINING IN INDUSTRY

Chairman: Howard L. Jones, University of Chicago

Aids to Communicating Statistical Ideas

Paul C. Clifford, Montclair State College

A Comprehensive Training Program in Industrial Statistics

Albert W. Wortham, Texas Instruments, Inc.

2:00 P.M., MONDAY

2:00 p.m., SHOREHAM, Tamerlane Room (IMS)

CONTRIBUTED PAPERS - IV

2:00 p.m., SHOREHAM, Park Room (ASA, BS, IMS)

CLASSIFICATION AND DISCRIMINATION - I

Chairman: Herbert Solomon, Stanford University

Classification Into Multivariate Normal Distributions With Unequal Covariance Matrices

T. W. Anderson, Columbia University, and R. R. Bahadur, Indian Statistical Institute

A Representation for Anderson's Statistic W

A. Bowker, Stanford University

An Asymptotic Expansion for the Distribution Function of Anderson's Classification Statistic W

R. Sitgreaves, Teachers College, Columbia University

2:00 p.m., SHOREHAM, West Ballroom (IMS)

RECENT DEVELOPMENTS IN INFORMATION THEORY (in cooperation with the Professional Group on Information Theory, Institute of Radio Engineers)

Chairman: David Slepian, Bell Telephone Laboratories

Bounds on Tails of Martingales With Applications to Information Theory

Claude Shannon, Massachusetts Institute of Technology

Information Theory and Statistics

Solomon Kullback, George Washington University

Error Correcting Codes

D. N. Ray-Chaudhuri, Case Institute of Technology

2:00 p.m., SHOREHAM, South Room (ASA)

DISCUSSION GROUP ON RESEARCH ON SKILL DEVELOPMENT AND MANPOWER UTILIZATION

Chairman: John S. McCauley, Bureau of Apprenticeship and Training

2:00 p.m., WILLARD, South Ballroom (AMA)

CONSUMER MOTIVATION AND BRAND CHOICE

Chairman: Edwin H. Lewis, University of Minnesota

Qualitative Research and Its Contribution to the Understanding of Brand Images

Burleigh B. Gardner, Executive Director, Social Research, Inc.

Brand Images as a Factor in the Purchase of Low-Priced Cars

George H. Brown, Marketing Research Manager, Ford Division, Ford Motor Company

Factors Motivating Consumer Choice of Private Brands

Robert S. Hancock, University of Minnesota

2:15 p.m., WASHINGTON, North Room (AAUTI)

WORKSHOP: "THE PLACE OF INSURANCE IN THE COLLEGIATE CURRICULUM"

Chairman: William T. Beadies, Illinois Wesleyan University

Orientation (2:15 p.m.)

Leslie J. Buchan, Washington University

Group Discussions (3:00 p.m.)

	Chairman	Secretary
Group A	John W. Cowee University of California	David A. Ivry University of Connecticut
Group B	C. Arthur Williams, Jr. University of Minnesota	Jesse F. Pickrell North Texas State College
Group C	John D. Long Indiana University	Grant M. Osborn Arizona State College
Group D	Donald R. Childress University of Oklahoma	Arthur Mason, Jr. Washington University

Group Reports and Summary (4:45 p.m.)

2:30 p.m., SHERATON-PARK, Continental Room (AEA)

PROBLEM OF RAISING INCOMES IN LAGGING SECTORS OF THE ECONOMY

Chairman: Alfred C. Neal, Committee for Economic Development

Lagging Sectors and Regions of the American Economy

Harvey S. Perloff, Resources for the Future, Inc.

The Evolving Low Income Problems of Agriculture

Frank J. Welch, University of Kentucky

Low Incomes in Urban Areas

Eleanor M. Snyder, Franklin D. Roosevelt Foundation

Discussants: George H. Borts, Brown University
George E. Brandow, Pennsylvania State University
Victor Roterus, U. S. Department of Commerce

2:30 p.m., SHERATON-PARK, Franklin Room (AFA)

OUTLOOK FOR CAPITAL AND MONEY MARKETS

Chairman: B. Haggott Beckhart, Columbia University

Federal Reserve Policy

Harold Barger, Columbia University

Urban Mortgage Market

Robert Moore Fisher, Board of Governors of the Federal Reserve System

Corporate Bond Market

George T. Conklin, Jr., The Guardian Life Insurance Company of America

The Short-Term Money Market

Norris O. Johnson, The First National City Bank of New York

The Capital Market and Long-Term Rates

Roy L. Reiersen, Bankers Trust Company

The Government Bond Market

Beryl W. Sprinkel, Harris Trust and Savings Bank

2:30 p.m., SHERATON-PARK, Adams Room (CEA)

BUSINESS MEETING, CATHOLIC ECONOMIC ASSOCIATION

2:30 P.M., MONDAY

2:30 p.m., SHERATON-PARK, Main Ballroom (AEA, ASA)

RESEARCH ON ECONOMIC DEVELOPMENT

Chairman: Max F. Millikan, Massachusetts Institute of Technology

Changing Parameters to Variables in the Theory of Economic Development

Everett E. Hagen, Massachusetts Institute of Technology

Agriculture in Economic Development

William H. Nicholls, Vanderbilt University

The Role of Government

Edward S. Mason, Harvard University

The Factor Proportions Problem

Richard S. Eckaus, Brandeis University

Mathematical Models of Economic Development

Hollis B. Chenery, Stanford University

Discussant: Albert Hirschman, Columbia University

2:30 p.m., SHOREHAM, Ballroom (RSA)

URBAN DEVELOPMENT AND THE SOCIAL SCIENTIST

Chairman: Lyle Fitch, City of New York

A. The Case: A Policy Decision Without the Help of Research

William L. Rafsky, City of Philadelphia

B. Research Panel

Political Science Approach

Robert Dahl, Yale University

Planning Approach

William Wheaton, University of Pennsylvania

Economics Approach

Morton Schussheim, Committee for Economic Development

Sociology Approach

Scott Greer, Northwestern University

C. The Problem Reviewed: An Effective Bridge Between Decision-Maker and Researcher?

3:30 P.M., MONDAY

3:30 p.m., SHERATON-PARK, Burgundy Room (ES)

ECONOMETRIC STUDIES - I

Chairman: Harold W. Watts, Yale University

A Quarterly Model of the Beef and Pork Economy Using Distributed Lags

Wayne Fuller, Iowa State University

Testing Alternative Formulations of the Demand for Automobiles

Daniel B. Suits, University of Michigan

Structural Price Forecasting Models for Shell and Frozen Whole Egg, Yolk, and Albumen

Richard J. Foote, Connell and Company

Discussants: John Haldi, Stanford University

George G. Judge, University of Illinois

3:30 p.m., SHERATON-PARK, Madison Room (ES)

ECONOMETRIC METHODS

Chairman: Robert L. Basmann, General Electric Company

The Selection of Variates for Use in Prediction. A Generalization of Hotelling's Solution

Geoffrey C. Chow, Cornell University

The Standard Error of Forecast for Interdependent Reduced Form Equations

John W. Hooper, Yale University and Arnold Zellner, University of Washington

On the Inconsistency of Simultaneous Equation Estimates Under Certain Types of Specification Error

Franklin M. Fisher, University of Chicago

Discussants: Lawrence R. Klein, University of Pennsylvania

Gerhard Tintner, Iowa State University

3:30 P.M., MONDAY

3:30 p.m., SHERATON-PARK, Caribar Room (ES)

CYCLES AND GROWTH*Chairman:* Hans P. Neisser, New School for Social Research**Business Cycles—Endogenous or Stochastic?**

Irma Adelman, Stanford University

The Integration of Simple Growth and Cycle Models

Hyman P. Minsky, University of California, Berkeley

Some Simple Econometrics of Growth: The Great Ratio of Economics

Lawrence R. Klein and Richard S. Kosobud, University of Pennsylvania

Discussant: G. Diran Bodenhorn, Dartmouth College

3:45 p.m., WILLARD, Cabinet Room (AMA)

FRONTIER DEVELOPMENTS IN INDUSTRIAL MARKETING*Chairman:* Edward W. Cundiff, University of Texas**Contributions of the Behavioral Sciences to Industrial Marketing**

Eugene J. Kelley, New York University

Broadening Industrial Marketing Horizons

William Lazer, Michigan State University

Panelists: Richard M. Hill, University of Illinois

Kenneth Lawyer, Western Reserve University

John J. Rath, Wayne State University

3:45 p.m., WILLARD, South Ballroom (AMA)

SHOULD COURSES IN RETAILING BE CONTINUED IN THE CURRICULUM OF SCHOOLS OF BUSINESS?*Chairman:* Robert D. Entenberg, University of Pittsburgh*Speakers:* Wenzil K. Dolva, Western Reserve University

Guy G. Gordon, University of Washington

Discussants: John A. Howard, University of Pittsburgh

Malcolm P. McNair, Harvard University

David D. Monieson, University of Pennsylvania

4:00 p.m., SHOREHAM, Terrace Banquet Room (ASA)

CONTROVERSIAL AREAS IN FEDERAL STATISTICS: ANTICIPATORY DATA*Chairman:* George P. Hitchings, Ford Motor Company**The Role of the Federal Government as a Source of Anticipatory Data**

Stanley Lebergott, Bureau of the Budget

The Budget as an Indicator of Government Intentions

David Novick, The Rand Corporation

Discussants: Morris Cohen, National Industrial Conference Board
Millard Hastay, Washington State College
Peter Henle, AFL-CIO

4:00 p.m., SHOREHAM, North Room (ASA)

EDUCATIONAL RESEARCH THROUGH APPLIED STATISTICAL METHODS*Chairman:* Herbert S. Conrad, U. S. Office of Education**Technical Aspects of the Survey of Human Resources**

John T. Dailey, American Institute for Research

Estimating Public School Expenditures in the Decade Ahead

Louis H. Conger, U. S. Office of Education

A Study of Factors Effecting Response in a Mail Survey of TeachersWard S. Mason and Robert J. Dressel, U. S. Office of Education
and Robert K. Bain, Purdue University

4:00 p.m., SHOREHAM, West Ballroom (ASA, IMS)

THE ORGANIZATION OF STATISTICAL INSTRUCTION IN COLLEGES AND UNIVERSITIES*Chairman:* Emanuel Parzen, Stanford University*Panel:* T. A. Bancroft, Iowa State University

J. Neyman, University of California

G. E. Nicholson, Jr., University of North Carolina

S. S. Wilks, Princeton University

Discussion: F. Mosteller, Harvard University

H. Solomon, Stanford University



The Dynamics of the American Economy

by CHARLES H. HESSION, S. M. MILLER,
and CURWEN STODDART

Brooklyn College

"Probably the best organized and most systematic presentation of institutional economics available today. It should be useful not only as an elementary text—particularly for students who may have no further training in the subject—but is also an excellent work for the growing field of adult education."—MICHAEL T. WERMEL, *California Institute of Technology*. 538 pages. \$6.00.

