UC Berkeley

Fisher Center Working Papers

Title

"Local Public Finance" and "Housing Markets"

Permalink

https://escholarship.org/uc/item/0f55230f

Author

Quigley, John M.

Publication Date

1985-10-01

Peer reviewed



Institute of Business and Economic Research

University of California, Berkeley

CENTER FOR REAL ESTATE AND URBAN ECONOMICS WORKING PAPER SERIES

WORKING PAPER 85-102

REVIEW ESSAYS:

"LOCAL PUBLIC FINANCE"

AND

"Housing Markets"

BY

JOHN M. QUIGLEY

These papers are preliminary in nature: their purpose is to stimulate discussion and comment. Therefore, they are not to be cited or quoted in any publication without the express permission of the author.

CENTER FOR REAL ESTATE AND URBAN ECONOMICS UNIVERSITY OF CALIFORNIA, BERKELEY

The Center was established in 1950 to examine in depth a series of major changes and issues involving urban land and real estate markets. The Center is supported by both private contributions from industry sources and by appropriations allocated from the Real Estate Education and Research Fund of the State of California.

INSTITUTE OF BUSINESS AND ECONOMIC RESEARCH J. W. Garbarino, Director

The Institute of Business and Economic Research is a department of the University of California with offices on the Berkeley campus. It exists for the purpose of stimulating and facilitating research into problems of economics and of business with emphasis on problems of particular importance to California and the Pacific Coast, but not to the exclusion of problems of wider import.

"LOCAL PUBLIC FINANCE" and "HOUSING MARKETS"

Prepared for

The New Palgrave

October 1985

John M. Quigley

University of California Berkeley

ABSTRACT

"Local Public Finance" and "Housing Markets" are two review essays prepared for <u>The New Palgrave</u>, the encyclopedia of economic theory, economic biography, and the history of economic thought to be published by Macmillan in 1987. These essays review selected aspects of the theories of housing markets and local public finance and are not intended to be themselves encyclopedic.

LOCAL PUBLIC FINANCE

John M. Quigley

University of California Berkeley

Economic analysis of the taxation and expenditure policies of local public authorities has become far more sophisticated, as theoretical inquiry has directed attention towards the uniquely local aspects of public finance and as national policies have increased the importance of the local public sector.

Many of the issues which arise in the analysis of the local public sector are familiar reflections of the important questions in public finance which have been addressed at the national level, for example: the incidence of taxation and the welfare losses from revenue instruments; the effect of government expenditures on consumer welfare and the distribution of well being; the effect of public sector distortions on resource allocation and relative prices.

However, the principal difference between the economic analysis of public finance at the national and at the local levels is the potential for mobility among jurisdictions by the transport of final products and inputs, and especially by the residents who finance local government and consume public output. Critically, this mobility may be endogeneous to the revenue or expenditure actions taken by the local public authority, and this must be considered in any economic analysis of local finance.

This insight, as it affects efficiency in the allocation of local public output and the incidence of local taxes, goes back at least to Marshall (1930, Appendix G) who presented a lucid discussion of the effect of local public ex-

penditures on residential mobility ("A high rate spent on providing good primary and secondary schools may attract artisan residents while repelling the well-to-do," pp. 794). He also noted the effects of mobility upon the incidence of local taxes.

Given the increased complexity of decentralized taxation and expenditure patterns when compared to national government policies, one may begin by asking whether the economic functions of government ought to be undertaken by the central (national) government rather than by local authorities. Consider the original Musgrave (1959) taxonomy of public sector functions: stabilization, and allocation. It seems clear that a system of local taxes and expenditures is inappropriate for achieving distributional or stabilization goals. After the adoption of any system of taxation and redistribution by a locality, even one which reflects a unanimous view of the citizens, it will be in the interests of those bearing the burden of the tax to relocate in other jurisdictions and in the interests of potential beneficiaries of the redistribution to move into the jurisdiction. Similarly, locally adopted monetary and fiscal policies are unlikely to further stabilization objectives, even if such objectives are uniformly held by local citizens. Important leakages are so large that the local benefits of stabilization policies, for example local public employment programs, are almost certain to be less than their costs.

