



University of Pennsylvania
ScholarlyCommons

Penn IUR Publications

Penn Institute for Urban Research

October 1989

Measuring Real Estate Returns When the City Acts as an Investor: Boston and Faneuil Hall Marketplace

Lynne B. Sagalyn

University of Pennsylvania, lsagalyn@pobox.upenn.edu

Follow this and additional works at: http://repository.upenn.edu/penniur_papers

Sagalyn, Lynne B., "Measuring Real Estate Returns When the City Acts as an Investor: Boston and Faneuil Hall Marketplace" (1989). *Penn IUR Publications*. 18.

http://repository.upenn.edu/penniur_papers/18

Reprinted with permission from *Real Estate Issues*, Volume 14, Issue 2, Fall/Winter 1989, pages 7-15, published by The Counselors of Real Estate. CRE is a nonprofit professional organization for leading real estate advisors around the world. Visit www.cre.org for more information.

NOTE: At the time of publication, author Lynne B. Sagalyn was affiliated with the Massachusetts Institute of Technology. Currently February 2007, she is a faculty member in the Wharton School of Business and the School of Design at the University of Pennsylvania.

This paper is posted at ScholarlyCommons. http://repository.upenn.edu/penniur_papers/18

For more information, please contact libraryrepository@pobox.upenn.edu.

Measuring Real Estate Returns When the City Acts as an Investor: Boston and Faneuil Hall Marketplace

Abstract

The financial payback to the City of Boston from the development of Faneuil Hall Marketplace provides a starting point for analyzing the benefits of public-private downtown project development deals.

Comments

Reprinted with permission from *Real Estate Issues*, Volume 14, Issue 2, Fall/Winter 1989, pages 7-15, published by The Counselors of Real Estate. CRE is a nonprofit professional organization for leading real estate advisors around the world. Visit www.cre.org for more information.

NOTE: At the time of publication, author Lynne B. Sagalyn was affiliated with the Massachusetts Institute of Technology. Currently February 2007, she is a faculty member in the Wharton School of Business and the School of Design at the University of Pennsylvania.

REAL ESTATE ISSUES

Volume 14
Number 2
Fall/Winter 1989

Real Estate in the 21st Century: A Delphi Perspective

Charles J. Delaney
& Maury Seldin, CRE

Measuring Financial Returns When the City Acts As an Investor:
Boston and Faneuil Hall Marketplace

Lynne B. Sagalyn, CRE

Class A Urban Village Cores from Scratch:
The Growing Trend

Christopher B. Leinberger

The Use of Computerized Property Tax Data for Urban and
Regional Analysis

David C. Prospero

Real Estate Taxes: Fixed or Variable

Norman J. Quinn, III

Common Law and the Evolving Broker's Liability to the Buyer

Robert J. Shedlarz
& James R. Webb

The Potential Market for Housing Among Older Americans

Karen Martin Gibler

Property Rights and the Tragedy of the Commons in
the National Park System

Austin J. Jaffe
& Michael Janov

Counselors: Professionally Motivated Business People

John Robert White, CRE

The Friendly Enemies

Henry Hart Rice, CRE



Published by the American Society of Real Estate Counselors
of the NATIONAL ASSOCIATION OF REALTORS®

LYNNE B. SAGALYN, CRE, RECEIVES 1989 BALLARD AWARD



Lynne B. Sagalyn, CRE

How Boston's risk taking venture with a private developer became a financial success summarizes the 1989 William S. Ballard Award article by Lynne B. Sagalyn, CRE, "Measuring Financial Returns When the City Acts As an Investor: Boston and Faneuil Hall Marketplace". This award, presented annually, is given to the author whose work exemplifies the journal's high standards of content.

In this Fall/Winter 1989 edition of *Real Estate Issues*, Sagalyn presents the terms of the city of Boston's deal with The Rouse Company, a private developer, and an analysis of the costs and lease-revenue flows considering the effects of time, inflation and trade-offs during renegotiation. In conclusion, Sagalyn cites the immediate financial success of Boston's risk taking with the Faneuil Hall Marketplace and the profitability realized from the spillover benefits on the property values of the surrounding area.

Sagalyn is an associate professor of Planning and Real Estate Development, Department of Urban Studies and Planning, at M.I.T., Cambridge, Massachusetts. She has been conducting research on

deal making in city development and the ways in which public agencies and private development firms plan and implement downtown complex developments.

She received a Ph.D. from M.I.T., an M.C.R.P. from Rutgers and a B.S., with distinction, from Cornell University. As a real estate counselor, Sagalyn has done extensive work on the performance of real estate investments as evidenced in her co-authorship of a book and subsequent speaking engagements on the topic of financial benefits from public-private partnerships.

The Ballard Award, with an honorarium of \$500, is funded by the generous contribution of the William S. Ballard Scholarship Fund in memory of Ballard, a late CRE.

All articles to be considered for next year's William S. Ballard Award competition must be submitted to the Society's Chicago office by August 1, 1990.

