BOOK REVIEWS

T. A. BROADBENT: Planning and Profit in the Urban Economy, London: Methuen, 1977, xiv, 274 pp.

The prime concern of this book is to highlight the passive role of planning, whether it be national, regional or urban, in the Western nation state. Specifically, attention is confined to the case of the United Kingdom and Broadbent takes pains to show how the three cornerstones of the mixed economy, namely, the private sector, the public sector, and the labor force interact to stimulate growth, or, as is more usual in the U. K., stagnation. His premise is that the private sector is by far and away the major determinant of growth given the strictures of the market mechanism, and that the other two cornerstones of the economy are "non-basic" in the sense that their main function is to ensure that capitalism and the market mechanism runs smoothly. It follows that the ogre of "creeping socialism" is none other than a last ditch attempt to shore up a crumbling (in the British case) market economy through government regulation, hand-outs (to which category is assigned regional policy), and the pacification of the workforce by way of the welfare state and an increasingly conciliatory attitude toward union bargaining and wage increases. Planning is really the bureaucratic process whereby the state serves the ends of the private sector and, conventional wisdom to the contrary, it is devoid of any effective power to change the structure of the economy. The off-shoot of spatial planning is cast in no better light; industrial location and urban land-use, for instance, being incumbent on the initiatives of private development with planning only coming to bear with such frills as site specifications and attempts to minimize negative externalities on the community or its transportation system.

What are the remedies for this state of affairs which, according to Broadbent, has done nothing to stop the decline of the British economy? Unlike Catanese (1974), Broadbent does not urge the direct intervention of planners in the polity, but suggests that the nation as a whole must soon be prepared to make a quantum leap whereby the public sector replaces the private sector as the "prime determinant" of the economy. In the meantime, planning can be reformed from within but to little avail given the massive constraints imposed by the market mechanism. That mechanism is, in turn, repudiated for its "dehumanizing" of society (and the author goes into the familiar impasse of neo-classical economics with its predilection for "things"-consumer preference-rather than the older tradition of economics with its concern for value and the contribution of labor) and the concomitant mentality which perceives inner-city areas and depressed regions as compartmentalized welfare cases rather than the inevitable outcomes of a global market system which abandons people and places unable to provide it with profits anymore. As a result, Broadbent puts a considerable effort into formulating the urban economy as an activity system centered on households as "mini-factories" and in this realignment of linkages, simultaneously dismisses the notion of the city as a combination of interacting industrial sectors (because inter-industry linkages are now extant on a national, or international scale) while resurrecting labor as an equal to the private and public components of the economy.

At this juncture, it should be stressed that the underlying message of pre-eminant capitalism and passive state planning is accompanied with a welter of backbround information, some of which tends to obfuscation on the part of the reader. For example, the author has a distressing habit of referring to chapters ahead of context for amplification of interesting points he is making. Obviously, this can break the chain of thought and may not even be necessary (for instance, do we really need to be reminded of what is a production system while reviewing the state of the British economy? - see p. 11). Similarly, Broadbent tends to gorge us with somewhat trite facts such as a summary of the whole of British planning legislation in tabular form (Chapter 4) and a table defining such profundities as "factors of production = land, labor, capital" (Fig. 37). One is left with the impression that in trying to get his message across to the generalist (presumably the average planners, politician, or bureaucrat), Broadbent felt he must simplify all the economic notions. However, his approach is inconsistent and one wonders how the average politician will interpret the smatterings of Lowry modeling or cost-benefit analysis used in Chapter 6 to illustrate the pros and cons of numerate planning procedures. Perhaps as a result of this extensive provision of supporting material, the usual run of typographic errors are evident: errors in punctuation (p. 36, 77), terminology (p. 151), inappropriate or omitted words (p. 102, 234, 246), and missing references (p. 104, 163, 164, 204).

Notwithstanding this padding, the message still came across, and in this reviewer's opinion it is a very worthwhile one to boot. This book succeeds in side-stepping the rhetoric of invidious planning or bungling state intervention and pinpoints the underlying causes of the morass which is the British economy. Real planning (à la French model) is what Broadbent is truly advocating, and not the short-term tunnel-vision which pervades the Treasury along with its "hands-off" instructions to concerned urban and regional planners. As Broadbent recounts, it is really not an ideological issue anymore: Britain has no choice but to promote indicative planning for its own survival because the alternative has simply failed (for an interesting comparison with a more overtly socialist plea for a planned economy, see Holland (1976)).

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Catanese, A. J. Planners and Local Politics: Impossible Dreams, Beverly Hills: Sage, 1974.

Holland, S. Capital versus the Regions, London: MacMillan, 1976.

K. J. BUTTON: The Economics of Urban Transportation, Saxon House, 1977, 180 pp.

Button's book attempts to fill a gap in the literature of transportation systems analysis. The gap is one wrought by the need for a coherent introductory text on the subject; a text which would provide students with a firm background in the economic theory of public policy analysis as well as insight into the problems of practical application. The gap is indeed successfully bridged by bringing into perspective the various aspects of the urban transportation problem, by outlining the economic principles upon which solutions to the problem could be formulated and by using the British experience to illustrate both the problem and the methods for practical solutions.

The overall thesis, and the major strength of Button's work, is the presence of the unwaivering theme that the urban transport problem is essentially an economic problem, and that the reason it persists is because the best possible (i.e., a pricing mechanism) solution has not been systematically applied. As a result all major parts of the book are organized in terms of: (a) the pricing solution of existing urban transport problems; (b) possible criticisms of such solutions; and (c) real world case studies. The author's criticism of pricing solutions which he openly advocates, are both honest and thorough, and enable the introductory reader to gain a view (although, admittedly not a balanced one) of the diversity of alternative approaches to the solution of transportation problems.