It is precisely the mobility of households, goods, and factors across jurisdiction that defeats local stabilization and redistribution policies. Conversely, however, the same "openness" of the local economy means that the decentralized local provision of public goods will in many cases improve the allocative efficiency of the economy. In particular, the smaller and more homogeneous is each community in a system of local government, the more likely

it is that the provision of public goods by any community will be consistent with the demands of its citizens. In the limit, of course, if public goods are financed by a head tax and if there are neither economies of scale in production nor externalities in consumption, then provision by a system of small jurisdictions, each with citizens of homogenous tastes and incomes, will result in an efficient allocation.

If, however, there are economies of scale in production, it makes sense to have larger jurisdictions. But when the public good is produced by a larger entity, "congestion" may result; that is, the quality of the good may decline as it is shared with more people. In larger jurisdictions, moreover, citizen demands may be more heterogeneous. The problem of balancing the benefits of cost sharing in production, on the one hand, with the sacrifice in well-being by compromising individual consumers' demands or by introducing "congestion" in public goods consumption, on the other hand, has been central to the normative analysis of the local provision of public goods.

Consider, for example, a "club" providing some collective benefit to identical individuals (Buchanan, 1965). Suppose an organization supplies some public output Q subject to congestion, or equivilantly, suppose it supplies a good whose standardized cost C(N) increases with population N. Individuals of income Y are assessed the average cost of service provision and allocate their remaining income to some numeraire good X. A community of identical individuals will choose public output to maximize utility, U(Q,X), subject to the individual budget constraint, Y = X + [C(N)/N]Q. This implies the familiar Samuelson (1954) condition:

1) $N[(\partial U/\partial Q) / (\partial U/\partial X)] = C(N)$

The level of public good provision is chosen by the club so that the *sum* of the individual marginal rates of substitution (MRS) between private and public goods equals the marginal rate of transformation (MRT) in production. Given this level of public output, from the budget constraint it also follows that choice of club size to maximize utility is:

2) C'(N) = C(N)/N

The optimum size of the club is the membership at which the average cost of public output is equal to the marginal cost of adding another member. From equations 1 and 2 it follows that for a pure public good, i.e. C'(N) = 0, the optimal size of the club is unbounded, while for a private good, where C(N) = N, the *individual* MRS is equal to the MRT and the size of the club is indeterminate.

Applied to local public finance, the model indicates that a system of communities, each with identical individuals and of that size which minimizes average cost, would be a stable and efficient mechanism for public service provision. Homogeneity of demands is necessary for efficiency even if the tax structure (or club dues) were of the Lindahl variety. Each group in a heterogeneous community would be better off by moving to a jurisdiction with identical tax shares.

The "club" model of the provision of local public goods is a special case of the so-called Tiebout (1956) model, probably the most influential idea in the modern analysis of local public finance. Tiebout's stylized and informal analysis assumes that residential mobility is costless, that local jurisdictions provide public goods at minimum average cost, and that local government

is financed by non-distortionary lump-sum taxes. Under these circumstances Tiebout argues that the provision of public goods by a system of competitive local governments may be no less efficient than the allocation of private goods by the market economy. The conclusion of this argument also depends crucially upon the availability to citizens of a sufficiently large number of jurisdictions offering differing packages of local public goods and upon the absence of interjurisdictional externalities, as well as more conventional assumptions about full information. In reality, in most metropolitan areas, local public output is supplied by a small number of communities (small, at least, relative to the number of types of demanders); local mobility is quite costly and is motivated by many non-fiscal concerns. Individuals often live in one jurisdiction and work in another, and there are externalities among jurisdictions. Finally, revenues are raised, not by head taxes, but by a variety of local taxes, especially ad valorem taxes on real property. Each of these factors limits the economic efficiency of the local public sector in important ways.

The externalities or "spillouts" of the benefits of public service provision mean that such goods will be underprovided without coordination by local communities—since each community will only consider the benefits accruing to its own citizens in choosing the level of service provision. For public goods and services with substantial spillouts of benefits, efficient levels of production can be stimulated by a system of open—ended matching grants to localities by the central government. As Pigou (1932) originally demonstrated, if the matching rate (the fraction of local spending reimbursed by higher government) corresponds to the fraction of local public output which spills out to non-residents, then the externality will be internalized. It is, of course, rather difficult to implement this maxim of local public finance (Oates, 1972).

