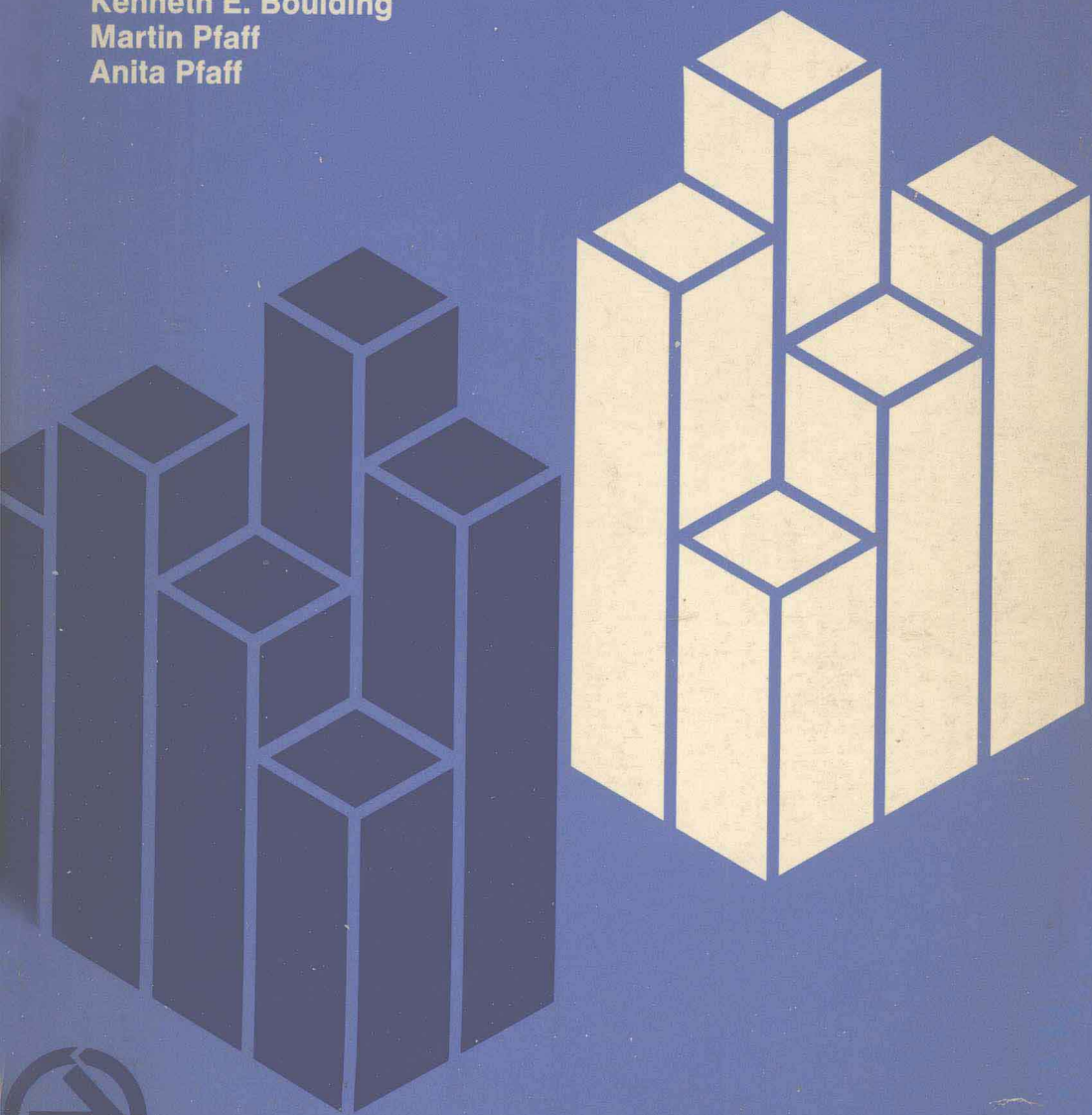


# Transfers in an Urbanized Economy

The Grants Economics  
of Income Distribution

Kenneth E. Boulding  
Martin Pfaff  
Anita Pfaff



Grants Economics Series

# **Transfers in an Urbanized Economy**

## **Theories and Effects of the Grants Economy**

---

Edited by

Kenneth E. Boulding  
University of Colorado

Martin Pfaff  
Wayne State University  
and University of Augsburg

Anita Pfaff  
Wayne State University  
and University of Augsburg

© 1973 by Wadsworth Publishing Company, Inc., Belmont, California 94002. All rights reserved. No part of this book may be reproduced, stored in a retrieval system or transcribed, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the publisher.