Specifically the book is organized into ten chapters. The introductory chapter reviews the British urban transport situation, outlines the dimensions of the problem and the various forms of urban transport control and lays the groundwork for the dichotomy which is explored in the remaining chapters, namely the pure theory of transportation versus the problems of pricing in a distorted economy. Chapter two analyzes the economic basis of urban traffic congestion, while chapters three to six address other specific aspects (road pricing, parking, traffic management, urban public transport and urban freight) of the urban transportation problem. The remaining chapters present no consistent point of attack and seem to be in an almost random order. Chapter seven identifies environmental problems produced by different transportation modes and, following his method of attack, discusses mechanisms of control. Chapter eight presents the traditional transportation modeling process with emphasis--naturally--on the economic approach to travel demand. Transportation investment appraisal is the subject of chapter nine, with cost-benefit analysis consuming the entire chapter. The final chapter, ten, provides a historical view of the development of urban transport policy in Great Britain.

Button's text falls far short of being a complete one. For example, problems of demand estimation and dynamics are glossed over in chapter eight, the discussion of alternative plan evaluation provides only skeletal coverage of the pertinent issues, and the land-use implications of transportation policy are sidestepped almost entirely. Nevertheless, if the text is viewed as a discussion of an economic approach rather than a review of approaches and if it is regarded as a text in the economics of urban transport rather than the text, then Button's work is a significant contribution to the literature of urban transportation.

In short, The Economics of Urban Transportation by Button is both thoughtful and entertaining, and can be read gainfully at most any level of familiarity with the topic. While Button's treatment is by no means a complete one of the subject (in some cases what many would regard as central issues in the economic analysis of transportation are blatantly ignored), the text represents a well-written treatise on urban transportation policy analysis from a consistent, although by no means myopic, economic viewpoint.

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RONALD E. GRIESON (ed.): Public and Urban Economics, Lexington, Mass.: D. C. Heath and Co., 1976, 417 pp.

This Festschrift was compiled to honor William S. Vickery, McVickar Professor of Political Economy at Columbia University. The 24 essays in this volume, all appearing for the first time in print, cover a wide gamut of topics in public and urban economics. Both the diversity of topics and caliber of the essayists reflect the impact Professor Vickery has had on the modern literature in these two fields of study.

The first 14 essays in the book pertain to selected topics in the area of public economics. Four of these deal with public treatment of private philanthropy. An essay by A. B. Atkinson (Chapter 2) examines the income tax treatment of charitable contributions. A model is constructed which allows an assessment of the relative merits of tax deductibility versus tax credits. Policy efficacy is evaluated on the basis of the equity of resulting impacts; the focus is on charities as redistributive agencies and the effect of deductions/credits on that function. The model constructed, by assuming the price and income elasticity of giving is unity, does not address the issue of the stimulus to charity provided by preferential tax treatment. Closely related to Atkinson's work are essays by Joseph E. Stiglitz (Chapter 14) and Martin Feldstein (Chapter 6). Stiglitz analyzes the effect of estate and inheritance taxes on the distribution of income. He shows that under certain plausible assumptions the estate tax may not achieve its objective of equalizing the distribution of income. Briefly, estate taxes may depress savings and capital accumulation leading to a lower capital-labor ratio and, if the elasticity of substitution between these inputs is less than one, an increased share of capital in the national income. If returns to capital are less equally distributed than returns to labor, the result will be less income equality. Feldstein's study uses time series data to investigate the (tax) price elasticity of charitable bequests. Although the resulting elasticities are quite sensitive to alternative specifications of the basic functional form, the estimates range between minus one and minus three indicating substantial tax inducement to increase bequests. In a final essay on philanthropy C. Lowell Harriss (Chapter 7) offers some thoughts on corporate charitable activity. Basing his analysis on the premise that corporate philanthropy, while not subject to strict quid pro quo requirements, will in some way benefit the company, Professor Harriss presents a non-rigorous, suggestive and wide ranging essay.

A second interesting contrast of essays in this book occurs in the juxtapositioning of the work of Edmund S. Phelps, "Social Policy and Uncertain Careers: Beyond Rawl's Paradigm Case" (Chapter 10) and Paul A. Samuelson's "Optimal Compacts for Redistribution" (Chapter 11). Both authors present seminal works in the continuing neo-utilitarian versus Rawlsian debate. Professor Phelps, the advocate in the Rawlsian corner, divides his essay in two parts. First he discusses why neo-utilitarianism is not relevant to the problem of distributive justice on which Rawls concentrated. Second, and less convincingly in this reviewer's opinion, he discusses what Rawls' insights might contribute to the problems that the neo-utilitarians presumably had in mind (i.e., homogenous prospects plus luck). Samuelson's essay, while praising the revitalization of the concepts of "fairness" and "justice" in welfare economics attributable to Rawls, is critical of the reintroduction of the concept of minimaxing (e.g., maximizer of one's minimum possible outcomes) inherent in the Rawlsian approach.