The heavy reliance upon local property taxes for financing the local public sector, especially in Britain, Canada, and the United States, is another source of allocative inefficiency in local finance. Clearly, a property tax alters the housing consumption decision and leads to underconsumption of housing as well as to inefficiency in public goods consumption. Until rather recently the system of local property taxes was viewed as a system of excises (Netzer, 1966), regressive levies on property and housing consumption, in contrast to the original Henry George (1879) position on land taxes. More recent theoretical analyses (e.g., Mieszkowski, 1972), which assume that capital is mobile across jurisdictions and that the supply of capital is insensitive to its rate of return, have led to a reconsideration of the regressive nature of the tax. inelastic supply of aggregate capital means that a national system of local property taxes will reduce returns to capitalists by the average level of the tax. The geographical mobility of capital implies that capital will flee from high tax jurisdictions, raising marginal productivity and pre-tax returns, to low tax jurisdictions, depressing pre-tax returns. Thus, the incidence of the system of property taxes depends upon the magnitude of the average level of the tax, relative to the deviations from that average, as well as the distribution of households among high tax and low tax jurisdictions. Despite the ambiguities in resolving these detailed empirical issues, this theoretical argument suggests that the burden of property taxation is heavily skewed towards the owners Empirically, this conclusion is probably modified by regressive appraisal and administrative procedures. It should be noted, moreover, that from local governments' perspective an increase in the level of the property tax to finance service provision is an excise on property users (since a change in any one community's property tax rate can have only a minute effect on the average level of rates for the nation).

The distortion inherent in property tax financing may lead to local policies of exclusionary zoning. If, for example, the benefits of the local public sector were roughly equal per household, then it would be in the interests of current residents to force incoming households to consume more housing than the average household. Current residents may attempt to enforce this by imposing minimum lot size restrictions or by other exclusionary practices to increase the housing consumption of newcomers. Of course, as noted before, unless there are sufficient communities so that the households residing within a jurisdiction are literally identical, those who chose to consume less housing will typically enjoy a fiscal residual.

Despite these clear examples of allocative inefficiency in the system of local public finance and service provision, there is a substantial body of evidence that variations in property tax rates are reflected in property values and that variations in public services, e.g. school quality, are capitalized into the sale prices of residential property. These findings are certainly consistent with the process of "voting with one's feet" implied by the Tiebout model, but the capitalization of taxes and services is not necessary to efficiency in local government, nor does efficient service provision necessarily imply capitalization.

The observation that individuals register their demands for publically financed services in their choices of community has other important implications, however. Specifically, information about the public goods provided by different jurisdictions, together with information about the characteristics of the residents of those jurisdictions may be sufficient to identify consumer demands for public services. Extensive analyses of these issues have been undertaken, combining economic theories of the local political process with aggregate data

on local public finance and choice of output. Under rather restrictive assumptions, the political process which determines the level of service provision can be modelled as the choice of the median voter of the community. Given the characteristics of that individual (or rather, estimates obtained from aggregate information), the "tax price" that individual confronts, and the level of public output chosen, the parameters of the demand curve are estimated econometrically. The "tax price" is the marginal cost to the individual of purchasing an additional dollar of public output. With property tax financing, this is typically approximated by the median voter's house value as a fraction of the community's taxable real property per household.

The results of these empirical investigations have proven useful in the positive analysis of citizen demands for public services and in the analysis of local finance. Nevertheless, the underlying economic model of local government behavior is open to questions, both technical (e.g., the requirement that preferences exhibit single peakedness) and substantive (e.g., the neglect of the role of bureaucracy in government decisions). For example, if the median voter determines the demand for local public output, then the propensity for a community to spend out of lump-sum aid from higher government ought to be no different from the propensity to spend out of income generated by local taxa-Yet empirical evidence suggests that the propensity of communities to spend out of untied grant income greatly exceeds the propensity to spend out of ordinary income. A variety of alternative models of local finance have been espoused to help explain this "flypaper" effect ("money sticks where it lands") in the context of bureaucratic decision-making. Chief among them are the socalled Leviathan models of a government that exploits its citizens by maximizing revenues extracted by taxation (Brennan and Buchanan, 1980). Clearly, however,

more theoretical work needs to be done to resolve the contradictions between mobile consumers of local public output and sluggish suppliers.