ISBN: 0-534-00196-3

L. C. Cat. Card No.: 72-86729

Printed in the United States of America

1 2 3 4 5 6 7 8 9 10---77 76 75 74 73

# Introduction to the Series on Grants Economics

---

This series of volumes might almost be described as radical economics by regular economists. Most of the contributors are members of the Association for the Study of the Grants Economy, and some may indeed be members of the Union for Radical Political Economy too, although most of them are not, we are sure. Nevertheless, the significance of grants economics may well be that it contains the most important clues to the questions the radicals are asking but, alas, are not often answering.

The central idea of grants economics is that exchange economics is not enough. From the days of Adam Smith economics has been dominated on the whole by the analysis of how society is organized by exchange. This is a necessary, but not sufficient, idea on which to base an understanding of the economic system. Exchange, that is, two-way transfer (*A* gives something to *B* and *B* gives something to *A*), is a powerful organizer of economic life, but it is not the *only* organizer. The *grant*, or one-way transfer (*A* gives something exchangeable to *B*, *B* gives nothing exchangeable to *A*), is becoming an increasingly common instrument of economic and political organization. Grants economics contends that grants must not be regarded as something exotic, outside the economic system proper, but must be integrated into both the theory and the empirical study of the economy.

The failure to do this has, in part at least, produced radical economics. Pure exchange economics cannot come to grips with some of the most important problems of our day – for instance, those involving the distribution of power, income, and wealth, which exchange economics takes for granted. The dissatisfaction with exchange economics is one of the most important sources of radical dissent. However, radical economists often destroy their own case by throwing exchange economics out the window altogether, thereby “turning off” the “straight” economists to the point where no communication takes place. Grants economics insists that *both* grants and exchange are necessary to the organization of a modern economic system and that any intelligent reform must be based on an integrated view of the system, which includes both grants and exchange as interacting mechanisms.

**These volumes are addressed to serious students of economics and the social sciences. We believe that they will fill a crucially important gap in the present state of knowledge and that their influence will be felt far beyond the particular problems to which they are addressed.**

**Kenneth E. Boulding and Martin Pfaff  
Series Editors**

# Contents

---

## **Urbanization and the Grants Economy: An Introduction 1**

- 1 Exploitative Transfers in the Metropolis 7
  - 1 Suburban-Central City Exploitation Thesis:  
One City's Tale  
William B. Neenan 10
  - 2 A Case Study: Costs and Benefits of Public Goods and  
Expenditures for a Ghetto  
Earl F. Mellor 38
- 2 Voluntary and Involuntary Transfers through Charity and the  
Tax System: Their Effects on Urban Poverty 59
  - 3 Utility Interdependence and Income Transfers through  
Charity  
Harold M. Hochman and James D. Rodgers 63
  - 4 Transfer Payments and the Ghetto Economy  
Daniel R. Fusfeld 78
  - 5 Transfer Payments to Large Metropolitan Poverty  
Areas: Their Distributive and Poverty-Reducing Effects  
Anita B. Pfaff 93
  - 6 Strategies against Urban Poverty  
Irving Leveson 130
- 3 Transfers and Participation in the Labor Force 161
  - 7 Effect of Nonemployment Income and Wage Rates on  
Work Incentives of the Poor  
Christopher Green and Alfred Tella 164