The works of John Ledyard and Leon N. Moses, "Dynamics and Land Use: The Case of Forestry" (Chapter 9), and Robert Solow, "Optimal Fishing with a Natural Predator" (Chapter 13) are quite similar in many respects despite differences in methodology and the obvious differences in environment of concern. The Ledyard/Moses work extends Thunen's classical theory of land use and rent by showing how time and transport cost interact to determine not only rents and land use, but also intensities of cultivation and harvesting rules at various distances from a center. Solow extends a "standard" model of fishery economics by considering a case where a valued specie is being also "exploited" by a second (non-human) predator. The common thread connecting these two essays is the argument that in both cases a policy of maintaining the maximum sustained yield would result in suboptimal outcomes.

Two excellent essays by Kelvin Lancaster (Chapter 3) and Carl S. Shoup (Chapter 12) investigate the implications of public goods/collective consumption on government budgets. The Lancaster work analyzes "impure" public goods, which includes most if not all goods and services usually considered public, as mixed goods possessing both public and private characteristics or attributes. The surprising and thought-provoking conclusion of his analysis is that if such goods are treated as pure public goods suboptimal provision will occur: too little will result! Optimality requires supply by market with subsidy (or a tax on private goods) and a formula is provided to determine the amount of tax/subsidy. In a stimulating essay Shoup investigates the tendency toward a decreasing role of the public sector in national income inherent in the collective consumption aspect of public goods in a mileau where the price elasticity of demand for these goods is less than one, population is rising and the income elasticity of demand is "low". In this context the reasons behind the observed increasing share of the public sector in our economy is investigated.

Martin J. Bailey's essay, "Cumulative Averaging and Neutrality" (Chapter 3), investigates the tax neutrality of Vickery's proposed cumulative averaging formula for the personal income tax. Here neutrality is defined as the absence of announcement effects with respect to resource allocations among industries as well as investors choice among financial instruments, depreciation schedules and so forth. Bailey's model supports Vickery's claim of neutrality for his proposal and refutes Samuelson's claim that for tax neutrality depreciation must reflect true economic depreciation.

Kenneth J. Arrow's chapter (Chapter 1) investigates quantity adjustments (versus price adjustments) in planning resource allocations. Building on and extending S. Marglin's model, Arrow finds that quantity adjustment in resource allocation represents a possible alternative to price adjustment in the multi-resource case, but while it requires less information flow from producers to (central) planners, it does impose a heavier computational burden on the center.

The final two essays in Part I of this book examine the microeconomic behavior of multi-product firms and non-profit organizations. William J. Baumol (Chapter 4) investigates the definition of scale economies, the behavior of costs in the presence of such scale economies and the efficiency of setting price equal to marginal costs in such a setting for a multi-product firm. Jacques H. Dreze and Maurice Marchand (Chapter 5) extend the Ramsey-Boiteux model to examine pricing (output and input), spending and gambling rules (e.g., portfolio management under risk) for a non-profit organization. While the latter subject (portfolio management) is investigated in a preliminary, simplified manner, the results are interesting and the entire essay is most enjoyable given its university "setting."

The ten essays in Part II (Urban Economics) of the book cover quite a wide variety of subject matter. Essays by Werner Z. Hirsch, Sidney Sonenblum and Jeffrey I. Chapman (Chapter 16), Jerome Rothenberg (Chapter 23), Peter Mieszkowski (Chapter 18), Richard F. Muth (Chapter 22), and Edwin S. Mills (Chapter 19) all could be classified under the general rubric of local public finance. The essays by Hirsch, et al, and Rothenberg deal with the output or expenditure side of the local finance equation. The former study attempts to specify and measure a production function for police services. The attempt is intriguing because the authors introduce both prevention and apprehension measures of output. While apprehension may be treated in a rather straightforward manner, measurement of crime prevention, necessitating some measure of potential crime, is more difficult. The authors derive a "crime function" and use it to measure potential crime. Crime prevention is the difference between a city's predicted crime (via the crime function) and actual reported crime. While the exact specification of both the crime function and police production function may be questioned (the authors counter some possible criticisms by running sensitivity tests on the latter) the results do tend to support such *a priori* expectations as apprehension dominating prevention in the setting of resource allocation goals.

Rothenberg's chapter, which could have just as easily been grouped with Shoup's and Lancaster's in Part I, examines the "inadvertent" distributional impacts in the provision of public services to individuals. By inadvertent, Rothenberg means they originate not from the redistributional goals of society, but rather "from the interplay of attempts to obtain self-interest advantage by the different participants in the political process" (political externalities) p. 372. Like the Part I essays, Rothenberg is dealing with "impure" public goods. In most cases of local public good provision the government provides capacity or facility (e.g., parks) not the service itself (recreation). To enjoy the type public good he is talking about, individuals must use supplementary private resources (e.g., to get to park, etc.). The demand for capacity or facility is thus a derived demand. In such a situation majority rule in the case of specific public projects is likely to result in inadvertent redistribution. Both unanimity with side payments and logrolling solutions are investigated (when they work, when they don't) and the suggestion is made to consider public service provision in terms of complexes of services rather than in isolation. The chapter closes with an excellent critique of the Tiebout case in light of the author's analysis.

The chapters by Mieszkowski and Muth examine the revenue or taxation side of local government. Mieszkowski examines the distributive effects of local property taxes from a global or macro-level versus the simplistic partial equilibrium perspective underpining the conventional wisdom. His macro-level model allows him to include an analysis of benefits received as well as taxes paid and to contrast the distributional effects of property taxes as opposed to wage taxes. He finds that when only residential capital is subject to tax the local property tax and a system of local wage taxes are similar - both will approximate a system of user charges. When industrial, as well as residential, capital is subject to property taxes these taxes lose their user charge attributes. Specifically the benefits of public expenditures for industrial purposes will be imperfectly related to property taxes paid on that capital. A final section of the chapter simulates the effects of central city taxes levied on capital or labor, under differing elasticity assumptions. The impact on land rents (city vs. suburb), wages (city vs. suburb) and profits are delineated.