Finally, it has been suggested that the inherent nature of local output and the traditional financing mechanisms of local government combine to exacerbate the economic and administrative problems of the local public sector (Baumol, 1967). Local output consists largely of labor-intensive services, where technical change is inherently slow, and is typically financed by income-inelastic tax instruments. Under reasonable demand conditions, these may produce a more or less continuous "crisis" in local public finance, as service costs escalate more rapidly then revenue increments. Given these characteristics of the local financing mechanism, as well as the redistributive nature of many local services, there may thus be a strong case for revenue or tax-base sharing at the national level.

Recent General References

Quigley, John M. (1979) "What Have We Learned About Housing Markets," in Peter Meiszkowski and Mahlon Straszheim, eds., *Current Issues in Urban Economics*, Baltimore, John Hopkins.

Rosen, Harvey S. (1985) "Housing Subsidies: Effects on Housing Decisions, Efficiency, and Equity," in Alan J. Auerbach and Martin Feldstein, eds., *Handbook of Public Economics*, Volume I, Amsterdam, North Holland.

Other References

Becker, Gary S. (1957) The Economics of Discrimination, Chicago, University of Chicago Press.

Burgess, Ernest W. (1925) "The Growth of the City," in Robert E. Park, Ernest W. Burgess, and Roderick D. McKenzie, eds., *The City*, Chicago, University of Chicago Press.

Friedman, Milton (1957) A Theory of the Consumption Function, Princeton, Princeton University Press.

Grigsby, William (1963) Housing Markets and Public Policy, Philadelphia, University of Pennsylvania Press.

Jorgenson, Dale W. (1971) "Econometric Studies of Investment Behavior: A Survey," Journal of Economic Literature IX December, pp. 1111-1147.

Kain, John F. and John M. Quigley (1975) Housing Markets and Racial Discrimination: A Microeconomic Analysis, New York, Columbia University Press.

Kuznets, Simon (1952) "Long Term Changes in National Income of the United States Since 1870," in Simon Kuznets, ed., *Income and Wealth*, Series II, London, Cambridge University Press.

Marshall, Alfred (1890) Principles of Economics: An Introductory Volume, London, Macmillan.

Muth, Richard F. (1969) Cities and Housing, Chicago, University of Chicago Press.

Schelling, Thomas (1978) *Micromotives and Macrobehavior*, New York, W.W. Norton.

von Thunen, Johann Heinrich (1826) Der Isolierte Staat in Benziehung auf Landwirtschaft und Nationalokonomie [The Isolated State in Relation to Agriculture and Economics], Hamburg.

CENTER FOR REAL ESTATE AND URBAN ECONOMICS WORKING PAPER SERIES PUBLICATION LIST

Institute of Business and Economic Research 156 Barrows Hall, University of California Berkeley, California 94720

The following working papers in this series are available at the charges indicated plus applicable tax, which partially covers the cost of reproduction and postage. Papers may be ordered from the address listed above. Checks should be made payable to the Regents of the University of California. Prices subject to change without notice.

-----Working Papers-----Kenneth T. Rosen and David E. Bloom. "A Micro-Economic Model 79-1 of Federal Home Loan Mortgage Corporation Activity." 5.00 April 1979. Kenneth T. Rosen and Mitchel Resnick. "The Size Distribution 80-2 of Cities: An Examination of the Pareto Law and Primacy." 5.00 July 1979. Jennifer R. Wolch. "Residential Location of the Service-80-3 5.00 Dependent Poor." August 1979. Stuart Gabriel, Lawrence Katz, and Jennifer Wolch. "Local 80-4 Land-Use Regulation and Proposition 13: Some Findings 5.00 from a Recent Survey." November 1979. "Hedonic Prices and Price Indexes in David Dale-Johnson. 80-5 Housing Markets: The Existing Empirical Evidence and Pro-5.00 posed Extensions." December 1979. Susan Giles Levy. "Consumer Response to High Housing 80-6 Prices: The Case of Palo Alto, California." January 5.00 1980. Dwight Jaffee and Kenneth Rosen. "The Changing Liability 80-7 Structure of Savings and Loan Associations." February 5.00 1980. Dwight Jaffee and Kenneth Rosen. "The Use of Mortgage 80-8 Passthrough Securities." March 1980. 5.00 Stuart Gabriel. "Local Government Land Use: Allocation 80-9 in the Wake of a Property Tax Limitation." May 1980. 5.00 Kenneth Rosen. "The Affordability of Housing in 1980 and 80-10 5.00 Beyond." June 1980.