International Trade

GOODS, PEOPLE, AND IDEAS

by WENDELL C. GORDON

University of Texas

This comprehensive introduction to international economics integrates current thinking in the field into a coherent whole. In straightforward prose Dr. Gordon gives the facts and the theories, and shows how they relate to one another. Major concepts, such as the balance of payments and the terms of trade, are presented clearly and explained in detail. "Its main advantage lies in the fact that it combines a very clear presentation of the theory of international trade with a historical description of the postwar developments."—ANDRE SIMMONS, *University of Florida*. "Supported by unusually rich statistical data outside of the ordinary, and extremely well balanced summaries at the head of each chapter, this book makes fine reading."—ROBERT G. WERTHEIMER, *Babson Institute*. 684 pages. \$6.75.

ALFRED A. KNOFF, *Publisher*

College Department

501 Madison Avenue

New York 22

4:00 P.M., MONDAY

4:00 p.m., SHOREHAM, Park Room (ASA, BS, IMS)

CLASSIFICATION AND DISCRIMINATION - II

Chairman: S. W. Greenhouse, National Institutes of Health

Some Problems in Multivariate Classification Using Discrete Variates

W. G. Cochran, Harvard University and C. E. Hopkins, University of Oregon

A Descriptive Application of Discriminant Functions in Physical Anthropology

M. J. R. Healy, Bell Telephone Laboratories and Rothamsted Experimental Station

Linear Multivariate Models as Representative of Clinical Judgment

P. J. Hoffman, University of Oregon

4:00 p.m., SHOREHAM, Tamerlane Room (IMS)

CONTRIBUTED PAPERS - V

Chairman: R. Bechhofer, Cornell University

4:00 p.m., SHERATON-PARK, Adams Room (CEA)

EXECUTIVE COMMITTEE MEETING, CATHOLIC ECONOMIC ASSOCIATION

5:15 p.m., WILLARD (AMA)

*PRESIDENT'S RECEPTION: INFORMAL SMOKER

5:30 p.m., SHERATON-PARK, Adams Room (AEA)

*ALUMNI RECEPTION: UNIVERSITY OF WISCONSIN, ECONOMICS IN ACTION

6:00 p.m., SHOREHAM (ASA)

MEETING, 1960 PROGRAM COMMITTEE

6:00 p.m., SHOREHAM, North Room (ASA)

BUSINESS MEETING, SOCIAL STATISTICS SECTION, ASA

* Fee or Invitation Event.

6:00 P.M., MONDAY

6:00 p.m., Shoreham, West Ballroom (IMS)

**BUSINESS MEETING, INSTITUTE OF MATHEMATICAL
STATISTICS**

8:00 p.m., SHERATON-PARK, Ballroom (AEA)

PRESIDENTIAL ADDRESS

Chairman: John M. Clark, Columbia University

Presidential Address

Arthur F. Burns, Columbia University

8:00 p.m., SHERATON-PARK, Franklin Room (AFA)

**MEETING, BOARD OF DIRECTORS AMERICAN FINANCE
ASSOCIATION**

8:00 p.m., SHERATON-PARK, Hamilton Room (RSA)

SELECTED REGIONAL TOPICS

Chairman: Robert A. Kavesh, New York University

Regional-Demographic Interaction: Some Issues and Examples

William S. Peters, Arizona State University

The Connectivity of the Interstate Highway System

William L. Garrison, University of Washington

A Regional Weight Input-Output Table

T. Y. Shen, Federal Reserve Bank of Boston

8:00 p.m., SHOREHAM, Park Room (ASA, BS)

SOME METHODOLOGICAL PROBLEMS IN SURVEYS

Chairman: Frederick F. Stephan, Princeton University

**The Use of Rotating Samples in the Census Bureau's Monthly
Sample Surveys**

Ralph S. Woodruff, Bureau of the Census

Some Sampling Techniques for Continuing Survey Operations

Leslie Kish and Irene Hess, Survey Research Center

Sampling Problems in the Far East

J. E. Morton, United Nations

Discussants: Eli S. Marks, National Analysts, Inc.

Robert L. Breedlove, American Telephone and Tele-
graph Company

8:00 P.M., MONDAY

8:00 p.m., SHOREHAM, North Room (IMS)

**1960 COUNCIL MEETING: INSTITUTE OF MATHEMATICAL
STATISTICS**

8:00 p.m. WILLARD, Cabinet Room (AMA)

**APPROACHES TO THE TEACHING OF GENERAL
MARKETING**

Chairman: William Knoke, University of Iowa

Interdisciplinary Contributions to Teaching of General Marketing

William Lazer, Michigan State University

The Case Approach to Teaching of General Marketing

John R. Malone, University of Notre Dame

**The Subject Matter Mastery Approach to Teaching of General
Marketing**

Theodore Beckman, Ohio State University

Discussants: Paul M. Hoffman, Southern Illinois University

Harry A. Lipson, University of Alabama

E. J. McCarthy, University of North Dakota

Donald L. Shawver, University of Missouri

William J. Stanton, University of Colorado

E. E. Werner, University of Wisconsin

9:30 p.m., MAYFLOWER, East Room (IRRA)

***SMOKER, INDUSTRIAL RELATIONS RESEARCH ASSOCIA-
TION**

9:30 p.m., SHERATON-PARK, Continental Room (AEA)

***RECEPTION FOR OFFICERS AND MEMBERS, AMERICAN
ECONOMIC ASSOCIATION**

* Fee or Invitation Event.

Notable Books

NATIONALIST AND PUBLIC BANKER, 1786-1844

NICHOLAS BIDDLE

by *Thomas P. Govan*. A study of the banker who used "New Deal" methods in 1830—challenges the conventional interpretation of U. S. economic history. \$7.50

KING COTTON DIPLOMACY

by *Frank L. Owsley and Harriet C. Owsley*. A revised and reorganized edition of the definitive treatment of Confederate foreign relations during the War between the States. \$10.00

WE THE PEOPLE

The Economic Origins of the Constitution

by *Forrest McDonald*. "... His formidable study . . . subjects Charles A. Beard's economic interpretation of the Constitution to one of the most smashing analyses in . . . historical criticism." —DAVID POTTER in *The Saturday Review*. \$7.00

THE PROGRESS OF UNDERDEVELOPED AREAS

edited by *Bert F. Hoselitz*. 16 essays on major problems of non-industrialized areas of the world. "An invaluable casebook. . . ." —H. W. SINGER, *Social Research*. \$5.50

THE ADMINISTRATION OF TECHNICAL ASSISTANCE

Growth in the Americas

by *Philip M. Glick*. A study of assistance programs of the U. S., the UN and the Organization of American States. "... one of the most valuable contributions . . . to date."—*Library Journal*. \$5.50

TECHNICAL COOPERATION IN LATIN AMERICAN AGRICULTURE

by *Arthur T. Mosher*. An evaluation of technical aid programs in Latin American agriculture—their achievements and limitations—with constructive recommendations for change. \$6.00

TECHNICAL ASSISTANCE BY RELIGIOUS AGENCIES IN LATIN AMERICA

by *James G. Maddox*. Detailed case studies of U. S. missionary programs in the management of hospitals, schools, clinics, and demonstration farms. "An excellent exposition."—*American Political Science Review*. \$3.50

Cambridge

Economic Handbooks

THE STRUCTURE OF COMPETITIVE INDUSTRY

by *E. A. G. Robinson*. A newly revised edition of the well known analysis of factors which influence the size of firms. Recent studies and examples familiar to students today have been added. \$2.25

MONEY

by *D. H. Robertson*. A thorough examination of the economic role of money; concerned with the principles of money in an enterprise society, and contemporary monetary institutions. \$2.25

THE BUSINESS CYCLE

by *R. C. O. Matthews*. A straightforward, eclectic summary of what is known about business cycles, utilizing Keynesian analytical tools and terminology, and drawing on recently developed aggregative economic concepts and growth models. \$3.00

SUPPLY AND DEMAND

A Classic Introduction to Economic Theory

by *Hubert Henderson*. A book that remains one of the most valuable statements of economic theory. "Laws" of economic theory are carefully developed and applied to the various factors of production; with emphasis on the part played by laws of value in determining a nation's economic achievement. \$2.25

INTERNATIONAL ECONOMICS

Revised Edition

by *Roy F. Harrod*. A thorough revision of this famous study of foreign exchange and the balance of trade. The treatment enables the reader to grasp the intimate connection between the two. \$2.25

THE ECONOMICS OF UNDERDEVELOPED COUNTRIES

by *Peter T. Bauer and Basil S. Yamey*. A detailed examination which probes every major economic problem affecting the development of underdeveloped countries. Institutional problems and economic theory are taken into account as well as natural and human resources and the role of capital. \$2.25

Through your bookseller

UNIVERSITY OF


 Chicago PRESS

8750 Ellis Avenue, Chicago 37, Illinois

IN CANADA: The University of Toronto Press, Toronto 6, Ontario

Journals from the



ECONOMIC DEVELOPMENT AND CULTURAL EXCHANGE

Founded in 1952 for exploratory discussion of economic development and cultural change. Articles mainly devoted to analysis of problems in lesser developed countries. Edited by Bert Hoselitz.