In contrast to the Mieszkowski work, where taxes go to finance allocative benefits, Muth looks at central city taxation for redistributive purposes, where expenditures benefit taxpayers only due to utility interdependence. For these latter type expenditures one need not live in the community taxing and transferring to benefit (e.g., "true" exploitation of city by suburbanites). Muth focuses on the resource reallocation effects (city vs. suburb) of such redistributional schemes. In the first section of the chapter a Harberger type model is presented. The "moral" of this part of the analysis is that "the resource allocation effects of a local real property tax result not because it is a property tax, but because it is a local tax levied differentially in relation to benefits received" (p. 362). A simulation of the model, using realistic parameter values, demonstrates that local financing of income redistribution can result in substantial loss to the economy as a whole through the reallocation of resources from the central city to suburbs. Specifically, substantial reductions in the return to (non-land) capital owners (wherever located), the largest impact, will be accompanied by significant losses to city land owners and gains to their suburban counterparts.

The final paper in the local finance quartet by Edwin S. Mills, extends his previous work by presenting a normative urban model emphasizing interaction between public and private sectors. A non-linear (mixed-integer) programming model highlighting the interaction between transport pricing and land use is the specific vehicle utilized. While the conclusion that optimum construction and pricing of the transportation system (in a congestion mileau) are sufficient government measures to enable private markets to allocate land efficiently may not be surprising, its significance in a world where congestion is used as an entree for land use controls cannot be denied. A simple, but realistic numerical simulation of the model showing output levels, congestion and land rent at varying distances from the cbd concludes this chapter.

Herbert Mohring's essay (Chapter 21) analyzes land market spatial equilibrium in a cbd-oriented city. It is in the Alonso-Muth-Solow tradition and thus is also broadly congruent with the Muth and Mills chapters which have been reviewed. In Section 1 the spatial equilibrium of households in a city where tastes and income differ, elasticity of demand for housing services and travel are non zero and where land is both valued in its own right and as an input to housing is presented. Especially interesting in this section is the author's specification of the conditions necessary for the poor to live close-in and the rich on the outskirts of the city. In the second part of the chapter Mohring presents a spatial equilibrium model in which households have identical tastes, income and a Cobb-Douglas type utility function. Although some of the theoretical results of this section's model are unrealistic (e.g., population density is not related to city size), inserting plausible values for the parameters allows Mohring to replicate certain characteristics of a representative city.

Ronald E. Grieson's contribution (Chapter 15) presents a model of monopolistic competition in a spatial setting with transport costs. The model is of the Demsetz type and Grieson's conclusions, although in terms of transportation parameters can be generalized to advertising, information and/or distribution costs. Results show that firms having marginal costs lying below average cost would provide free transportation (or sales service, advertising). Those firms experiencing constant or decreasing returns to scale would not provide such services gratis. The price discrimination involved in the provision of free transportation does involve some inefficiency for all but the furthest customers of the firm, but it is the best solution (lowest total average cost of production and transportation) that can be achieved without government subsidies.

Essays by Ezra J. Mishan (Chapter 20) and G. S. Tolley and Peter Zadrozny (Chapter 24) address two common externalities encountered on the urban scene: pollution and congestion respectively. Mishan's chapter focuses on the issue, using partial equilibrium analysis assuming optimality elsewhere, of whether the movement of people or firms into a polluted area and/or the output of polluting industries should be controlled through the use of taxes or subsidies in order to meet Pareto criteria. The issue is addressed using four models each of which assumes the relevant information on pollution and damages is known. The four models represent the various permutations of pollution being a function of immigration (or not) and a locational advantage accruing to immigrants into a polluted area (or not).

Tolley and Zadrozny's chapter represents a continuation and extension of Vickery's work on congestion, road capacity and city size. A traditional (automobile) congestion model is extended to allow (1) responsiveness of commuting decisions to costs of driving at peak times--a non-zero elasticity of demand; and (2) a road building response to congestion. The resulting model is simulated for a city of 6,000,000 people undergoing 10 percent growth. Allowing neither type 1 or 2 adjustments the estimated external cost of the resulting congestion is $42 million. Type 1 adjustment reduces the estimate to $26 million. Allowing both types of adjustment the cost estimates, including the cost of expansion of the road network, range from $19 to $30 million.

The final essay to be reviewed, "Race, Ethnicity, and Residential Location," is by John F. Kain (Chapter 17). It represents a continuation of Kain's previously reported, widely known, copiously cited research. The chapter first looks at the pattern of residential segregation of blacks, the total foreign stock and eight nationality groups (plus an "other" group) within the Cleveland SMSA. The former group exhibits the most segregated distribution. Two models are then constructed in an attempt to explain residential location patterns on the basis of family type, family size, age of head and household income (a total of 384 categories of households). This socioeconomic-demographic model is much less accurate in predicting the spatial distribution of blacks than any of the other ethnic groups. For blacks measurable characteristics explain only a small part of the residential distribution and contribute nothing to explaining their almost total absence from certain areas. For ethnic groups defined on the basis of nationality the model contains significant explanatory value. Kain then reviews Lieberson's results, reported in Ethnic Patterns in American Cities, on residential segregation of blacks and ethnic groups in major U. S. cities in 1910, 1920, 1930 and 1950. At each date the pattern of segregation was clear, blacks were the most segregated followed by first generation foreign migrants and then second generation foreign stock. In addition blacks were more segregated than so-called "new" migrants (from southern and eastern Europe) who in turn were more segregated than "old" migrants (from northern and western Europe). Over time there has been a decline in the segregation of foreign ethnic groups but an increase in black segregation. Finally, while the data or omniscience necessary to dispose of workplace location or black preferences as the causal factors behind black residential segregation was not available, Kain does discuss and denigrate these possibilities.