8	The New Jersey–Pennsylvania Experiment: A Field Study in Negative Taxation David Elesh, Jack Ladinsky, Myron J. Lefcowitz, and Seymour Spilerman	181
4 Tax Transfers and Educational Policy 203		
9	State Grants and Inequality of Opportunity in Education Byron W. Brown	208
10	Income Redistribution Impact of State Grants to Public Schools: A Case Study of Delaware Thomas Muller	226
11	External Effects of Education Grants on Tax Base-Sharing Municipal Governments Charles Waldauer	246
12	Impact of Spatial Tax Flows as Implicit Grants on State-Local Tax Incidence: With Reference to the Financing of Education Donald L. Phares	258
13	How Effective Are Grantor Controls?: The Case of Federal Aid to Education David O. Porter and David C. Warner	276
5 Transfers as Instruments of Urban Ecological Policy 303		
14	Grants and Environmental Policy A. Myrick Freeman III	309
15	Technological Innovativeness, the Grants Economy, and the Ecological Crisis Thomas M. Havrilesky	317
16	The Role of Grants, Exchange, and Property Rights in Environmental Policy A. Allan Schmid	340
17	Pollution Abatement, Pareto Optimality, and the Market Mechanism George A. Daly and Fred J. Giertz	350
18	Externalities, Welfare Economics, and Environmental Problems Robert H. Strotz and Colin Wright	359
6 Conclusion 375		

# Urbanization and the Grants Economy: An Introduction

---

This is the second volume of papers concerned with problems of nonmarket redistribution—that is, redistribution through the grants economy—within the United States. Most of the papers were presented at the meetings held jointly by the Association for the Study of the Grants Economy and the American Economic Association, the American Association for the Advancement of Science, or the Public Choice Society in December 1969 and 1970.

This volume focuses on the spatial, or geographic, patterns of tax incidence and the public and private redistribution that characterize the urbanized American economy. This view entails not only an examination of the patterns of redistribution between the different component parts of the metropolis, such as suburban versus central city or central city versus specific ghetto areas, nor is the main concern with the problems associated with urbanization per se, although the papers are grouped around such problem areas. Rather, the primary concern is the means we use collectively or individually to finance public goods or to bring about reform and to solve problems. The main issue, therefore, is the role that exchange, or the market mechanism, can play in solving relevant contemporary problems as compared with nonmarket means, which we call the private or public grants economy. In this sense, *transfers* are instruments used to finance the supply of goods through the grants economy.

In the simplest conception, a grant or a transfer involves a one-way economic relationship whereby party A conveys an exchangeable to party B without receiving in return an exchangeable of equal market value. This definition focuses on changes in net worth of the grantor and the grantee. Under exchange the net worth of two parties is unchanged, whereas under a grant the net worth of the grantor is diminished and the net worth of the grantee is increased. This is clearly an economic definition, which neglects cultural, social, political, or, more generally, psychic benefits that accrue to the grantor in a particular granting situation. Furthermore, the grants economy is the predominant vehicle of financing nonprivate—or public—goods through provision or transfer of economic goods or services; thus it often effects an income redistribution. Public goods are, by definition, goods



that are not financed through the private exchange or market economy because they are characterized by large externalities and the exclusion principle does not apply to them. However, the dichotomization into private exchange and public nonexchange (or grant) is by no means unambiguous. Rather, an examination of many types of goods traditionally classified as private and public goods in the literature of public finance reveals that both contain exchange and grant components.<sup>1</sup> For example, public financing of education provides both benefits to the individual, because it increases his potential income, and benefits to society at large, because educated individuals are of benefit to others through their contribution to the output of the total socio-economy. Furthermore, within the private sector a stunning amount of nonexchange transactions occur. In 1970, U.S. intrahousehold transfers alone were estimated at \$313 billion.<sup>2</sup>

This apparatus provides insights into the social nature of many private phenomena not generally considered part of public finances. Private transfers between family members within the household, between families, and from corporations, grants from foundations, and transfers in cash or in kind from the vast network of institutions constituting the sprawling "nonprofit" sector of the economy have not generally been considered part of the public economy, yet they convey sizable external benefits to others or to the system at large.

On the other hand, many economic processes in the public sector that show up in public budgets are based on the exchange calculus: beneficiaries pay for these services, just as if they were being supplied by a private corporation. This situation calls for a conceptual scheme that does greater justice to this new reality, and which, in our view, justifies the intellectual effort invested in developing the language, the analytical apparatus, and the empirical analysis of grants economics. The aim is not to replace but to complement the literature on the public economy and public finance, by providing a particular point of view. By thus setting as the cornerstone of our inquiry the distributive consequences of economic acts, we emphasize that equity, together with efficiency, stability, and growth, should provide the normative criteria for grants allocations. Grants economics goes beyond even this widened normative frame and places the norm of social integration and the maintenance of a viable socioeconomic system as an explicit norm on the firmament of the policy maker. Thus grants economics may be viewed as an approach to the political economics of nonmarket phenomena.