80-11	Kenneth Rosen. "The Impact of Proposition 13 on House Prices in Northern California: An Initial Test of the Interjurisdictional Capitalization Hypothesis." May 1980.	5.00
80-12	Kenneth Rosen. "The Federal National Mortgage Association, Residential Construction, and Mortgage Lending." August 1980.	5.00
80-13	Lawrence Katz and Kenneth Rosen. "The Effects of Land- Use Controls on Housing Prices." August 1980.	5.00
80-14	Kenneth Rosen. "The Demand for Housing Units in the 1980s." September 1980.	5.00
80-15	Konrad Stahl. "A Note on the Microeconomics of Migration." October 1980.	5.00
80-16	John T. Rowntree and Earl R. Rolph. "Efficient Community Management." August 1980.	5.00
80-17	John M. Quigley. "Nonlinear Budget Constraints and Consumer Demand: An Application to Public Programs for Residential Housing." September 1980.	5.00
80-18	Stuart A. Gabriel and Jennifer R. Wolch. "Local Land-Use Regulation and Urban Housing Values." November 1980.	5.00
80-19	F. E. Balderston. "The Structural Option for the Savings and Loan Industry." November 1980.	5.00
80-20	Kristin Nelson. "San Francisco Office Space Inventory." November 1980.	5.00
80-21	Konrad Stahl. "Oligopolistic Location Under Imperfect Consumer Information." December 1980.	5.00
80-22	Konrad Stahl. "Externalities and Housing Unit Mainte- nance." December 1980.	5.00
81-23	Dwight M. Jaffee and Kenneth T. Rosen. "The Demand for Housing and Mortgage Credit: The Mortgage Credit Gap Problem." March 1981.	5.00
81-24	David E. Dowall and John Landis. "Land-Use Controls and Housing Costs: An Examination of San Francisco Bay Area Communities." March 1981.	5.00
81-25	Jean C. Hurley and Constance B. Moore. "A Study of Rate of Return on Mortgage Passthrough Securities." March 1981.	5. 00

81-26	Kenneth T. Rosen. "The Role of Pension Funds in Housing Finance." April 1981.	5.00
81-27	John M. Quigley. "Residential Construction and Public Policy: A Progress Report." April 1981.	5.00
81-28	Kenneth T. Rosen. "The Role of the Federal and 'Quasi-Federal' Agencies in the Restructured Housing Finance System." June 1981.	5.00
81-29	Diane Dehaan Haber and Joy Hashiba Sekimura. "Innovations in Residential Financing: An Analysis of the Shared Appreciation Mortgage and a Comparison of Existing Alternative Mortgage Instruments." June 1981.	5.00
81-30	Diane Dehaan Haber and Joy Hashiba Sekimura. "Alternative MortgagesConsumer Information Pamphlet." June 1981.	5.00
81-31	Jean C. Hurley. "A Model for Pricing Passthrough Securities Backed by Alternative Mortgage Instruments." June 1981.	5.00
81-32	Kenneth T. Rosen. "The Affordability of Housing in Califor- nia." September 1981.	5.00
81-33	Kenneth T. Rosen and Lawrence Katz. "Money Market Mutual Funds: An Experiment in Ad Hoc Deregulation." September 1981.	5.00
81-34	Kenneth T. Rosen. "New Mortgage Instruments: A Solution to the Borrower's and Lender's Problem." September 1981.	5.00
81-35	Konrad Stahl. "Toward a Rehabilitation of Industrial, and Retail Location Theory." October 1981.	5.00
81-36	Fred Balderston. "S & L Mortgage Portfolios: Estimating the Discount from Book Value." October 1981.	5.00
81-37	Kenneth T. Rosen. "A Comparison of European Housing Finance Systems." October 1981.	5.00
81-38	Fred Balderston. "Regression Tests of the Relationship Between Book Net Worth and Revised Net Worth of S&L's." October 1981.	5.00
81-39	Lawrence Smith. "Rent Controls in Ontario: Roofs or Ceilings?" November 1981.	5.00
81-40	Alan Cerf. "Investment in Commercial Real Estate Including Rehabilitation: Impact of the Tax Recovery Act of 1981." November 1981.	5.00