When reviewing an edited volume, whether it be a Festschrift, the proceedings of a conference or whatever, it has become almost traditional for the reviewer to criticize the lack of common theme, unevenness, etc. of the component papers. This is not the case with the present volume. Many of the papers in this book are extensions of Vickery's work; they all bear the label "inspired by Vickery." The consistently high quality of the chapters is not only a reflection of professional competency of their authors, but it is a tribute to the recipient of this Festschrift. I recommend the book to all regional scientists. Both the Public Economics and Urban Economics parts contain well written expositions on timely topics of interest to our profession. It will be the rare regional scientist who does not find at least one of the 24 chapters to be of interest. Most will find more.

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STUART HOLLAND: Capital versus the Region, New York: St. Martin's Press, 1976, vi, 328 pp.

Stuart Holland pulls no punches in his perspective on regional science. He claims "...members of the so-called Regional Science Association...fail to appreciate that their reasoning is almost entirely circular, and that in genuinely scientific terms it is a cul-de-sac leading nowhere" (p. 29). Capital versus the Region is a straightforward challenge to the conservative orthodoxy that has become characteristic of regional science. The work is a difficult read. It is uneven...occasionally pedantic, occasionally rhetorical, occasionally insightful and provocative.

Holland argues that capitalism is the underlying cause of regional imbalance. Prescriptions to alleviate imbalance based on neo-classical equilibrium assumptions which deny the need for direct State intervention and the problem of the power of multi-national corporations are doomed to failure. Thus the imbalance between job and income structure between regions in mature capitalist economies has been increasing.

Holland's criticisms are bold. He begins his arguments by claiming that the theoretical works of Weber and Losch have been useless in solving actual regional problems. His section titles speak his stance: "The Apotheosis of Technique: Isard"; "The Banality of the Competition for Space"; "False Hopes from Input-Output Analysis"; "False Hopes from Industrial Complex Analysis"; and "The Limits of..." a selection of regional science ideas. His basic argument should be familiar to regional scientists by now: regional scientists, blindly guided by a devotion to a specific methodological and paradigmatic orientation, have unduly constrained the understanding of the process of multi-regional development by neglecting important aspects of its complexity (direct intervention and the role of multi-nationals). Further, their conservative adherence to the orthodoxy of self-equilibrating capitalism distracts attention from the actual causes of regional imbalance. In the conclusion of his indictment, Holland argues that one of the main obstacles to effective development of regional and location strategies may well be the regional economist.

Holland is not arguing for extinction of a discipline without replacement. Rather he is arguing that the cloning of regional scientists be stopped, to be replaced by planners with a heritage based on analytical thinking coupled with multi-scale perspective and political awareness. This hybrid regional analyst would be lacking the rigor of the regional scientist, but also the mortis.

This book is not, however, all bludgeon and bluster. It puts forth basic arguments which are both consistent in themselves and destructive of the bases of the conservative models. Holland builds his case around the mobility of factors, the role of the government sector, sectoral investment strategies, and the scale transcendence of corporate investment strategies. Initially he posits a simple model based on competitive assumptions and an economy restricted to national markets. If the market works freely, given the reasonable assumption that capital is more mobile than labor, the result is increased regional divergence. Thus in situations where there is a less developed region and a more developed region, the free market mechanism leads to a cumulative imbalance unless specifically countered by direct government intervention, e.g., locational controls or public enterprise. Indirect government intervention (e.g., growth-center policies) have proved inadequate. This is largely due to changes in the spatial characteristics of the modern capitalist firm since the 1950s. These changes have resulted in multi-national firms which transcend the power of individual governments. These firms have created a "meso-economic big league" whose operation exacerbates the problem of interregional inequalities since the multi-nationals have not shown a tendency to be multi-regional as well. Their tendency has been to concentrate investment in the more developed regions.

Holland's policy prescriptions are not particularly innovative. He basically is arguing for the government to industrialize less-developed regions. An unbalanced economic sectoral investment strategy is his preferred plan to correct regional imbalance. Thus spatial concentration and dispersion can be used as dual prongs in a national location policy. Nonetheless, the serious challenge of this book is not in its prescriptions, but rather in its insight and incisiveness into the utility of regional science in solving the persistent problems of regional imbalance. If regional scientists can withstand the vitriol and rhetoric, they may find within this work sufficient stimulus to pursue alternative paths which lead out of the fundamentalist cul-de-sac Holland circumscribes.

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LEONTIEF, W. W. The Structure of the American Economy 1919-1939, 2nd Edition Reprint, New York: IASP, 1976.

LEONTIEF, W. W. (ed.). Studies in the Structure of the American Economy, Reprint 1953 Edition, New York: IASP, 1976.