---

1. See M. Pfaff and A. Pfaff, "Grants Economics: An Evaluation of Government Policies" (Congress of the International Institute of Public Finance, Leningrad, September 1970), *Public Finance*, September 1971; M. Pfaff and A. Pfaff, with an introduction by K. E. Boulding, *The Grants Economy* (Belmont, Calif.: Wadsworth Publishing Co., forthcoming); and K. E. Boulding and M. Pfaff, eds., *Redistribution to the Rich and the Poor* (Belmont, Calif.: Wadsworth Publishing Co., 1972).

2. James Morgan and Nancy Baerwaldt, "Changing Patterns of Intra-Family Transfers." Paper presented at the joint session of the American Economic Association for the Study of the Grants Economy, New Orleans, La., December 1971.

Thus, although we are concerned with both private and public transfers in general, public transfers occupy our major interest in this volume, largely because they are much more sizable in the present economic system than private transfers between individuals and between families. These public transfers are themselves a phenomenon of the past three decades. This is not to imply that public giving had not previously been a characteristic feature of governmental social welfare policy but that the magnitude and the range of public transfers has increased, particularly in the last three or four decades, so as to make public giving a major force in economic life.

The growth, both relative and absolute, in magnitude and significance of public transfers is intimately connected with urbanization, which has drastically transformed most Western societies during the past century and a half. Urbanization has led to a relative deemphasis of the role of private transfers for the purposes of promoting health, education, and welfare, largely due to the break up of the extended family and the decline of the small, geographically based community. On the other hand, the decline of the emphasis on private transfers could also be viewed as a compensatory reaction to the increased dominance of the market as a social mechanism for the attainment of human needs. The rise of the market has been closely tied in with specialization, or more generally, with industrialization. When we talk of the urbanized economy then, we refer to this whole complex of economic or industrial processes as well as their social, political, and cultural consequences and antecedents. The study of the role of transfers in an urbanized economy thus entails an examination of the role of transfers in remedying problems associated with an urbanized and industrialized society. More specifically, we are interested in relating specific problem areas of an urbanized economy to the public policy measures that have been adopted to combat them. This process generally involves a study of the flow of benefits and costs associated with a particular policy, say the provision of higher education within a geographic entity such as a municipality, or a state. However, among these various geographic, or spatial, entities, the main interest centers on larger aggregates of individuals or urban clusters associated with the metropolis.

Apart from the empirical investigation of various types of transfers, the volume is concerned with explanations of the role that transfers can or should play in the urbanized economy. A major point of departure is the *theory of market failure*, which presumes that markets cannot achieve certain types of economic ends, and hence nonmarket means – transfers – are needed to achieve these ends. In the literature of public finance, market failures are generally associated with the presence of monopoly elements in the economy; with the prevalence of increasing returns to scale, within which the competitive calculus cannot operate; with indivisibilities in production or consumption, where the marginal logic is not applicable; and with externalities on both the production and consumption sides. The last

of these aspects of market failure will occupy our special attention. In various contexts we shall explore the effects that external benefits and costs have on various aspects of public policy. Just as we note market failures in the areas of urban education, housing, and so on, we may also speak of *failures of the grants economy* in these areas. Far from acting as an effective remedy to market failures, the grants economy often is characterized by “perverse” effects; instead of attaining goals not attainable within the market, the grants economy often leads to results opposite from those intended by the policy makers. From the various papers we learn that many of the problems in an urbanized economy are the result of this perversity of allocative mechanisms, whether they are caused by the market or by the grants economy. One of our objectives is to point out these perverse effects, as reflected in the inequity of the distributive results of public policy or in the inappropriate choice of instruments for taxation.

The central message of this volume is thus by no means cheering. Although we point out that grants may be an instrument for the solution of urban problems, we also note that sophistication in their use leaves much to be desired at the present. We therefore call for a social technology to combat urban problems that would include a more skillful use of transfers on both the taxation and the expenditure side of public budgets.