Selected articles: "Economic Growth Under Centralized and Decentralized Planning in Yugoslavia," Rudolf Bicanic, University of Zagreb; "The Mediating Role of the Trade Union," Asoka Mehta, Bombay; "Sociological Aspects of the Economic Adaptation of Oriental Immigrants in Israel: A Case Study in the Problem of Modernization," S. N. Eisenstadt. Quarterly. One year, \$6.00.

THE JOURNAL OF POLITICAL ECONOMY

Founded in December 1892. The first journal to be published by The University of Chicago Press. Articles cover the entire field of economics—monetary problems, business fluctuations, labor, the relation of government to industry, commercial policy, economic theory and history, financial organization. Regularly featured book reviews. Edited by Albert Rees.

Selected articles: "How Income Ought to be Distributed: A Paradox in Distributive Ethics," Robert H. Strotz; "Unemployment in Backward Economies," Harvey Liebenstein and Harry T. Oshima; "The Discount as a Credit-Control Weapon," Warren L. Smith. Bimonthly. One year, \$6.00.

THE JOURNAL OF BUSINESS

Founded in 1929. An authoritative journal devoted to problems of the business world. Brings forward findings of research and professional analysis, with commentary that covers multiple aspects of the field. Topics include economics, marketing, forecasting, personnel, business psychology, accounting, advertising and finance. Edited by Irving Schweiger and Jack Hirschleifer.

Selected articles: "Economic Growth and Stock Prices: The Australian Experience," D. McI. Lamberton; "The Goals of Economic Policy," George Stigler; "The Current Business Recession," Arthur F. Burns; "Performance Appraisal and the Organization Man," Thomas L. Whisler. Quarterly. One year, \$6.00.



TUESDAY, DECEMBER 29

7:45 a.m., SHERATON-PARK, Caribar Room

***BREAKFAST: UNIVERSITY OF INDIANA**

7:45 a.m., SMORGASBORD RESTAURANT, 2641 Connecticut Ave. (AFEA)

***MINNESOTA BREAKFAST**

8:00 a.m., SHERATON-PARK, Franklin Room (AEA)

***BREAKFAST MEETING, ORDER OF ARTUS**

Presiding Officer: E. Bryant Phillips, University of Southern California

8:00 a.m., SHERATON-PARK, Burgundy Room (AEA)

***ALUMNI BREAKFAST: CASE INSTITUTE, ECONOMICS IN ACTION**

8:00 a.m., SHERATON-PARK, Madison Room, (AFA)

***EDITORIAL BOARD BREAKFAST MEETING**

8:00 a.m., SHOREHAM, South Room (ASA)

***BREAKFAST MEETING, MEMBERS OF THE INTERNATIONAL STATISTICAL INSTITUTE**

8:00 a.m., SHOREHAM, Tamerlane Room (ASA)

***BREAKFAST BUSINESS MEETING—BUSINESS AND ECONOMICS STATISTICS SECTION, ASA**

8:00 a.m., WILLARD, Jefferson Room (AMA)

***BREAKFAST, OHIO STATE UNIVERSITY**

* Fee or Invitation Event.

8:30 A.M., TUESDAY

8:30 a.m., SHOREHAM, Terrace Banquet Room (ASA, BS)

RATIO ESTIMATION

Chairman: H. O. Hartley, Iowa State University

The Application of Ratio and Regression Estimators to Analytic Studies

H. O. Hartley, Iowa State University

Unbiased Component-Wise Ratio Estimation

D. S. Robson and C. Vithayasai, Cornell University

Sampling Experiments on Ratio Estimators

A. Ross, University of Kentucky Medical Center

Unbiased Estimation

W. H. Williams, McMaster University

8:30 a.m., SHOREHAM, Park Room (ASA)

OUTLIERS

Locating Outliers in Factorial Experiments

Cuthbert Daniel, New York City

Outliers

Frank Anscombe, Princeton University

Discussants: John Tukey, Princeton University
William Kruskal, University of Chicago

8:30 a.m., SHOREHAM, Palladian Room (ASA)

PROBLEMS OF THE STANDARD METROPOLITAN STATISTICAL AREA DEFINITION

Chairman: Peyton Stapp, Bureau of the Budget

Sharpening the SMSA Tool

H. P. Alsbaugh, Standard Rate and Data Service

Use of SMSA Data in Local Planning

(to be announced)

Use of SMSA as an Operating Tool

Vladimir D. Chavrid, Bureau of Employment Security

Discussant: Henry Shryock, Bureau of the Census

8:30 A.M., TUESDAY

8:30 a.m., SHOREHAM, North Room (ASA)

CONTRIBUTED PAPERS

The Visual Conceptualization of Linear Correlation

Ellis B. Page, Eastern Michigan College

Mandatory Homework Assignments in Elementary Statistics Courses

Frank Meissner, Stanford Research Institute

9:00 a.m., SHOREHAM, West Ballroom (IMS)

WALD LECTURE - III

Chairman: W. G. Cochran, Harvard University

Factorial Designs—Compounding and Fractional Replication

R. C. Bose, University of North Carolina

9:00 a.m., WASHINGTON, North Room (AAUTI)

TESTING TECHNIQUES: AN ANALYSIS AND DEMONSTRATION

Chairman: Kenneth Black, Jr., Georgia State College of Business Administration

Speaker: Robert J. Solomon, Educational Testing Service, Princeton, New Jersey

9:00 a.m., WILLARD, South Ballroom (AMA)

ADVANCES IN MARKETING THEORY AND SCIENCE

Chairman: Perry Bliss, University of Buffalo

Computer Simulation of Marketing Processes

F. E. Balderston, University of California

Adjusting Marketing Theory to a World of Abundance

Stanley C. Hollander, Michigan State University

The Use of Generalizations in the Analysis of Marketing Problems

Harry Hansen, Harvard University

9:30 A.M., TUESDAY

9:30 a.m., MAYFLOWER, Williamsburg Room (IRRA)

CHANGING PATTERNS OF INDUSTRIAL CONFLICT

Chairman: E. Wight Bakke, Yale University

Changing Patterns of Industrial Conflict

Arthur Ross, University of California

Discussants: Ross Stagner, Wayne State University
Thomas Kennedy, Harvard Graduate School of
Business
Arthur Goldberg, AFL-CIO

9:30 a.m., MAYFLOWER, East Room (IRRA)

THE NATIONAL LABOR RELATIONS BOARD

Chairman: Martin Wagner, Institute of Labor and Industrial Relations,
University of Illinois

Collective Bargaining Under Government Auspices

George W. Taylor, University of Pennsylvania

Discussants: Guy Farmer, Washington, Former Chairman, NLRB
Morris Glushien, General Counsel, ILGWU

9:30 a.m., SHERATON-PARK, Continental Room (AEA)

**INCENTIVES AND ECONOMIC GROWTH: CHANGING ROLES
AND PUBLIC POLICIES**

Chairman: Solomon Fabricant, New York University

Incentives in the United States

Armen Alchian, University of California, Los Angeles, and William
H. Meckling, The Rand Corporation

Incentives in the Soviet Union

Gregory Grossman, University of California, Berkeley

Incentives in Underdeveloped Economies

Simon Rottenberg, University of Chicago

Discussants: Joseph S. Berliner, Syracuse University
Benjamin Higgins, University of Texas
Herbert Stein, Committee for Economic Development

9:30 A.M., TUESDAY

9:30 a.m., SHERATON-PARK, Ballroom (AEA)

PROBLEM OF SOCIAL PRIORITIES

Chairman: Joseph L. Fisher, Resources for the Future, Inc.

The Balanced Budget as a Test of Social Priorities

Arthur Smithies, Harvard University

Criteria for Undertaking Water Developments

Joe S. Bain, University of California, Berkeley

Criteria for Appraising Governmental Housing Programs

Leo Grebler, University of California, Los Angeles

Discussants: Samuel M. Cohn, Bureau of the Budget
Otto Eckstein, Harvard University
Neal J. Hardy, National Housing Center, Washington,
D. C.