Regional science has not been immune from the general exponential growth of information common to all disciplines. While this is welcomed in the broad sense of expanding and deepening our understanding of the structure, growth and development of regional systems, it also brings with it certain dangers. If we assume that each new book or journal contains within it part of the accumulated wisdom of the past, there is a tendency for us to direct students to the newest, latest article on location theory, input-output analysis or density gradients in urban areas. Their exposure to the classic statements in these areas is dependent, in most instances, on perhaps a one or two sentence summary. The richness and importance of those early articles is often lost or submerged in a sea of chicken scratch. Another major difficulty stems from the fact that a lot of the classic materials contained in books published in the 1950s and early 1960s are now no longer available. For example only seven of the MIT Regional Science Series remain in print. For this reason, IASP's venture in reprinting two of the major contributions to industrial structure analysis is to be welcomed. Among other things, it provides us with a measure of the direction and rate of change of progress in research in interindustry analysis. We sometimes forget, as Leontief reminds us in the preface to the first book, that the first input-output table of the U. S. had to be aggregated from 42 to 10 sectors to facilitate analytical computations.

For regional scientists, the two most important contributions in the edited volume are Leontief's "Interregional Theory" and Isard's "Some Empirical Results and Problems of Regional Input-Output Analysis." The former chapter contains a masterly exposition of the optimum interregional model. It anticipates his later collaboration with Strout and contains many striking insights into the different conceptual bases for regional vis-a-vis national growth. In particular, Leontief points to the critical role household expenditures play in the regional economy. His later suggestions for the development of a dynamic regional theory remain to be explored. The dynamic model he developed in earlier chapters was seen to depend on the irreversibilities of certain kinds of investment. One of the most significant sources of irreversibility may be found in the locational patterns of industry--particularly those industries Leontief classifies as regionally balanced. With this imposing structure set before him, Isard then faces the inevitable task of empirical implementation of such a model. Isard had, of course, developed the theory a few years earlier in his piece in the November 1951 issue of the Review of Economics and Statistics. From what we now know of Walter Isard, such a challenge was met unequivocably with typical Isardian flair. Given the horrible data with which he had to work the analysis was all the more striking. In the last section, we read the beginnings of a new view of the economy--the space-economy around which (or in which) Isard proposed a general equilibrium model with both a time and space axis.

The remaining chapters of the edited volume contain various explorations in the use of technological data. Anne Carter's continuing research in structural change begins here with an analysis of the technological structure of the cotton textile industry.

The progress that has been made in this field since 1950 has been remarkable. Polenske and Skolka's[1] edited collection of the 1974 U.N. Input-Output conference papers substantiate this comment. However, many of the same problems remain. The data are better and more plentiful, but the problems of technological change, substitution and interregional stability remain. New uses for interindustry analysis have arisen: a 1970s version of the Structure of the American Economy, were it to be written, would reflect environmental issues, pollution/output trade-offs, residuals management and energy concerns.

The reprinting of these two books is welcomed: it is both gratifying to appreciate the rate and volume of progress in a major area of research and humbling to read that issues that appear new had been anticipated some years earlier.

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RICHARD P. NATHAN and CHARLES F. ADAMS, JR.: Revenue Sharing: The Second Round, Washington, D. C.: The Brookings Institute, 1977, pp. 268.

IN SEARCH OF REVENUE

The idea of revenue sharing embodied in the State and Local Fiscal Assistance Act of 1972 has been gathering support for a number of years. Revenue sharing by the time of enactment of the 1972 Act seemed to be promising all things to all people, of every shade of political and social thought. The Brookings Institute set out to exhaustively examine this act during its original five year life. Subsequently, the Act was amended in 1976 extending revenue sharing to 1980. The Brookings Institute has published two preliminary but, nevertheless, comprehensive studies to access how the Act's provisions and their implementation have met the diverse expectations for revenue sharing.

Monitoring Revenue Sharing

The authors precede with this study in the expectation that much can be gained by monitoring new programs while the data is still fresh. The authors are realistic enough to realize that this first volume must of necessity break new ground and thus reserve final judgment. The central purpose of the research is to provide systematic uniform data on the 1972 act and examine important policy issues in light of that data.

The 1975 work attempts to study in detail the distribution, fiscal, and political impacts of the 1972 Act for the recipients of the shared revenue. The authors were particularly concerned about the way the distributional formula in the 1972 Act worked. This concern over the distributional formula stems from the concern shown by the framers of the 1972 Act with the design of the distribution formula. The law, as enacted, affects some 39,000 jurisdictions including 50 states, the District of Columbia, 323 Indian tribes and Alaskan native villages, as well as 38,000 counties, municipalities and townships. In this light, the authors attempted to determine the net gains or losses that would be experienced by various states and regions. The authors explicitly assumed that the costs of the program are met either by projected increases in federal receipts, or by displacing in uniform a corresponding total amount of other federal grants to state or local government or by displacing a uniform fraction of total federal expenditures. Although the authors are careful in their analysis, the reader comes away with basic nagging questions that the distributional impact of the act are still to be established.

In addition to the distributional aspect of Monitoring, the authors also examine the fiscal effect of the bill on state and local finances. The analysis of the fiscal effects in this report concentrates on identifying net real changes in state and local finances that were brought about by initial revenue sharing.

The study attempts the almost impossible task of following the revenue sharing funds to identify the fiscal effects of the 1972 bill. This analysis is complicated by the funds fundability; that is, the ease with which the funds can be transferred within and among state and local budgetary accounts. In examining the fiscal aspect of the 1972 bill, the authors discovered that the most vocal criticism of the act centers on charges of discrimination in the final use of the funds. The 1972 Act prohibits the use of shared revenue in programs which discriminate.