We are concerned not only with explicit transfers, which are characterized by cash flows between grantors and grantees, but also with implicit grants, which are not reflected in such obvious flows. An example of an implicit public grant is the economic benefit conveyed to the owner by rezoning of land from farm to commercial use. Such implicit grants often arise through the legislative, administrative, or judicial activities of the government in its interface with economic or market forces. Furthermore, we are interested in mixed transactions, which involve both exchange and non-exchange flows. These transactions generally can be broken down into their grant equivalent and exchange equivalent or if they deal with nonmarket or public flows, into their tax equivalent or grant equivalent.<sup>3</sup>

The papers are arranged in the following order. In part 1 patterns of redistribution within the metropolis are examined by means of two specific case studies. In the first case the problem of equity involving relations between suburban communities and central cities is examined. William Neenan asks whether suburban communities do compensate the central city adequately for expenses that it undertakes on their behalf. His empirical base is derived from a study of the Detroit area. This case is followed by Earl Mellor's study of the cost and benefits of public goods and expenditures in a Washington, D.C., ghetto area. He is specifically concerned with the question of whether a low-income neighborhood is self-sufficient with regard to its immediate needs, such as providing for safety, education, and welfare.

---

3. Tax equivalent denotes the net cost borne by a particular individual over and above the value of a public service received by him; grant equivalent refers to the net benefits received after his payments in the form of taxes have been considered.

It appears that these two questions are central to the relationship between the inner city and its suburban environment. Many problems of financing programs for education, transportation, and so on result from the perception of equity and legitimacy.

In part 2 the impact of voluntary and involuntary transfers through charity and the tax system is examined with special reference to the inner-city poverty areas. Harold Hochman and James Rodgers explain urban income transfers through "utility interdependence." Daniel Fusfeld studies the relationship between the public welfare payment and the ghetto economy for the United States in general, and Anita Pfaff examines empirically the distributive and poverty-reducing effects of social welfare payments to large metropolitan poverty areas. Finally, Irving Leveson explores alternative strategies for remedying urban poverty. Part 2 thus relates to a specific aspect of urbanization – namely, poverty and urban concentrations of poverty areas.

The next few sections look at some of the problems that are or might be associated with the increase in public grants and with the opportunity for a better allocation of the public grant system. In part 3, one of the main effects of transfers on the market for labor is examined, specifically the effect transfers have on participation in the labor force by grants recipients. Two papers report on empirical work carried out in the past and present to measure the work-disincentive effect of public transfer payments. This topic is of special concern because many people believe that public welfare payments make it possible for able-bodied individuals to live without working and that it in fact encourages laziness and the willingness to live on handouts. Christopher Green and Alfred Tella look at the effect of nonemployment income and wage rates on the work incentives of the poor. David Eleish, Jack Ladinsky, Myron Lefcowitz, and Seymour Spilerman based their study on the ongoing New Jersey–Pennsylvania experiment, which is designed to assess the effect of public transfers on work behavior.

As participation in the labor force or in the market economy provides one remedy for the problems of the ghetto and of urban poverty, education may be viewed as the second major key to individual advancement and, by implication, to the alleviation of urban poverty and of urban problems in general. In part 4 the role of taxes and transfers as instruments of financing educational policies is explored in both theoretical and empirical veins. Byron Brown poses some basic questions on the potential of state grants for promoting equality of opportunity in education; Thomas Muller estimates the impact that recent state education grant proposals are likely to have on local tax burdens and thus on the distribution pattern of the public grants economy; Charles Waldauer analyzes the fiscal interdependence among various government levels and the implication of the external effects of school aid; and Donald Phares studies implicit public grants resulting from the exportation or importation of taxes between different states and regions and their implications for educational policy. While the case for federal action is thus strengthened, David Porter and David Warner point

out some of the problems of current federally supported education programs that result from information and control aspects.