9:30 a.m., SHERATON-PARK, Caribar Room (AFEA)

**THE FARM POLICY DEBATE: THE ADMINISTRATION'S POSI-
TION AND AN INDEPENDENT VIEW**

Chairman: George E. Brandow, Pennsylvania State University

In Support of the Administration's Farm Policy

Don Paarlberg, Special Assistant to the President

Industrial Organization, Market Structure and Agricultural Policy

Robert L. Clodius, University of Wisconsin

Discussants: Boris C. Swerling, Stanford University
James T. Bonnen, Michigan State University

9:30 a.m., SHERATON-PARK, Burgundy Room (ES)

RECENT DEVELOPMENTS IN THE THEORY OF THE FIRM

Chairman: Richard B. Heflebower, Northwestern University

**The Embryonic Corpse: Being an Enquiry into the Possible
Existence of a Theory of the Firm**

Richard M. Cyert and J. March, Carnegie Institute of Technology

Inductive Inference and Business Behavior

Robert W. Clower, Northwestern University

The Life and Death of the Firm

J. N. Wolfe, University of Toronto

Discussants: Richard E. Caves, University of California, Berkeley
Edith T. Penrose, Johns Hopkins University

9:30 A.M., TUESDAY

9:30 a.m., SHERATON-PARK, Franklin Room (AFA)

FINANCING REAL ESTATE IN THE 1960's: PROSPECTS, PROBLEMS, AND PROGRAMS

Chairman: Arthur M. Weimer, Indiana University

Residential Real Estate Finance in the 1960's

W. George Pinnell, Indiana University

Financing Commercial and Industrial Real Estate in the 1960's

Homer Hoyt, Homer Hoyt Associates

The Financing of Community Facilities and Public Improvements

Miles L. Colean, Consultant

Discussants: Fred E. Case, University of California at Los Angeles

Paul F. Wendt, University of California, Berkeley

Richard U. Ratcliff, University of Wisconsin

Robert O. Harvey, University of Illinois

Glen H. Beyer, Cornell University

Louis Winnick, Department of City Planning, New York

James B. Cash, Jr., Subcommittee on Housing, Committee on Banking and Currency, U. S. Senate

9:30 a.m., SHERATON-PARK, Exhibit Hall (ES)

MATHEMATICAL PROGRAMMING - I

Chairman: Gerard Debreu, Yale University

A Decomposition Principle for Mathematical Programming

Philip Wolfe, The Rand Corporation

Applications of the Decomposition Principles for Mathematical Programs

George B. Dantzig, The Rand Corporation

Non-Linear Programming for Separable Objective Functions and Constraints

H. O. Hartley, Iowa State University

Discussants: Tjalling C. Koopmans, Yale University

George Hadley, Massachusetts Institute of Technology

9:30 A.M., TUESDAY

9:30 a.m., SHERATON-PARK, Madison Room (ES)

INVESTMENT AND INNOVATION

Chairman: Arthur M. Okun, Yale University

Capital Stock in Investment Functions: Problems of Concept and Measurement

Zvi Griliches, University of Chicago

Manufacturers' Inventories and the Acceleration Principle

Michael C. Lovell, Yale University

Technological Change and the Imitation Process

Edwin Mansfield, Carnegie Institute of Technology

Discussants: Robert Eisner, Northwestern University

John R. Meyer, Harvard University

9:30 a.m., SHERATON-PARK, Adams and Hamilton Rooms (RSA)

THE NEW YORK METROPOLITAN REGION STUDY—A BASIS FOR POLICYMAKING?

Chairman: Werner Z. Hirsch, Washington University

Panel: 1. Viewed from the Approach of Government Organization

Norton Long, Northwestern University

2. As Seen from the Angle of Land Use Planning

Fritz Gutheim, Congressional Staff, Washington, D. C.

3. In Terms of Public Economic Decision Making

Kirk R. Petshek, City of Philadelphia

4. In Terms of Private Decision Making

Warren Lindquist, Downtown Lower Manhattan Association

5. Viewed from the Transportation Angle

Robert Mitchell, University of Pennsylvania

Response: For the New York Study

Raymond Vernon, Harvard Business School

ABC Social Science Texts

Henry Grayson *University of Maryland*

Phillip H. Lohman *University of Vermont*

PRINCIPLES OF ECONOMICS

- Emphasis on economic theory, with institutional description and empirical data providing a realistic setting
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- A cultural-historical perspective
- Student's Workbook

Harvey E. Drach *University of Cincinnati*

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A streamlined treatment giving the student all he needs to write clear, concise, effective communications in tune with the times.

Leland J. Gordon *Denison University*

ECONOMICS FOR CONSUMERS • Third Edition

An examination of the role of the consumer in our economic system and the factors affecting economic choices.

Ferdinand F. Mauser *Wayne State University*

David J. Schwartz *Georgia State College of
Business Administration*

INTRODUCTION TO AMERICAN BUSINESS

A balanced discussion of the essential functions of business, with emphasis on American business as a dynamic process.

William H. Knowles *Michigan State University*

PERSONNEL MANAGEMENT

- A Human Relations Approach
- A sound and readable analysis of the principles and philosophy that underlie personnel management.

AMERICAN BOOK COMPANY
COLLEGE DIVISION, 30 Fifth Avenue, New York 3, New York

9:30 A.M. TUESDAY

9:30 a.m., SHOREHAM, Main Ballroom (AFA, ASA)

RESEARCH ON INCOME, CONSUMPTION, AND SAVINGS

Chairman: Milton Friedman, University of Chicago

Tests of Some Basic Propositions in the Theory of Consumption

Arnold Zellner, University of Washington

Labor Supply, Family Income, and Consumption

Jacob Mincer, City College of New York

Transitory Income and Expenditures on Consumption Components

Robert C. Jones, University of Pennsylvania

Some Neglected Features of Britain's Income Levelling

John A. Brittain, Vanderbilt University

Prediction and Consumer Buying Intentions

F. Thomas Juster, National Bureau of Economic Research

Discussant: Marc Nerlove, University of Minnesota

10:30 a.m., SHOREHAM, Blue Room (ASA)

APPRAISAL OF CURRENT ANTICIPATIONS DATA

Chairman: Albert G. Hart, Columbia University

Monthly Change Indices and Other New Measures of Business Fluctuations

John Hoagland, Michigan State University

What Do Consumer Buying Plans Forecast?

Morris Cohen, National Industrial Conference Board

Some Interrelationships Among Consumer Buying Plans, Expectations and Purchases

F. Thomas Juster, National Bureau of Economic Research

Discussants: Irving Schweiger, University of Chicago

Millard Hastay, Washington State College

10:30 a.m., SHOREHAM, Terrace Banquet Room (ASA, BS)

STATISTICAL DEFINITIONS, CONCEPTS, AND CATEGORIES

Chairman: Dudley Kirk, Population Council

Relations of Some Social Science Concepts to Statistical Data

Frederick F. Stephan, Princeton University

The Evaluation Program of the 1960 Censuses

Morris H. Hansen, Leon Pritzker, and Joseph Steinberg, Bureau of the Census

Some Principles of Definition in Statistics

L. E. Rowebottom and D. H. Steinthorson, Dominion Bureau of Statistics

10:30 A.M., TUESDAY

10:30 a.m., SHOREHAM, Palladian Room (ASA)

**ADEQUACY OF THE ELEMENTARY STATISTICS COURSES
AND ELEMENTARY TEXTS**

Chairman: John Firestone, City College of New York
Lester Frankel, Audits and Surveys, Inc.
Everett Johnson, George Washington University

10:30 a.m., SHOREHAM, West Ballroom (ASA, BS, IMS)

MATHEMATICAL MODELS IN THE LIFE SCIENCES

Chairman: Harold F. Bright, George Washington University

The Two-Stage Mutation Model for Carcinogenesis and Experimental Means of Its Verification

Jerzy Neyman and Elizabeth L. Scott, University of California, Berkeley

On the Relation Between the Structural Geometry and the Function of Individual Neurons

Wilfred Rall, National Institutes of Health

Competing Risks and the Followup Study

Chin Long Chiang, University of California, Berkeley

10:30 a.m., SHOREHAM, Park Room (ASA)

**STATISTICAL ANALYSIS OF TURBULENCE ON THE SURFACE
OF THE SUN**

Francois Frenkiel, Johns Hopkins University

Martin Schwarzschild, Princeton University

Discussants: G. Watson

Leo Tick, New York University

10:30 a.m., SHOREHAM, South Room (IMS)

INVITED PAPERS - IV

Chairman: J. F. Hannan, Michigan State University

Construction of Optimum Experimental Designs

J. Kiefer, Cornell University

Generalized Bayes Solutions in Estimation Problems

J. Sacks, Columbia University

On a Unified Theory of Estimation

A. Birnbaum, New York University

10:30 A.M., TUESDAY

10:30 a.m., SHOREHAM, North Room (BS)

CONTRIBUTED PAPERS - II

Chairman: R. G. D. Steel, Cornell University

Ratio Estimation in Stratified Sampling

J. N. dePascual, Iowa State University

On the Distribution of a Stratified Ratio-Estimate for a Response-Bias Problem in a Consumer Survey

B. D. Tikkiwal, Karnatak University

10:30 a.m., WASHINGTON, North Room (AAUTI)

SEMINAR ON INSURANCE RESEARCH

Chairman: John F. Adams, Temple University

OASI Data—The Basis for an Insurance Industry Employment Research Program

Theodore Bakerman, Duquesne University

Substantive Report of the AAUTI Census Committee (A Committee Report)

William Alrich, The Spectator, Philadelphia

Structure of the Life Insurance Industry

James L. Athearn, University of Florida

An Inquiry into the Administration and Security Behind Anticipated Benefit Rights Under Private Pension Plans (Pension Research Council Study)

Dan M. McGill, University of Pennsylvania

Union Members' Opinions of Insurance Fringe Benefits (Ford

Foundation Study being conducted jointly by Theodore Bakerman and Ludwig A. Wagner)

Ludwig A. Wagner, Duquesne University

A Comparison of European and American Actuarial Techniques in the Non-Life-Insurance Field

David B. Houston, University of California, Los Angeles

Credit Insurance in Texas

Kenneth W. Herrick, Texas Christian University

An Analysis of the Life Insurance Agent Compensation Structure

Frank J. Schwentker, University of North Carolina

Retirement Counseling Programs in American Corporations (A report on a Ford Foundation Grant Program)

Michael T. Wermel, California Institute of Technology

Current Problems of Cost Control in Health Insurance

William H. Wandel, Nationwide Insurance Company, Columbus, Ohio

10:45 A.M., TUESDAY

10:45 a.m., WILLARD, South Ballroom (AMA)

SHOULD SELLING BE TAUGHT IN COLLEGES AND UNIVERSITIES?