Finally, Monitoring attempts to study the political effects of the 1972 Act. In this part of the study, the authors are forced to rely on field observations carried out by a number of associates who are well acquainted with a particular geographic area and its politics. These field associates attempted to determine what impact the 1972 Act had on state and local government decisioning processes. The authors noted that the decentralization theory was implicitly accepted with the passage of the revenue sharing act. According to this theory, the passage of revenue sharing would increase the role of the generalist in state and local government both elected or appointed and reduce that of the functional or program officials. A further assumption is that over time revenue sharing would produce a greater interest and competence in these generalist decision makers. The authors, through their field associates, attempted to evaluate the assumptions of the decentralization theory in light of the 1972 Act. In this evaluation, the study is particularly concerned about the impact of revenue sharing on different types and sizes of city and state governments. Although the authors draw no generalized conclusions, their discussion based on their field associates' observations are both enlightening and interesting.

Revenue Sharing: The Second Round

The Brookings Institue continued their study of revenue sharing but modified their approach to adjust their study to the provisions of the State and Local Fiscal Assistant Act Amendments of 1976. In the Second Round, the authors are more concerned with the fiscal impact and decision making aspect of revenue sharing. The distributional aspects of revenue sharing had not changed in the 1976 amendment and had been thoroughly covered in the earlier volume.

In studying the fiscal aspects of the 1976 Amendments, the authors attempted to analyze the impact that revenue sharing had on the fiscal problems of various government units, particularly major cities. The fiscal aspects of general revenue sharing centered on the impact that shared revenue has on expenditure decisions of recipient governments. While the authors have taken elaborate steps to ensure that the statistical design of their study is scientific, the analysis in this section suffers from inappropriate attention to the theoretical model. In particular, the authors spend a little less than two pages reviewing the theoretical model for determining the demand for public goods. This analysis begins on page 24 and ends on page 26 and is, at best, a very poor review of a very important subject. From this review the authors conclude that with non-categorical grants, such as revenue sharing, the recipient governments will experience only an income effect, in the jargon of consumer theory. Given an increase in the resources available to recipient governments, the monies will be used for some combination of increased public spending, reduced taxes and borrowing, and increased fund balances. In the absence of a price effect, the authors suggest there is no bias in favor of increased spending on any particular public good or service. The authors continue their analogy and appear to commit a classic error in economic logic by suggesting that "the overall effects on public spending on a noncategorical grant can be expected to be smaller than for a matching categorical grant"(p. 25).

It seems quite possible that the authors have developed their theoretical model based on a fallacy of composition as indicated in this last statement. For example, the impact of a noncategorical grant could be expected to be larger than a matching categorical grant if public goods in general are normal or luxury goods while the public goods eligible for matching categorical grants are inferior. It is also possible that public goods may be inferior to private goods; thus, while the overall spending effect of a noncategorical grant may be less than for a categorical grant, this impact may stem from the public's desire for less public and more private goods. In any event, the theoretical model outlined in the Second Round is very weak and could mislead both the reader and researcher.

The actual statistical analysis of the fiscal impact of revenue sharing on recipient governments is interesting but, as yet, inclusive. The problems involved with the analysis stem from the inability of both researchers and recipient governments to determine the total effect of revenue sharing on the government agency budgets. For the recipient government, the decision makers may view revenue sharing in at least three ways. First, the decision maker may view revenue sharing as a new addition to his or her revenue sources. Second, the decision maker could view this revenue sharing as the trade off for lost categorical grants received in the past. Finally, some decision makers may view revenue sharing as a net loss when the lost categorical grants outweigh the increase in shared funds. The authors are quite aware of these problems and other problems in evaluating the fiscal impact of revenue sharing. Nevertheless, the study of the fiscal effects while possibly defective both theoretically and statistically is an indispensible first step in the review of revenue sharing.

Finally, the Second Round refined the use of the field associates to help provide additional information about impact of revenue sharing on decision making in particular about the size of jurisdiction and perceived attitudes towards revenue sharing. The development and findings of this research are both interesting and informative. This reader shares the authors' enthusiasm for the use of associates to help shed light on questions where statistics seem inappropriate or difficult to apply.

Overall I found that both volumes of this work are indispensible, particularly for anyone concerned with intergovernment fiscal relations. These works, while limited in their original scope, do break new ground and provide new data and analysis on the impact of revenue sharing. These volumes have begun the lengthy process of testing the decentralization thesis and the appropriateness of increased local autonomy. While these works have developed a lot of important analysis, the work in this field has just begun. Nevertheless, these studies are important for the libraries of researchers and practitioners alike.

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PETER R. STOPHER and ARMIN H. MEYBURG (eds.): Behavioral Travel-Demand Models, Lexington, Mass.: Lexington Books, 1976, xix, 336 pp.

Behavioral travel-demand models differ from other mathematical models of transportation and urban planning principally by their utilization of individual travelers as units of analysis. These models predict the probability that an individual will behave in a specified manner given a detailed description of this person's options, resources and socioeconomic and personal characteristics. Although many theoretical problems need to be resolved, behavioral models are becoming more widely accepted in recent years. They may soon show promise in a variety of other fields, particularly regional science and micro-economics.