	81-41	Frederick E. Balderston. "The Savings and Loan Mortgage Portfolio Discount and the Effective Maturity on Mortgage Loans." December 1981.	5.00
~ 	82-42	John M. Quigley. "Estimates of a More General Model of Consumer Choice in the Housing Market." January 1982.	5.00
	82-43	Martin Gellen. "A House in Every Garage: The Economics of Secondary Units." March 1982.	5.00
	82-44	John D. Landis. "California Housing Profiles: 1980." March 1982.	5.00
	82-45	Paul F. Wendt. "Perspectives on Real Estate Investment." February 1982.	5.00
	82-46	Kenneth T. Rosen and Lawrence B. Smith. "The 'Used House Market.'" May 1982.	5.00
·	82-47	Kenneth T. Rosen. "Deposit Deregulation and Risk Management in an Era of Transition." May 1982.	5.00
	82-48	Steven W. Kohlhagen. "The Benefits of Offshore Borrowings for the S&L Industry." May 1982.	5.00
	82-49	Lawrence B. Smith. "The Crisis in Rental Housing: A Canadian Perspective." June 1982.	5.00
	82-50	Anil Markandya. "Headship Rates and the Household Formation Process in Great Britain." June 1982.	5.00
	82-51	Anil Markandya. "Rents, Prices, and Expectations in the Land Market." June 1982.	5.00
	82-52	Kenneth T. Rosen. "Creative Financing and House Prices: A Study of Capitalization Effects." August 1982.	5.00
	82-53	Kenneth T. Rosen and Lawrence B. Smith. "The Price Adjust ment Process for Rental Housing and the Natural Vacancy Rate." September 1982.	5.00
	82-54	Frederick E. Balderston. "Analysis of the Viability of S&L Firms." September 1982.	5.00
	82-55	Lawrence B. Smith, Kenneth T. Rosen, Anil Markandya, and Pierre-Antoine Ullmo. "The Demand for Housing, Household Headship Rates, and Household Formation: An International Analysis." October 1982.	5.00
	82-56	Sherman Maisel and Kenneth T. Rosen. "The Macroeconomics of Money Market Mutual Funds." December 1982.	5.00

82-57	Frederick E. Balderston. "Time-Path Viability of S&L FirmsPart One: Firms Characterized by Accounting Data Only, With and Without Savings Growth." December 1982.	5.00
83-58	Alan R. Cerf. "Homeownership: Tax Incentives and National Policy." March 1983.	5.00
83-59	Hilary R. Sheehan. "Intermetropolitan Trends in Adminis- trative Employment." May 1983.	5.00
83-60	Harvey S. Rosen, Kenneth T. Rosen, and Douglas Holtz-Eakin. "Housing Tenure, Uncertainty and Taxation." April 1983.	5.00
83-61	Kenneth T. Rosen and Lawrence B. Smith. "Recent Develop-ments in the Economics of Housing." June 1983.	5.00
83-62	Ronnie Starbow. "Survey on the Use of Alternative Mortgage Instruments." June 1983.	5.00
83-63	Fung-Shine Pan. "On the Ginnie Mae: A Survey." June 1983.	5.00
83-64	Stuart Gabriel and Ilan Maoz. "Cyclical Fluctuations in the Israel Housing Market." June 1983	5.00
83-65	Dan Durning and John M. Quigley. "On the Distributional Implications of Mortgage Revenue Bonds and Creative Finance." October 1983.	5.00
83-66	Marian F. Wolfe. "Investment Performance of Existing Rental Housing in Selected San Francisco Bay Area Communities." October 1983.	5.00
83-67	Marian F. Wolfe. "Economic Behavior and Attitudes of Rental Property Owners." October 1983.	5.00
83-68	Alan R. Cerf. "Ownership or Rental Revisited: 1983." October 1983.	5.00
83-69	Frederick E. Balderston. "Time-Path Viability of S&L Firms Part II: Firms Characterized by Accounting Data and by Indi-	
	vidual Portfolio Composition, With and Without Savings Growth." October 1983.	5.00
83-70	Frederick E. Balderston. "An Analysis of S&L Mergers, 1980-1982." November 1983.	5.00
83-71	Frederick E. Balderston. "New Entry Into the S&L Industry, 1980-82 and Beyond." November 1983.	5.00
83-72	Pierre Antoine Ullmo. "The Demand for Housing, Household Headship Rates, and Household Formation in France." December 1983.	5.00