Chairman: C. A. Kirkpatrick, University of North Carolina

Speakers: D. R. Lindsay, Editor, The American Salesman
M. W. Lee, Vice President, National Association of Collegiate Schools of Business
A. N. Seares, President, National Sales Executives
E. C. Bursk, Editor, Harvard Business Review
R. E. Stevens, National Society of Sales Training Executives

10:45 a.m., WILLARD, Cabinet Room (AMA)

FOREIGN MARKETING IN AN ERA OF INCREASING COMPETITION

Chairman: Roland L. Kramer, University of Pennsylvania

Vice Chairman: Harold Kellar, Baruch School, City College of New York

Is the United States Being Priced Out of World Markets?

Laurence P. Dowd, University of Michigan

American Education in Foreign Marketing Is Achieving Its Objectives: Case Histories

Harold Kellar, Baruch School, City College of New York

The Role of Visual Aids in the Teaching of Foreign Marketing

John Fayerweather, Columbia University

The New Role of Marketing Research, Advertising and Salesmanship in International Trade

Barkev Kibarian, Northwestern University

Soviet Marketing and the Chances of Trade With the United States

Marshall I. Goldman, Wellesley College

12:00 noon, MAYFLOWER, State Room (IRRA)

***LUNCHEON SESSION**

Chairman: William Haber, University of Michigan

Memorial to Selig Perlman

Philip Taft, Brown University

Memorial to Sumner Slichter

John Dunlop, Harvard University

• Fee or Invitation Event.

12:30 P.M., TUESDAY

12:30 p.m., SHERATON PARK, Exhibit Hall (AMA, AFA)

***LUNCHEON SESSION**

Chairman: James J. O'Leary, Life Insurance Association of America

Financial Policies and Sustainable Economic Growth

Robert B. Anderson, Secretary of the Treasury

12:30 p.m., SHOREHAM, Tamerlane Room (ASA)

***CENSUS TRACT LUNCHEON**

Chairman: Gale R. Ober, Jr., Cleveland Real Property Inventory

How To Use Census Tract Data

12:30 p.m., WASHINGTON, Washington Room (AAUTI)

***LUNCHEON SESSION**

Chairman: J. Edward Hedges, Indiana University

CREF—A Retrospective and Prospective View

William C. Greenough, President, Teachers Insurance and Annuity Association and College Retirement Equities Fund

12:30 p.m., WILLARD, Grand Ballroom (AMA)

***LUNCHEON SESSION: PRESIDENTIAL ADDRESS**

Chairman: Wendell R. Smith, Radio Corporation of America

The Dark Continents of Marketing

Reavis Cox, President, American Marketing Association

1:30 p.m., SHERATON-PARK, Continental Room (ES)

ECONOMIC GROWTH AND DEVELOPMENT

Chairman: Simon S. Kuznets, Johns Hopkins University

Competition and Complementarity Between Defense and Development—A Preliminary Approach

Charles Wolf, Jr., The Rand Corporation

The Economics of Government Incentives to Limit Population

Stephen Enke, Yale University and The Rand Corporation

Patterns of Industrial Growth

Hollis B. Chenery, Stanford University

Discussant: Francis M. Bator, Massachusetts Institute of Technology

• Fee or Invitation Event.

New Harper Books
FALL 1959

UNIONS & UNION LEADERSHIP
Their Human Meaning
Jack Barbash

ECONOMICS OF TRANSPORTATION
Revised Edition
Marvin L. Fair and Ernest W. Williams, Jr.

VALUE IN SOCIAL THEORY
A Selection of Essays on Methodology
Gunnar Myrdal

INDUSTRIAL MAN
Businessmen & Business Organizations
W. Lloyd Warner and Norman H. Martin

SPRING 1960

AMERICAN ECONOMIC HISTORY
Eighth Edition—Harold U. Faulkner

FUNDAMENTALS OF ECONOMICS
Sixth Edition—Paul F. Gemmill

AN ANATOMY OF LEADERSHIP
Princes, Heroes & Supermen
Eugene E. Jennings

ECONOMIC THEORY
AND ORGANIZATIONAL ANALYSIS
Harvey Leibenstein

INDUSTRY, LABOR, & COMMUNITY
William H. Form and Delbert C. Miller

BUSINESS COMES OF AGE
The Story of the Committee for Economic Development
Karl Schriftgiesser

49 East 33d Street
New York 16, N. Y.

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1:30 P.M., TUESDAY

1:30 p.m., SHERATON-PARK, Adams Room (ES)

POLICY USES OF ECONOMETRIC MODELS

Chairman: Ta-Chung Liu, Cornell University

Use of Econometric Results to Appraise Alternative Agricultural Programs

Anthony S. Rojko, U. S. Department of Agriculture

Estimation of Cross-Elasticities of Demand for Food: A Case Study in the Application of Econometric Methodology in Policy Research

Elmer Learn, University of Minnesota

Taxation and the Demand for Alcoholic Beverages
William Niskanen, The Rand Corporation

Discussants: Murray Kemp, Massachusetts Institute of Technology
Edwin S. Mills, Johns Hopkins University

1:30 p.m., SHERATON-PARK, Burgundy Room (ES)

MATHEMATICAL PROGRAMMING - II

Chairman: William W. Cooper, Carnegie Institute of Technology

Economic Applications of Dynamic Programming
Martin J. Beckmann, Brown University

Application of Linear Programming Techniques to Analysis of Bank Portfolios

David Chambers and Abraham Charnes, Northwestern University

Discussant: John F. Muth, Carnegie Institute of Technology

2:00 p.m., MAYFLOWER, Williamsburg Room (IRRA)

UNION POLICIES AND INDUSTRIAL MANAGEMENT

Chairman: John Dunlop, Harvard University

Brookings Research Project on the Influence of Unions Upon Management: A Reappraisal of Union Policies and Industrial Management

E. R. Livernash, Harvard University

Discussants: Ralph H. Bergmann, United Rubber Workers
Leland Hazard, Pittsburgh Plate Glass Co. and
Pittsburgh University
George P. Shultz, University of Chicago

2:00 P.M., TUESDAY

2:00 p.m., SHOREHAM, West Ballroom (IMS)

RIETZ LECTURE

Chairman: J. Wolfowitz, Cornell University

The Problems of Two Samples From Continuous Distributions
S. S. Wilks, Princeton University

2:00 p.m., SHOREHAM, Tamerlane Room (ASA)

CENSUS TRACT CONFERENCE

Final Tract Tables To Be Published for the 1960 Census
Conrad Taeuber, Bureau of the Census

Census Tract Maps, Panel Discussion
Robert C. Klove, Bureau of the Census, panel leader
Dorothy Myers, Community Services of Metropolitan Boston
Joseph V. Dundon, Community Welfare Council of Buffalo and Erie County

2:00 p.m., SHOREHAM, Main Ballroom (ASA)

BUSINESS FLUCTUATIONS AND PURCHASES OF CAPITAL GOODS AND MATERIALS

Chairman: George Garvy, Federal Reserve Bank of New York

Over and Under Purchasing of Housing
Manuel Gottlieb, University of Kansas
Under and Over Buying of Business Plant and Equipment
Daniel Creamer, National Industrial Conference Board
Over and Under Purchasing of Materials
Ruth Mack, City of New York

Discussants: Daniel Hamberg, University of Maryland
Robinson Newcomb, Robinson Newcomb Associates

2:00 p.m., SHOREHAM, Terrace Banquet Room (ASA)

THE PLANNING AND FINANCING OF SOCIAL RESEARCH

Chairman: Stuart A. Rice, Surveys and Research Corporation

Programming and Financing Social Research
Paul Webbink, Social Science Research Council
The Role of the Federal Government in Social Research
Henry Riecken, National Science Foundation
The University as a Force in Social Research
Philip M. Hauser, University of Chicago

2:00 P.M., TUESDAY

2:00 p.m., SHOREHAM, Park Room (ASA, BS)

PLANNING CLINICAL TRIALS

Chairman: Jerome Cornfield, Johns Hopkins University

Panel: Irwin D. J. Bross, Roswell Park Memorial Institute
Spencer M. Free, Jr., Smith Kline and French Laboratories
Harry Gold, Cornell University Medical College
Edmund A. Gehan, National Institutes of Health
John Moyer, Hahnemann Medical College

2:00 p.m., SHOREHAM, South Room (ASA)

MEETING OF EXPERIMENT STATION STATISTICIANS

Chairman: E. L. LeClerc, U. S. Department of Agriculture

2:00 p.m., SHOREHAM, Palladian Room (ASA)

BUSINESS MEETING, SECTION ON PHYSICAL AND ENGINEERING SCIENCES, ASA

2:00 p.m., WASHINGTON, North Room (AAUTI)

BUSINESS MEETING, AMERICAN ASSOCIATION OF UNIVERSITY TEACHERS OF INSURANCE

2:00 p.m., WILLARD, South Ballroom (AMA)

BUSINESS RESEARCH—STUDIES

Chairman: Robert J. Eggert, Marketing Research Manager, Ford Motor Company

A Documentary "Film" Record of Who's Viewing Those TV Commercials—Precise TV Audience Measurement by the Dyna-Foto-Chron

Charles Allen, Northwestern University

The "Marketing Laboratory" of Life Magazine: How We Run It and Highlight of Findings

Milton L. Blum, President, Marketing, Merchandising and Research, Inc.