The current volume consists of proceedings from the Second International Conference on Behavioral Demand held in Asheville, North Carolina, during May, 1975. Papers presented at the conference were to serve as resources for discussion at eight workshops. Each workshop, concerning a separate issue in behavioral demand modeling, generated a position paper that is also included in the volume. Because the most salient results of this conference were clarifications of current research issues, it is important to note that the third conference in this series has already been held at Tanunda, South Australia, in April, 1977. Since many of the recommendations made at the second conference were modified at the third, the serious researcher would be well advised to obtain the proceedings from this latter meeting when available.

Unfortunately, the contents of Behavioral Travel-Demand Models may be of only fleeting significance. Little new research is presented and discussions of previous research are sketchy. New directions for behavioral demand modeling are presented for the most part without substantive development. And, as may be expected from such an assemblage of resource and workshop papers, the discussions are often repetitive.

Three resource papers offer particularly strong literature reviews. These are: (1) K. P. Burnett and D. C. L. Prestwood, "The Development of Disaggregate Trip Distribution Models," which explores extensions of behavioral models developed for travel-mode choice to destination choice; (2) J. L. Louviere, et al, "Travel Demand Segmentation: Some Theoretical Considerations Related to Behavioral Modeling," which discusses market-segmentation techniques in relation to travel demand forecasting; and (3) A. P. Talvitie, "Mathematical Theory of Travel Demand," which reviews several recent mathematical modeling approaches. Other resource papers deal with behavioral model applications, attitudes as predictors of behavior, life style and travel demand, value of time, and relationships between transportation supply and demand.

While Stopher and Meyburg's volume may be of use to those now planning research into behavioral demand models, few of the papers are directed toward the knowledgeable but casual reader. This orientation limits its utility as a text or comprehensive introduction to the field.

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PETER R. STOPHER and ARMIN H. MEYBURG: Transportation Systems Evaluation, Lexington, Mass.: D. C. Heath and Co., 1976, 178 pp.

In Transportation Systems Evaluation, Stopher and Meyburg explain and summarize various inputs and the ensuing mechanisms for evaluating transportation investments. The text presents two alternative, yet not mutually exclusive, approaches for evaluating transportation systems: (1) economic analysis; and (2) cost-effectiveness analysis. The advantages and disadvantages of these approaches are combined, explained, and illustrated under one cover, thus encompassing a variety of work. The "under one cover" descriptor signals the relevance of this textbook for use by beginning graduate students and as reference for practicing professionals. The word overview should be underscored since the material offered is fairly old hat except for Chapter 4 dealing with the value of time savings. Thus, new ideas for defining, measuring, and evaluating pertinent social and environmental issues are not to be found; only a conceptual discussion of their presence and how such issues might be fitted into a cost-effective framework. Inasmuch as the main objective of the authors was to bring this wealth of information within a single grasp, one should only expect new areas of exploration to be briefly discussed and left for the interested reader to investigate via adequate referencing. This was accomplished to a great extent.

More specifically, the book's first three chapters discuss the generalities of any evaluation, as well as set the evaluation process in a transportation framework. Chapter 4 focuses on defining and measuring the value of travel time savings. Chapter 5 presents various economic methods of evaluation, while Chapter 6 provides a background for the discussion of cost-effectiveness--in Chapter 7--by descriptively examining user and non-user costs and benefits, as well as legal, social and environmental issues. The final chapter, eight, provides a critical summary of both economic evaluation and cost-effectiveness and offers suggestions for future research. The tables and figures are understandable and helpful and the transportation investment example allows a useful empirical comparison of different economic evaluation procedures.

Given the review nature of the book one is tempted to only evaluate the text on the strength of its selected materials which are indeed strong. However, for the sake of completeness, the opportunities lost by not incorporating newly developed ideas into the discussion of several chapters should be pointed out. For example, in Chapter 2, the concept of perceived price of travel is introduced in association with the development of travel demand curve. In essence Stopher and Meyburg view the perceived price of travel as the cost a traveler recognizes for each specific trip (and formally defined) as only the out-of-pocket cost. Additional costs such as insurance, maintenance, etc. are not usually included for any specific trip; hence, they are not considered as perceived cost and thus do not effect the demand curve. This economic view of perceived costs can be contrasted, however, with a behavioral view which would define perceived costs as the relationship between the amount the traveler is paying for an actual trip (objective price) which may be only out-of-pocket costs and what the traveler thinks or perceives the price to be (subjective price). If any relationship other than a linear one exists between the objective and subjective variables, and the empirical evidence suggests this to be true (Burnette, 1976; Briggs, 1973), then the travel demand curve is conditioned by the objective-subjective relationship. A discussion of this issue could have greatly enhanced the otherwise well written Chapter 2.

Furthermore, in Chapter 4, the authors state that the reduction of user travel time is the most significant benefit of the majority of transportation improvements. Thus, accurate or true measures of the value of time are needed to correctly evaluate the transportation improvement. Sidestepping the methodological problem of measuring the value of time (which is adequately discussed in Chapter 4), an examination of the accounting procedures used in economic evaluation methods suggests that it is common to apply travel time savings per trip to the number of trips occurring after the improvement. However, additional trips should not be valued as high as those previously taken because the added trips (due to the transportation improvement) could have been taken (on the pre-improved system) by simply paying the price. This suggests that economic evaluation methods may be crediting excess benefits to projects which increase travel capacity if the same value of travel time savings is applied to pre-improvement trips as to the additional trips which occur when travel capacity is increased. A discussion of this issue could provide some interesting re-formulations of existing economic evaluation procedures.

In conclusion, Transportation System Evaluation provides a basic understanding of existing economic and non-economic evaluation procedures. Those with a limited background in this area should find the text valuable as both a didactic and reference source.

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