

This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Input-Output Analysis: An Appraisal

Volume Author/Editor:

Volume Publisher: Princeton University Press

Volume ISBN: 0-870-14173-2

Volume URL: <http://www.nber.org/books/unkn55-2>

Publication Date: 1955

Chapter Title: Front matter, Input-Output Analysis: An Appraisal

Chapter Author: Raymond W. Goldsmith

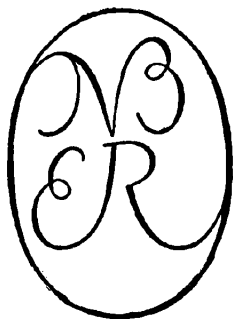
Chapter URL: <http://www.nber.org/chapters/c2862>

Chapter pages in book: (p. -10 - 0)

# Input-Output Analysis: An Appraisal

Studies in Income and Wealth  
Volume Eighteen

BY THE  
CONFERENCE ON RESEARCH  
IN INCOME AND WEALTH



A REPORT OF THE  
NATIONAL BUREAU OF ECONOMIC RESEARCH, NEW YORK

---

PUBLISHED BY  
PRINCETON UNIVERSITY PRESS, PRINCETON  
1955

Copyright, 1955, Princeton University Press

L.C. CARD NO. 55-5007

Second Printing, 1956

Third Printing, 1962

Fourth Printing, 1966

Printed in the United States of America

**Input-Output Analysis:  
An Appraisal**

NATIONAL BUREAU OF ECONOMIC RESEARCH  
*CONFERENCE ON RESEARCH IN INCOME AND WEALTH*

NATIONAL BUREAU OF ECONOMIC RESEARCH  
1956

OFFICERS

Harry Scherman, *Chairman*  
Gottfried Haberler, *President*  
George B. Roberts, *Vice-President and Treasurer*  
W. J. Carson, *Executive Director*

DIRECTORS AT LARGE

Wallace J. Campbell, *Director, Cooperative League of the USA*  
Solomon Fabricant, *New York University*  
Albert J. Hettinger, Jr., *Lazard Frères and Company*  
Oswald W. Knauth, *Beaufort, South Carolina*  
H. W. Laidler, *Executive Director, League for Industrial Democracy*  
Shepard Morgan, *Norfolk, Connecticut*  
George B. Roberts, *Vice-President, The First National City Bank of New York*  
Beardsley Ruml, *New York City*  
Harry Scherman, *Chairman, Book-of-the-Month Club*  
George Soule, *Bennington College*  
N. I. Stone, *Consulting Economist*  
J. Raymond Walsh, *New York City*  
Joseph H. Willits, *Director, The Educational Survey, University of Pennsylvania*  
Leo Wolman, *Columbia University*  
Donald B. Woodward, *Vick Chemical Company*  
Theodore O. Yntema, *Vice-President-Finance, Ford Motor Company*

DIRECTORS BY UNIVERSITY APPOINTMENT

E. Wight Bakke, <i>Yale</i>	Gottfried Haberler, <i>Harvard</i>
Arthur F. Burns, <i>Columbia</i>	Clarence Heer, <i>North Carolina</i>
Melvin C. de Chazeau, <i>Cornell</i>	R. L. Kozelka, <i>Minnesota</i>
G. A. Elliott, <i>Toronto</i>	C. Arthur Kulp, <i>Pennsylvania</i>
Frank W. Fetter, <i>Northwestern</i>	T. W. Schultz, <i>Chicago</i>
H. M. Groves, <i>Wisconsin</i>	Jacob Viner, <i>Princeton</i>

DIRECTORS APPOINTED BY OTHER ORGANIZATIONS

Percival F. Brundage, *American Institute of Accountants*  
Harold G. Halcrow, *American Farm Economic Association*  
S. H. Ruttenberg, *Congress of Industrial Organizations*  
Murray Shields, *American Management Association*  
Boris Shishkin, *American Federation of Labor*  
Willard L. Thorp, *American Economic Association*  
W. Allen Wallis, *American Statistical Association*  
Harold F. Williamson, *Economic History Association*