Small Cars: Are They Here to Stay?

Albert E. Sindlinger, President, Sindlinger & Co., Inc.

Discussants: Thomas E. Coffin, National Broadcasting Co., Inc.
Ernest Dale, Cornell University

2:00 p.m., WILLARD, Cabinet Room (AMA)

CHANGING PATTERNS IN THE TEACHING OF SALES MANAGEMENT

Chairman: Robert H. Myers, Miami University

Panel Discussion

2:30 p.m., SHERATON-PARK, Caribar Room (AEA)

PROBLEM OF ACHIEVING AND MAINTAINING A HIGH RATE OF ECONOMIC GROWTH

Chairman: Moses Abramovitz, Stanford University

Rapid Growth as an Objective of Economic Policy

William J. Fellner, Yale University

The Conditions of Economic Progress in the United States

W. W. Rostow, Massachusetts Institute of Technology

Discussants: Paul A. Baran, Stanford University
Per Goran Ohlin, Columbia University
Rutledge Vining, University of Virginia

2:30 p.m., SHERATON-PARK, Franklin Room (AEA, AFEA)

FACILITATING MOVEMENTS OF LABOR OUT OF AGRICULTURE

Chairman: Theodore W. Schultz, University of Chicago

Migration From Agriculture: The Historical Record and Its Meaning

Dale E. Hathaway, Michigan State University

The Private and Social Cost of Migration of People Out of Agriculture

James G. Maddox, North Carolina State College

Policies to Improve the Labor Transfer Process

D. Gale Johnson, University of Chicago

Discussants: Earl O. Heady, Iowa State University
Melvin W. Reder, Stanford University
George P. Shultz, University of Chicago

2:30 p.m., SHERATON-PARK, Ballroom (AEA, ASA)

RESEARCH ON THEORY OF THE FIRM

Chairman: Richard M. Cyert, Carnegie Institute of Technology

Sequential Decision Making in the Firm

Julius Margolis, University of California, Berkeley

Simulation of the Firm

Kalman Cohen, Carnegie Institute of Technology

Theory of the Efficient Several-Person Firm

Jacob Marschak, Yale University

Managerial Economics and the Firm

Thomson Whitin, Massachusetts Institute of Technology

Game Theory as an Approach to the Firm

Martin Shubik, General Electric Company

Discussant: Michael J. Farrell, Cambridge University

2:30 p.m., SHERATON-PARK, Madison Room (AFA)

CONSUMER FINANCE

Chairman: Clyde W. Phelps, University of Southern California

Recent Trends in State Regulation of Installment Credit

Wallace P. Mors, Babson Institute of Business Administration

Recent Institutional Developments in the Field of Consumer Credit

Carl A. Dauten, Washington University

Discussants: Ernest A. Dauer, Household Finance Corporation

Thomas W. Rogers, American Finance Conference

Robert P. Shay, University of Maine

Robert Bartels, Ohio State University

Francis J. Calkins, Marquette University

Jerome B. Cohen, College of the City of New York

2:30 p.m., SHOREHAM, Blue Room (RSA)

ANALYSIS OF UNDERDEVELOPED REGIONS

Chairman: Lloyd Rodwin, Massachusetts Institute of Technology

Papers: 1. Regional Factors in Planned Economic Development
Stefan Robock, Committee on Economic Development

2. An Inductive Approach to the Regionalization of Underdevelopment

Brian J. L. Berry, University of Chicago

Discussants: Wilfred Malenbaum, University of Pennsylvania

Allan Rodgers, Pennsylvania State University

Paul Rosenstein-Rodan, Massachusetts Institute of Technology

Recently Published

ECONOMICS IN ACTION

Harry G. Brainard, Michigan State University

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The twenty-one chapters are organized into five major parts: Economics—Its Setting; Production and the Pricing Process; Production, Stability, and Economic Growth; The National Economy; The World Economy.
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Coming in January

MONEY AND INCOME

An Outline of Monetary Economics

A. C. L. Day, London School of Economics; and S. T. Beza, Princeton University

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In addition to a survey of modern macro-economic theory the book provides substantial coverage of United States monetary history and institutions. The theory of international monetary economics is considered in some detail. The text includes illustrations, suggested reading at ends of chapters, a mathematical appendix and an index.

640 pages tentatively \$7.50

Other Important Texts

TOWARDS A MORE GENERAL THEORY OF VALUE

Edward H. Chamberlin, Harvard University
1957 330 pages; illustrated \$5.00

ESSAYS IN THE THEORY OF ECONOMIC GROWTH

Evsey D. Domar, Massachusetts Institute of Technology
1957 280 pages; illustrated \$5.00

OXFORD UNIVERSITY PRESS
NEW YORK

3:00 p.m., SHOREHAM, West Ballroom (IMS)

SPECIAL INVITED ADDRESS

Chairman: E. Lukacs, Catholic University

Sufficiency and Approximate Sufficiency

Lucien LeCam, University of California, Berkeley

3:25 p.m., WILLARD, Cabinet Room (AMA)

MARKETING MANAGEMENT DECISION SIMULATION

Chairman: Taylor W. Meloan, University of Southern California

Teaching Marketing Via Simulation

E. Wainwright Martin, Jr., Indiana University

A Marketing Game—Let's Play

Paul S. Greenlaw, Director, Management Training, The Dayton Rubber Co.

Opportunities and Limitations of Games

Fred W. Kniffin, Pennsylvania State University

3:30 p.m., SHERATON-PARK, Burgundy Room (ES)

ECONOMIC THEORY - II

Chairman: Ralph B. Bristol, The Rand Corporation

A Dynamic Model of Duopoly

Charles E. Ferguson, Duke University, and Ralph W. Pfouts, University of North Carolina

The Axiomatic Concept of a Scale and the Logic of Preferences in the Theory of Consumer Expenditures

S. N. Afriat, Princeton University

Some Properties of Neumann—Type Growth Models

Nicholas Kaldor, University of California, Berkeley, and University of Cambridge

Discussants: Robert Bishop, Massachusetts Institute of Technology
Martin Shubik, General Electric Company

3:30 p.m., SHERATON-PARK, Adams Room (ES)

ANALYSIS OF PRODUCTION

Chairman: Clifford Hildreth, Michigan State University

Measurement of Relative Economic Efficiency

Marc Nerlove, University of Minnesota

Effects of Entrepreneurial Capacity on Price Adjustments of Agricultural Firms

Albert N. Halter and Donald G. Paris, University of Kentucky

The Substitution Between Capital and Labor

Kenneth J. Arrow, Hollis B. Chenery, Bhagicha S. Minhas, Stanford University, and Robert Solow, Massachusetts Institute of Technology

Discussants: Zvi Griliches, University of Chicago

Gerhard Tintner, Iowa State University

4:00 p.m., SHERATON-PARK, Continental Room (AEA, ES)

APPRAISING THE ROLE OF MONEY IN THE ECONOMY

Chairman: Alain C. Enthoven, The Rand Corporation

A Statistical Comparison of Rival Monetary Rules

Martin Bronfenbrenner, University of Minnesota

A Test To Assess the Influence of the Money Stock on Business Activity

Phillip Cagan, Brown University

The Micro-Structure of the Monetary System and an Aggregative Money Supply Function

Karl Brunner, University of California, Los Angeles

Discussants: John G. Gurley, Brookings Institution

John H. Kareken, University of Minnesota

4:00 p.m., SHOREHAM, Main Ballroom (ASA)

STATISTICS FOR A FEDERAL TRANSPORTATION POLICY

Chairman: Paul W. Charington, Harvard Business School

Economic Statistics Needed for Transportation Research and Policy

Allen R. Ferguson, Northwestern University

Methods for Measuring Transportation of Passengers and Commodities at the National Level

Donald E. Church, Bureau of the Census

Discussants: Norman L. Johnson, Port of New York Authority

Wilfred Owen, Brookings Institution

Marvin Hoffenberg, Committee for Economic Development

4:00 p.m., SHOREHAM, Terrace Banquet Room (ASA)

HOW THE 1960 CENSUS WILL BE TAKEN

Chairman: Conrad Taeuber, Bureau of the Census

The Enumerator Rings the Bell

Lowell T. Galt and Robert B. Voight, Bureau of the Census

Programming the Population Census

Richard A. Hornseth, Bureau of the Census

Publications of the 1960 Census

Howard G. Brunsman, Bureau of the Census

Discussants: Lester R. Frankel, Audits and Surveys Co., Inc.