Part 2 thus looks at short-term remedies to urban poverty conveyed by transfer payments, whereas parts 3 and 4 focus on long-run mechanisms that could remedy the impact of human ecology on the status of the urban poor through participation in the labor force and through educational advancement. Part 5 examines the more general problem of the physical ecology, specifically of pollution, which tends to make the plight of the poor who live in concentrated urban areas even more difficult. Part 5 is thus concerned with remedies to some of the basic problems of an industrial society, which tend to affect not only urban areas in general but particularly persons who already have the greatest problems—namely, the poor. The focus again is on the limitations and strengths of the market economy versus the grants economy in solving problems of pollution and environment. On the whole, part 5 employs a theoretical approach to these basic questions. Myrick Freeman sets the stage by looking at the implications of grants as instruments and products of pollution-control policies in general. He focuses specifically on the relationship between exchange and grants processes in solving these problems. Thomas Havrilesky singles out technology from other forces as a major variable of concern; he points out that pollution is an area in which the market exchange mechanism simply breaks down. Allan Schmid examines the foundations of the market and relates it to the concept of private property and its uses and abuses in causing environmental crises. The concluding two papers by George Daly and Fred Giertz and by Robert Strotz and Colin Wright place these issues in the more formal framework of welfare economics.

The picture is drawn on a very broad canvas. A variety of elements that account for urban problems and for approaches to their solution are discussed. The deeper a person enters into these issues the more he sees that the supply of public funds, although it is a necessary condition, is by no means sufficient for the remedy of many of these problems. The economist is perhaps most adept in handling this instrument, although as the papers indicate, our level of knowledge in the use of these instruments is rudimentary at best. But this situation may be seen as an indication of the need for a high priority of effort on the part of economists in an area which is so intimately related to some of the greatest contemporary problems.

# 1

## Exploitative Transfers in the Metropolis

---

The political and legal boundaries drawn between the city and the suburban environment often reflect rather arbitrary differences; generally the city and suburbia are part of an overall system which has its cultural, social, political, and economic dynamics and interrelationships. The boundaries assume an even greater importance at a time of social crisis because they raise questions of equity and legitimacy and thus cut at the very heart of human community.

Equity is one of the main norms by which individuals as members of groups evaluate the socioeconomic system: from the point of view of equity, the central question is whether the different components pay their own way in the system or whether they in fact constitute a burden to the rest of the system. If these components, or subgroups, are characterized by differences in income, status, and power, it can be questioned whether there is exploitation of one by the other, of the many by the few, or of the few by the many. In a very specific manifestation, we can question whether there is exploitation of the city by the suburban communities, which use the public facilities of the city perhaps without adequately compensating the city for those benefits. An alternative view focuses on the poverty area itself; the inverse of the former thesis, whether the poverty areas pay their way in terms of the public goods and services they require for their operation, has been posed frequently. The negation of this question would imply *de facto* "exploitation" of the city and suburbia by the inner-city poverty area, which is the recipient of social goods paid for, presumably involuntarily, by others. This exploitation is a matter of degree; often it involves the redistributive transfers voted voluntarily by the majority for the minority poverty group. Nonetheless, these two questions aim at the problem of *public* redistribution between the components of the urban conglomerate. The main focus, therefore, is not on exploitation through the operations of monopoly or other market forces but on deviations from some social equity norms engendered by the use of public funds and resources and by competing groups endowed with different degrees of power.

The papers of part 1 do not provide conclusive answers to all these basic questions. However, some general insight based on two case studies if

applicable in a specific case and may also be generalized, with varying degrees of confidence, to other metropolitan areas.

Based on a study of the relationship between the city of Detroit and its suburban areas, William Neenan concludes that "if benefits are measured by willingness to pay, suburban municipalities, in varying degrees, do receive a welfare gain at the expense of Detroit." His views of the willingness to pay principle can be viewed both as an efficiency criterion and as an equity criterion for determining the tax contribution of residents and non-residents of urban areas. By contrasting net public sector benefit flows (as measured by willingness to pay) with the revenue flows, Neenan is able to show that "in all instances the revenue flows to Detroit fail to compensate fully for the public sector benefits flowing from Detroit to the . . . public sector, ranging from \$1.73 per capita for Highland Park to \$12.58 per capita for Birmingham."<sup>1</sup> He concludes: "For a family of four this welfare gain is estimated to range from nearly \$7.00 to over \$50.00 a year. These figures are averages for the suburban communities. For some families there may well be no gain; for others, with more frequent contact with Detroit, the welfare gain is undoubtedly much larger. Thus the one obvious conclusion that emerges from this analysis is that the tax contribution of suburban residents to the central city can be markedly increased without offsetting the welfare gain they are currently enjoying from the central city public sector."