RESEARCH STAFF

Solomon Fabricant, <i>Director of Research</i>	
Geoffrey H. Moore, <i>Associate Director of Research</i>	
Moses Abramovitz	John W. Kendrick
Morris A. Copeland	Simon Kuznets
David Durand	Clarence D. Long
Richard A. Easterlin	Ruth P. Mack
Milton Friedman	Ilse Mintz
Raymond W. Goldsmith	G. Warren Nutter
Millard Hastay	Lawrence H. Seltzer
W. Braddock Hickman	George J. Stigler
Daniel M. Holland	Leo Wolman
Thor Hultgren	Herbert B. Woolley

RELATION OF NATIONAL BUREAU DIRECTORS TO  
PUBLICATIONS REPORTING CONFERENCE PROCEEDINGS

Since the present volume is a record of conference proceedings, it has been exempted from the rules governing submission of manuscripts to, and critical review by, the Board of Directors of the National Bureau. It has, however, been reviewed and accepted for publication by the Director of Research.

*(Resolution adopted July 6, 1948  
and revised November 21, 1949)*

## PREFATORY NOTE

This volume of *Studies in Income and Wealth* is devoted to the discussion of input-output analysis. It contains the seven papers dealing with the general problems and the evaluation of methods and results and a report on a study for Puerto Rico, which were delivered at the Conference on Research in Income and Wealth held in October 1952, together with the comments of participants.

Eleven papers describing the derivation of interindustry tables for various individual sectors of the economy were prepared by members of the Division of Interindustry Economics of the United States Bureau of Labor Statistics. These were multilithed for use by specialists and appear in a paper-bound volume entitled *Input-Output Analysis: Technical Supplement*. Because these papers are meant only for limited distribution the regular publication procedure of the National Bureau was not followed in the preparation of the technical supplement.

The program committee consisted of Raymond W. Goldsmith, Wassily Leontief, and John DeWitt Norton. Mr. Goldsmith also acted as editor of the volume. We are indebted to H. Irving Forman, who prepared the charts.

### *Executive Committee, 1954-1955*

Raymond W. Goldsmith, *Chairman*

Raymond T. Bowman	Nathan M. Koffsky
Martin R. Gainsbrugh	Stanley Lebergott
Simon A. Goldberg	Joseph A. Pechman
Edgar M. Hoover	Charles F. Schwartz

Lillian Epstein, *Secretary*





# Contents

INTRODUCTION	3
Raymond W. Goldsmith	
SOME BASIC PROBLEMS OF EMPIRICAL INPUT-OUTPUT ANALYSIS	9
Wassily Leontief	
C O M M E N T	
Alexander Henderson	22
Ruth P. Mack	29
David Rosenblatt	29
Rutledge Vining	31
D. C. MacGregor	46
Ezra Glaser	49
THE NATURE AND USES OF INTERINDUSTRY-RELATIONS DATA AND METHODS	53
W. Duane Evans and Marvin Hoffenberg	
C O M M E N T	
Clark Warburton	125
Oskar Morgenstern and Thomson M. Whitin	128
A REVIEW OF INPUT-OUTPUT ANALYSIS	137
Carl F. Christ	
C O M M E N T	
Milton Friedman	169
Philip M. Ritz	174
RESEARCH REQUIRED FOR THE APPLICATION OF INTERINDUSTRY ECONOMICS	183
John DeWitt Norton	
A SURVEY OF CURRENT INTERINDUSTRY MODELS	215
Frederick T. Moore	
A COMPARISON OF THE STRUCTURES OF THREE SOCIAL ACCOUNTING SYSTEMS	253
Stanley J. Sigel	

*C O N T E N T S*

<b>C O M M E N T</b>	
Morris A. Copeland	285
Reply by Stanley J. Sigel	288
<b>INTERINDUSTRY ECONOMICS AND NATIONAL INCOME</b>	
<b>THEORY</b>	<b>291</b>
Herman I. Liebling	
<b>C O M M E N T</b>	
Gerhard Colm	315
George Jaszi	317
<b>INPUT-OUTPUT ANALYSIS OF THE PUERTO RICAN ECONOMY</b>	
Amor Gosfield	321
<b>C O M M E N T</b>	
Daniel Creamer	362
Walter Isard	366
<b>INDEX</b>	<b>369</b>