William Hodgkinson, Jr., American Telephone and Telegraph Company

Dorothy Swaine Thomas, University of Pennsylvania

4:00 p.m., SHOREHAM, Foyer B (ASA)

ROLE OF THE STATISTICIAN IN POLICY FORMATION

Chairman: William Tongue, Jewel Tea Company

Panel: Ewan Clague, Bureau of Labor Statistics

William F. Butler, Chase Manhattan Bank

Walter Hoadley, Jr., Armstrong Cork Company

Stanley H. Ruttenberg, AFL-CIO

4:00 p.m., SHOREHAM, Park Room (ASA)

TOLERANCING

Some Statistical Techniques for Industrial Tolerancing

Brad Murphy, Bell Telephone Laboratories

Some Questions About Specifications and Drawings

Sutton Monro, Bell Telephone Laboratories

4:00 p.m., SHOREHAM, West Ballroom (IMS)

INVITED PAPERS - V

Chairman: M. Rosenblatt, Brown University

Group Representation Methods in Multivariate Distribution Theory

A. T. James, Yale University

Recent Developments in the Convergence of Stochastic Processes

G. Kallianpur, Michigan State University

Toeplitz Forms and Generalizations of Bernoulli Trials

F. Spitzer, University of Minnesota

4:00 p.m., SHOREHAM, North Room (BS)

BUSINESS MEETING, BIOMETRIC SOCIETY (ENAR)

4:00 p.m., SHOREHAM, Tamerlane Room (IMS)

CONTRIBUTED PAPERS - VI

Chairman: Margaret Gurney, Bureau of the Census

4:30 p.m., SHERATON-PARK, Madison Room (AFA)

BUSINESS MEETING, AMERICAN FINANCE ASSOCIATION

5:00 p.m., SHERATON-PARK, Hamilton Room (RSA)

BUSINESS MEETING, REGIONAL SCIENCE ASSOCIATION

5:00 p.m., SHOREHAM, South Room

***SOCIAL HOUR: COLUMBIA UNIVERSITY ALUMNI**

6:00 p.m., SHERATON-PARK, Madison Room (AFA)

MEETING OF INCOMING BOARD OF DIRECTORS, AMERICAN FINANCE ASSOCIATION

6:00 p.m., SHOREHAM, South Room (ASA)

BUSINESS MEETING, SECTION ON TRAINING, ASA

6:30 p.m., YWCA, Barker Hall, 1011 17th St., N.W. (AFEA)

***DINNER MEETING, AFEA**

Chairman: Bushrod W. Allin, Agricultural Marketing Service, USDA

Organization and Strategy for Agricultural Economics Work
George L. Mehren, University of California

* Fee or Invitation Event.

8:00 p.m., SHERATON-PARK, Burgundy Room (AEA)

PROBLEM OF INTERNATIONAL HARMONY: ECONOMIC POLICIES FOR A LASTING PEACE

Chairman: Gardner Patterson, Princeton University

America's Economic Responsibilities as a Great Power

Raymond F. Mikesell, University of Oregon

Promoting Free World Economic Development Through Direct Investment

Jack N. Behrman, University of Delaware

The Revival of International Capital Markets

Paul Meek, Federal Reserve Bank of New York

Discussants: Arthur Bloomfield, University of Pennsylvania

Emilio G. Collado, Standard Oil Company (N. J.)

J. Richard Huber, University of Washington

8:00 p.m., SHERATON-PARK, Continental Room (AEA)

PROBLEM OF ACHIEVING AND MAINTAINING FULL EMPLOYMENT

Chairman: Geoffrey H. Moore, National Bureau of Economic Research

Some Questions Emerging Under the Employment Act

Edwin G. Nourse, Joint Council on Economic Education

The Power of Our Economy to Generate Employment

Clarence D. Long, Johns Hopkins University

Problems in Reducing Unemployment in Depressed Areas

Isador Lubin, Franklin D. Roosevelt Foundation

Discussants: Gottfried Haberler, Harvard University

Jacob J. Kaufman, Pennsylvania State University

Ruth P. Mack, Office of the Mayor, City of New York

8:00 p.m., SHERATON-PARK, Adams-Hamilton Room (RSA)

PRESIDENTIAL ADDRESS

Chairman: Robert B. Mitchell, University of Pennsylvania

The Nature and Scope of Regional Science

Walter Isard, University of Pennsylvania

8:00 P.M., TUESDAY

8:00 p.m., SHERATON-PARK, Caribar Room (AEA)

IMPROVING THE EFFICIENCY OF THE TRANSPORTATION AND UTILITIES SYSTEMS

Chairman: Charles L. Dearing, Illinois State Toll Highway Commission

Effects of Public Regulation on Railroad Performance

James C. Nelson, State College of Washington

Competition or Regulation of Natural Gas Production and Transportation

Alfred E. Kahn, Cornell University

Discussants: Burton N. Behling, American Association of Railroads

Robert W. Harbeson, University of Illinois

Richard B. Heflebower, Northwestern University

8:00 p.m., SHOREHAM, Main Ballroom (ASA)

PRESIDENTIAL ADDRESS

Chairman: Walter Hoadley, Jr., Armstrong Cork Company

Address: Rensis Likert, Institute for Social Research

9:00 p.m., SHERATON-PARK, Madison Room

***UNIVERSITY OF ILLINOIS SMOKER**

10:00 p.m., SHOREHAM, Terrace Banquet Room (ASA, BS, IMS)

***INFORMAL PARTY**

* Fee or Invitation Event.

Leading Social Science Books Recently Published by Public Affairs Press

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lished in November, 1959, 245 pages, \$6.75*

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California Institute of Technology
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ELIOT D. CHAPPLE and **LEONARD R. SAYLES**, both,
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WEDNESDAY, DECEMBER 30

8:30 a.m., SHOREHAM, Terrace Banquet Room (AFEA, ASA)

CONTROVERSIAL AREAS IN FEDERAL STATISTICS: THE CARE AND MAINTENANCE OF INDEX NUMBERS

Chairman: Solomon Fabricant, National Bureau of Economic Research

Critical Problems of Price Index Construction

B. Ralph Stauber, U. S. Department of Agriculture

The Consumer Price Index, Technical Questions and Practical Answers

Sidney A. Jaffe, Bureau of Labor Statistics

Discussants: Harlow W. Halvorson, University of Wisconsin
Lazare Teper, International Ladies' Garment Workers' Union

Clayton Gehman, Board of Governors of the Federal Reserve System

Kenneth E. Miller, Armour and Company

8:30 a.m., SHOREHAM, Blue Room (ASA)

SOCIAL STATISTICS: THEIR ORGANIZATION FOR POLICY USE

Chairman: Raymond T. Bowman, Bureau of the Budget

The Use of Statistics in the Formulation and Evaluation of Broad Social Programmes

Octavio Cabello, United Nations

Health, Education, and Welfare Indicators and Trends

Luther W. Stringham, Department of Health, Education, and Welfare

Discussants: Katherine Ellickson, AFL-CIO
Wilbur J. Cohen, University of Michigan

8:30 a.m., SHOREHAM, Palladian Room (ASA)
DEMAND AND SUPPLY OF STATISTICIANS

Chairman: Donald C. Riley, Bureau of the Budget

Round Table

A. H. Bowker, Stanford University
 Gertrude Cox, Research Triangle Institute
 Churchill Eisenhart, Bureau of Standards
 Robert Ferber, University of Illinois
 David L. Futransky, Bureau of the Census
 Morris H. Hansen, Bureau of the Census
 George W. Mitchell, Federal Reserve Bank of Chicago
 David Novick, The Rand Corporation
 Abe Rothman, Bureau of Labor Statistics

8:30 a.m., SHOREHAM, Park Room (ASA)

RELIABILITY

Irreversible Absorption Processes as Failure Models With Applications to Accelerated Life Testing

William Allen, Princeton, New Jersey

On Drawing Inferences in the Case of an Exponential Distribution With Censoring

Jack Nadler, Bell Telephone Laboratories

Discussants: Cuthbert Daniel, New York City

Milton Sobel, Bell Telephone Laboratories

8:30 a.m., Shoreham, Tamerlane Room (ASA)

CONTRIBUTED PAPERS

Chairman: Marvin Kastenbaum, Oak Ridge National Laboratory

Estimating Shelf Life of Bacterial Populations

Ira A. DeArmon, Jr., U. S. Army Biological Warfare Laboratories

Application of Linear Regression to Frequency Graduation

Robert J. Buehler, Iowa State University

Disease Severity Quantitation

Clifford J. Maloney, U. S. Army Biological Warfare Laboratories

Some Experiences in the Practice of Medical Statistics

Robert G. Hoffman, University of Florida

Ties in Paired Comparison Experiments

W. A. Glenn and H. A. David, Virginia Polytechnic Institute

Error and Non-Error Models in Bio-Assay

K. M. Patwary, Howard University

Some Generalized Distributions and Confidence Intervals in Multivariate Analyses

Rolf E. Bargman, Virginia Polytechnic Institute

8:30 a.m., SHOREHAM, North Room (ASA)

BUSINESS MEETING, BIOMETRICS SECTION, ASA

9:00 a.m., SHOREHAM, West Ballroom (IMS)

WALD LECTURE - IV

Chairman: E. Parzen, Stanford University

Construction of Error Correcting Codes

R. C. Bose, University of North Carolina

9:00 a.m., WILLARD, South Ballroom (AFEA, AMA)

PRODUCTIVITY INCREASES IN MARKETING

Chairman: Winn F. Finner, U. S. Department of Agriculture

Measuring Productivity Changes in Marketing

Vernon Ruttan, Purdue University

Interpreting Productivity Measurements and Their Application to Economic Problems

Ewan Clague, Bureau of Labor Statistics

Discussants: Lawrence C. Lockley, University of Southern California

L. Jay Atkinson, U. S. Department of Commerce

9:30 a.m., SHERATON-PARK, Continental Room (AEA)

INVESTING IN EDUCATION AND RESEARCH

Chairman: Simon Kuznets, Johns Hopkins University

The Role of Scientific Research in Stimulating Economic Progress

Irving H. Siegel, Council of Economic Advisers

Evidence on Underinvestment in Education

Gary S. Becker, Columbia University

The Outlook for Expenditures on Research and Development During the Next Decade

Dexter M. Keezer, McGraw-Hill Publishing Company

Discussants: Roger A. Freeman, Institute for Social Science Research

Burton H. Klein, The Rand Corporation

Henry H. Villard, City College of New York

9:30 A.M., WEDNESDAY

9:30 a.m., SHERATON-PARK, Franklin Room (AFA)