84-73	Jonathan S. Leonard. "The Interaction of Residential Segregation and Employment Discrimination." January 1984.	5.00
84-74	Sherman Maisel. "The Secondary Mortgage Market and Proper Risk Sharing." January 1984.	5.00
84-75	Cynthia Kroll. "Employment Growth and Office Space Along the 680 Corridor: Booming Supply and Potential demand in a Suburban Area." February 1984.	10.00
84-76	Peter Berck and Kenneth T. Rosen. "Hedging with a Housing Start Futures Contract." March 1984.	5.00
84-77	John M. Quigley. "Residential Energy Standards and the Housing Market: A Regional Analysis." February 1984.	5.00
84-78	John M. Quigley. "Consumer Choice of Dwelling, Neighborhood and Public Services." April 1984.	5.00
84-79	John M. Quigley. "Citizen Turnout and Self-Interested Voting: Inferring Preferences from Secret Ballots." April 1984.	5.00
84-80	Charles Marston and Michael Wiseman. "Financing Local Government in San Francisco." April 1984.	5.00
84-81	Kenneth T. Rosen. "Toward a Model of the Office Building Sector." April 1984.	5.00
84-82	Daniel Kaufmann and John M. Quigley. "The Consumption Benefits of Investment in Urban Infrastructure: The Evaluation of Sites and Services Programs in Underdeveloped Countries." April 1984.	5.00
84-83	Lawrence Katz and Kenneth T. Rosen. "The Interjurisdictional Effects of Land-Use Controls on Housing Prices." July 1984.	5.00
84-84	Konrad Stahl and Raymond Struyk. "U.S. and German Housing Markets and Policies: A Comparative Economics Analysis." October 1984.	5.00
84-85	Alan R. Cerf. "Tax Shields for Low Income Housing and Alternative Real Estate Investments Compared: Before E.R.T.A. and After D.R.A." October 1984.	5.00
84-86	John Quigley. "The Evaluation of Complex Urban Policies: Simulating the Willingness to Pay for the Benefits of Subsidy Programs. October 1984.	5.00
84-87	Robert Wiberg. "The Demise of the REIT's and the Future of Syndications." May 1984.	5.00

84-88	James B. Kau and Donald Keenan. "Taxes, Points and Rational- ity in the Mortgage Market." May 1984.	5.00
84-89	James F. Epperson, James B. Kau, Donald C. Keenan, and Walter J. Muller, III. "Pricing Default Risk in Mortgages." October 1984.	5.00
84-90	James B. Kau and G. Stacy Sirmans. "Interest Rates, Inflation, and Specification Bias in Housing Models." October 1984.	5.00
84-91	Carolyn Sherwood-Call. "Theoretical Evidence on the Economic Effects of San Francisco's Payroll Tax." October 1984.	5.00
85-92	Jerome Rothenberg. "New Construction vs. Rehabilitation: The Tradeoff in Meeting America's Housing Needs." April 1985.	5.00
85-93	Roger Craine. "Maturity Intermediation and Interest Rate Risk: Hedging Strategies for S&Ls." March 1985.	5.00
85-94	Kenneth T. Rosen and Ruth Shragowitz. "The Proposed Growth Limit on Commercial Construction for San Francisco." May 1985.	5.00
85-95	Cynthia Kroll and Eileen Marrinan. "California Retail Sales: Growth Patterns and Locational Tendencies." May 1985.	5.00
85-96	Cynthia Kroll and Eileen Marrinan. "Siting Retail Space in the 1980s: A California Perspective." May 1985.	5.00
85-97	Joe Peek and James A. Wilcox. "The Reaction of Reduced-Form Coefficients to Regime Changes: The Case of Interest Rates."	5.00
85-98	Cynthia Kroll. "California Office Space: The 1984 Record and the 1985 Outlook."	5.00
85-99	Yoon Dokko and Robert Edelstein. "Uncertain Inflation, Real Risk and Stock Prices: A Note."	5.00
85-100	Sherman J. Maisel and John M. Quigley. "Tax Reform and Real Estate."	5.00
85-101	Andrea Lepcio and Kenneth T. Rosen. "The Impact of Treasury II on the Cost of Rental Housing." August 1985.	5.00
85-102	John M. Quigley. Review Essays: "Local Public Finance" and "Housing Markets." October 1985.	5.00