Earl Mellor studies the low-income neighborhood of the Shaw-Cardozo area in Washington, D.C., in order to find out whether it is "self-sufficient with regard to its most immediate needs, such as providing for neighborhood safety, education, and welfare." He points out that his paper neither proves nor disproves any assertion of the implicit subsidy being conveyed by this area to the city at large, "because either a net inflow or a net outflow can be 'proven,' depending on what items are considered necessary and/or desired public functions and on the assumptions made with regard to the incidence of various tax burdens." Nonetheless, he estimates the benefits for education conveyed by public schools and the benefits for public safety imparted by police protection, corporation council, the courts, the Department of Corrections, fire protection, and other measures. He also looks at welfare benefits that arise from hospitals, vocational rehabilitation, highways and traffic, sanitation, urban renewal, city overhead, and social insurance.

Mellor then compares the outflows in the form of contributions for social insurance, federal income tax, District of Columbia income tax, property taxes, and so on with the benefits, or inflows. "The result (using feasible taxation) is a net outflow from the area amounting to \$10.1 million using the minimum benefit estimate and a small net outflow of \$8 million using the feasibly possible estimate. The wide range of net benefits indicates

---

1. The former is a moderate-income municipality encircled by Detroit's central city area; the latter is a traditionally affluent suburb.

that with present data the case of net inflows or net outflows with regard to the Shaw-Cardozo area is not settled. It can be stated that the area is reasonably paying its way – perhaps more than paying its way – and that its residents are capable of providing a reasonable level of public functions.”

The first two papers thus look at exploitative transfers – that is, transfers which generally are not paid voluntarily on the part of the transferors. Part 2 is concerned both with private voluntary transfers made for charitable and other purposes and with partly involuntary transfers made through the tax system; parts 3, 4, and 5 address themselves mainly to public transfers, which may be construed to have elements of voluntariness and coercion, depending upon the degree of interdependence or identification between the individual and the community at large.



## 1

**William B. Neenan:**  
**Suburban-Central City Exploitation**  
**Thesis: One City's Tale**

A metropolitan area, both central city and suburbs, is a natural economic and social unit. We are learning that Henry Ford's prescription, "we shall solve the City Problem by leaving the City," does not work. Problems, just as easily as people, can tumble over artificially constructed boundaries. Even though interdependency within metropolitan areas is subscribed to in the abstract, there is still, however, no commonly accepted response to the basic question: Do suburban communities compensate the central city adequately for expenses it undertakes in their behalf? Much political heat, heightened by traditional American antipathy toward city life as well as class and racial biases, has been generated over the exploitation thesis: suburbanites stoutly maintain there should be no taxation without representation; central citians are resentful of what they consider freeloading, claiming that every tub should stand on its own bottom.

Despite widespread recognition of the importance of this question and some empirical research, the exploitation question is largely unresolved. Recently in this *Journal* a leading student of urban finance commented: "... it is important to remember that we do not yet have a satisfactory and systematic benefit-cost study on the question of whether the suburbanite subsidizes or is being subsidized by the central city."<sup>1</sup> In this article the dimensions of the exploitation thesis in the Detroit SMSA [standard metropolitan statistical area] will be explored. Benefit and revenue flows between Detroit and six other municipalities in the Detroit SMSA will be estimated. Central to this examination of the exploitation thesis will be a willingness to pay model proposed for evaluating public services. The primary conclusion of this article is that if benefits are measured by willingness to pay, suburban municipalities, in varying degrees, do receive a welfare gain at the expense of Detroit.

---

From *National Tax Journal*, Vol. XXIII, No. 2, June 1970. Reprinted by permission of the publisher and author. Mr. Neenan is Assistant Professor of Economics, The University of Michigan. He is grateful for the helpful criticisms from many: from Robin Barlow, Harvey Brazier, Gunter Schramm, and Sidney Winter; from members of the public finance seminar, especially Larry Dildine, Irv Garfinkel, Gary Fields, and Steven Gold; and from students in the graduate course in government expenditures at The University of Michigan. Sandra J. Rice collected most of the data which appear here. She has been a helpful critic and most generous at all times. The Institute of Public Policy Studies of The University of Michigan provided financial support for the study.

1. David Davies, "Fiscal Effort, A Comment," *National Tax Journal*, XXII (September, 1969), p. 423.