GROSS FLOWS OF FUNDS THROUGH SAVINGS INSTITUTIONS: TRENDS AND UNDERLYING FACTORS

Chairman: Eleanor S. Daniel, Mutual of New York

Life Insurance Companies

Kenneth Wright, Life Insurance Association of America

Savings and Loan Associations

Charles M. Torrance, Federal Savings and Loan Insurance Corporation

Mutual Savings Banks and Time Deposits

J. Brooke Willis, Savings Banks Trust Company

Discussants: Daniel Brill, Board of Governors of the Federal Reserve System

Thomas W. Wolf, United States Treasury

9:30 a.m., SHERATON-PARK, Caribar Room (ES)

PANEL DISCUSSION: FORECASTING TECHNIQUES

Chairman: Peyton Stapp, Bureau of the Budget

Econometric Forecasts: The Record and Prospects for the Future
Lawrence R. Klein, University of Pennsylvania

Forecasting Uses and Limitations of Measures of Cyclical Behavior
Geoffrey H. Moore, National Bureau of Economic Research

Using Anticipation Surveys in Forecasting General Business Conditions

Louis J. Paradiso, Department of Commerce

9:30 a.m., SHERATON-PARK, Adams Room (ES)

ECONOMIC THEORY - III

Chairman: Robert W. Clower, Northwestern University

Equilibrium in Von Neumann Models and Generalizations

Charles W. Howe, Purdue University, and John Haldi, Stanford University

Expectations, Inventories and the Stability of Competitive Markets

Edwin S. Mills, Johns Hopkins University

Uncertainty, Prediction, and Competitive Equilibrium

Richard R. Nelson, The Rand Corporation

Discussants: Gerard Debreu, Yale University

Mitchell Harwitz, Northwestern University

9:30 A.M., WEDNESDAY

9:30 a.m., SHERATON-PARK, Burgundy Room (ES)

INPUT-OUTPUT STUDIES

Chairman: Hans J. Brems, University of Illinois

Note on Input-Output Analysis: Differences Between Repercussion Effects in Physical Terms and in Value Terms

Hidetaro Iyemoto, Kobe University

A Small Leontief Model for Portugal

Gerhard Tintner, Iowa State University, and B. Murteira, Lisbon, Portugal

The Structure and Growth of the Japanese Economy

Shinichi Ichimura, Osaka University and Johns Hopkins University

Discussant: Paul G. Clark, Williams College

9:30 a.m., SHERATON-PARK, Hamilton Room (ES, RSA)

ECONOMETRIC MODELS IN REGIONAL ANALYSIS

Aggregation in Regional Econometric Models

Wilbur R. Thompson and John Mattila, Wayne State University

A General Equilibrium Model of Production, Trade and Location

Leon N. Moses, Northwestern University

Discussants: Charles Tiebout, University of California, Los Angeles
Benjamin H. Stevens, University of Pennsylvania

9:30 a.m., SHOREHAM, Main Ballroom (AEA, ASA)

RESEARCH ON PRODUCTIVITY, WAGES, AND PRICES

Chairman: Gerhard Colm, National Planning Association

Trends in Wages, Productivity, Prices, and Profits in Selected Major Industries

Ted Anderson, University of California, Los Angeles

Wage Escalation and 'Wage Inflation'

Joseph W. Garbarino, Cornell University

A Timing Test of the Cost-Push Inflation Thesis

William R. Belmont, University of North Dakota

Discussants: Walter Fackler, U. S. Chamber of Commerce
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Charles Schultze, Indiana University

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10:30 a.m., Shoreham, Park Room (ASA, BS)

QUANTIFICATION AND MEASUREMENT IN BIOLOGICAL AND SOCIAL SCIENCE

Chairman: William G. Cochran, Harvard University

Efficient Conversion of Non-Metric Information Into Metric Information

Robert P. Abelson, Yale University and John W. Tukey, Princeton University and Bell Telephone Laboratories

General Models in Biology in Relation to Statistical Inference

Chester I. Bliss, Connecticut Agriculture Experiment Station and Yale University

Discussant: Jerome Cornfield, Johns Hopkins University

10:30 a.m., SHOREHAM, West Ballroom (IMS)

INVITED PAPERS - VI

Chairman: R. Gnanadesikan, Bell Telephone Laboratories

Moment Generating Functions of Quadratic Forms of Normal Order Statistics

H. Ruben, Columbia University

Some Nonparametric Tests in Multivariate Problems

L. Weiss, Cornell University

The Actual Distribution of One Sample Kolmogorov-Smirnov Statistics

M. Dwass, Northwestern University

10:30 a.m., SHOREHAM, North Room (IMS)

FINAL REPORT OF THE ADVISORY COMMITTEE ON WEATHER CONTROL

Chairman: A. H. Bowker, Stanford University

Criticism of the Final Report of the Advisory Committee on Weather Control

J. Neyman, University of California, Berkeley

Bias in the Evaluation of Cloud Seeding Operations Introduced by the Transformation of Variables

Elizabeth L. Scott, University of California, Berkeley

Problems of Experimental Design

W. J. Youden, Bureau of Standards

Stochastic Theory of Precipitation

Lucien LeCam, University of California, Berkeley

10:30 a.m., SHOREHAM, Tamworth Room (HMS)

CONTRIBUTED PAPERS - VII

12:30 p.m., SHERATON-PARK, Adams Room (AEA)

***LUNCHEON MEETING FOR EDITORS OF SOCIAL SCIENCE JOURNALS**

12:30 p.m., SHOREHAM, President's Suite (ASA)

***LUNCHEON MEETING, INCOMING BOARD OF DIRECTORS OF THE AMERICAN STATISTICAL ASSOCIATION**

1:30 p.m., SHERATON-PARK, Caribar Room (ES)

ECONOMETRIC STUDIES - II*Chairman:* Franklyn D. Holzman, University of Washington**An Analysis of Rediscount Rate Management in the Federal Reserve System**

Richard A. LaBarge and Walton T. Wilford, Southern Methodist University

A Test for the Presence of Cost Inflation in the U. S. Economy, 1955-57

Edmund S. Phelps, The Rand Corporation

Backlog Accumulation and Price Change: How Sensitive Are Industrial Prices to Varying Demand and Delivery Conditions?

Victor Zarnowitz, National Bureau of Economic Research

Discussant: Warren L. Smith, University of Michigan

1:30 p.m., SHERATON-PARK, Franklin Room (ES)

ANALYSIS OF TIME SERIES—A REVIEW PAPER*Chairman:* Lawrence R. Klein, University of Pennsylvania**The Fitting of Time-Series Models**

James Durbin, London School of Economics

* Fee or Invitation Event.

1:30 p.m., SHERATON-PARK, Madison Room (ES)

NEW APPROACHES TO OLD PROBLEMS*Chairman:* Edwin Kuh, Massachusetts Institute of Technology**Psychometric Analysis of Business Motivation**

John R. Meyer, Harvard University

Rational Expectations and the Theory of Price Movements

John F. Muth, Carnegie Institute of Technology

Resource Flow Models With Application to Metal Fabrication

Stedman B. Noble, George Washington University

2:00 p.m., SHERATON-PARK, Hamilton Room (RSA)

SELECTED TOPICS IN METROPOLITAN ANALYSIS*Chairman:* Gerald A. P. Carrothers, University of Pennsylvania**A Topological Model of Consumer Space Preferences**

David L. Huff, University of Washington

A General Theory of the Urban Land Market

William Alonso, Harvard University

2:30 p.m., SHERATON-PARK, Burgundy Room (AEA)

REFORMING THE TAX SYSTEM*Chairman:* Louis Shere, Indiana University**Incidence of the Corporation Income Tax**

Carl S. Shoup, Columbia University

A Program for Federal Tax Reform

Dan Throop Smith, Harvard University

Discussants: Carman G. Blough, American Institute of Certified Public Accountants

Richard B. Goode, Brookings Institution

Richard A. Musgrave, Johns Hopkins University

2:30 P.M. WEDNESDAY

2:30 p.m., SHERATON PARK, Continental Room (AEA)

RELATIONS BETWEEN ECONOMIC THEORY AND ECONOMIC POLICY

Chairman: Morris A. Copeland, Cornell University

The Influence of Economic Theory on Economic Policy
Clair Wilcox, Swarthmore College

The Influence of Policy and Events on Economic Theory
George J. Stigler, University of Chicago

Discussants: Paul T. Homan, Southern Methodist University
Fritz Machlup, Johns Hopkins University
Joseph J. Spengler, Duke University

3:30 p.m., SHERATON-PARK, Caribar Room (ES)

INTERNATIONAL ECONOMICS

Chairman: Arnold Harberger, University of Chicago

International Trade and the Inequality Problem
Jerome L. Stein, Brown University

Canada's Foreign-Exchange Market: A Quarterly Model
Rudolf R. Rhomberg, International Monetary Fund

Stability in the Balance of Payments—A Multi-Country Approach
Akira Takayama, University of Rochester

Discussant: Harry G. Johnson, University of Chicago

3:30 p.m., SHERATON-PARK, Franklin Room (ES, RSA)

MIGRATION OF LABOR

Chairman: Richard A. Easterlin, University of Pennsylvania

Factors Influencing the Net Migration of Labor from Agriculture
Charles H. Berry, Yale University

An Investigation of the Relationship Between Migration and Income in the United States

Larry Sjaastad, University of Chicago

Discussants: Stanley Lebergott, Bureau of the Budget
Bernard Okun, Princeton University

5:00 P.M. WEDNESDAY

5:00 p.m., SHERATON-PARK, Adams-Hamilton Room (ASA)

BUSINESS MEETING, AMERICAN ECONOMIC ASSOCIATION

6:00 p.m., SHERATON-PARK, Madison Room (AEA)

***DINNER MEETING, EXECUTIVE COMMITTEE, AMERICAN ECONOMIC ASSOCIATION**

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