MEASURING FINANCIAL RETURNS WHEN THE CITY ACTS AS AN INVESTOR: BOSTON AND FANEUIL HALL MARKETPLACE

The financial payback to the City of Boston from the development of Faneuil Hall Marketplace provides a starting point for analyzing the benefits of public-private downtown project development deals.

by **Lynne B. Sagalyn, CRE**

In the 1970s, public finance took on new meaning for city officials intent on rebuilding their downtown areas. Pressed by ongoing cutbacks in federal aid and existing demands on municipal treasuries, cities as diverse as Baltimore, Boston, Cincinnati, Los Angeles, Milwaukee, Philadelphia, San Diego and St. Paul adopted businesslike practices. To attract the retail centers, hotels, sports stadiums and public amenities they wanted for downtown, city officials negotiated development agreements with private real estate firms, custom-tailoring financial assistance to match the specific needs of individual projects. To pay their share of the bill, cities leveraged public dollars, packaging diverse sources of money with ingenuity and resourcefulness. Increasingly, as part of their agreements with developers, cities also bargained for loan paybacks, lease participations and profit sharing. These financial interests were the symbols of a new practice: public-private deal making. By the mid-1980s, this practice was widespread in big and small cities alike.¹

Deal making marked a turning point in the way cities managed and financed downtown redevelopment.

Lynne B. Sagalyn, CRE, is an associate professor in the Department of Urban Studies and Planning at Massachusetts Institute of Technology, Cambridge, MA, and a core faculty member of MIT's masters degree program in Real Estate Development. A specialist in real estate finance, Sagalyn has been conducting research on deal making in city development and the ways in which public agencies and private development firms plan and develop downtown retail centers.

The author especially thanks Bernard J. Frieden, co-author of *Downtown, Inc.: How America Rebuilds Cities* (Cambridge, MA: MIT Press, 1989), the larger research effort from which this paper is derived. Appreciation also is extended to Lawrence E. Susskind, Lawrence S. Bacow, John McMahan, CRE, A. Jerry Keyser, an anonymous referee for comments on an earlier draft, and Denise DiPasquale for useful conversations on this topic. John Avault of the Boston Redevelopment Authority assisted with data collection. Financial support was provided by the MIT Center for Real Estate Development.

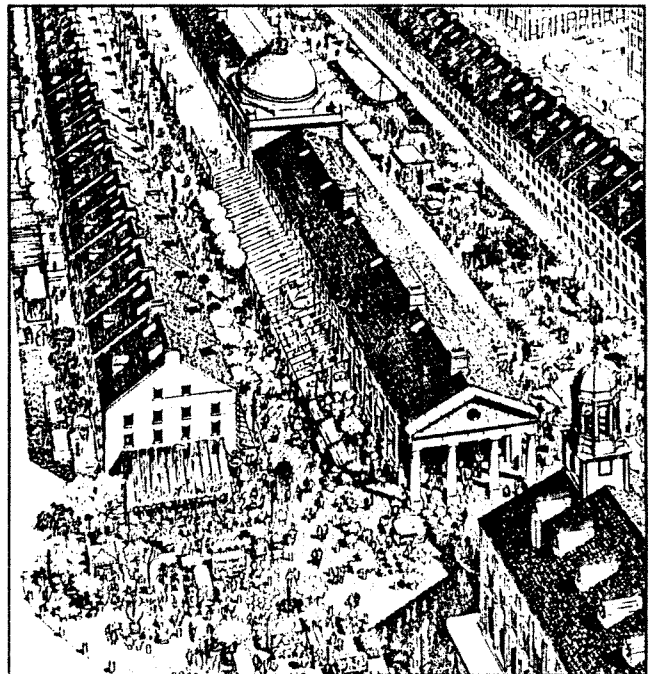


Photo credit: The Rouse Company

Under the federal urban renewal program, which for two decades had funded the rebuilding of downtown, cities worked with developers at arms-length as required by the program's guidelines. After the urban renewal program was shut down in 1974, cities dropped the cumbersome regulations and embraced a new strategy that brought them into face-to-face negotiations with developers.² As they charted their own course, cities became co-investors in private development projects. This new role gave cities a right to share in major decisions throughout the development process, not just during the early approvals stage. And the new financial agreements, unlike redevelopment's traditional fiscal dividend of rising property tax assessments, specified the rate and timing of the return on public investment.

As successful as the new public-private strategy has been in changing the course of downtown investment, neither government officials nor policy analysts have evaluated the actual financial returns that accompany public-private deals. First, the deals are complex; they involve many players, many sources of funds and layers of subsidies financed directly with budgeted funds and indirectly through off-budget expenditures. In addition, the terms of these business deals are not always covered in a single document or negotiated with a single agency. As a result, it is hard to unravel the complexity of the deals, and few people understand them.

Second, there is no clear technique for evaluating the deals. Prospective (pro forma) analysis of a project typically reveals how public assistance can close the gap between development costs and investment value to make a project financially feasible for a private developer, but it does not ensure that cities will design minimum aid packages. Most important, it is not a balance sheet for public accounting of public-private projects. For this, cost-benefit analysis is an appropriate conceptual framework,³ but it must be adapted so it may be used to evaluate the financial outcomes of negotiated development. In particular, it is crucial to analyze the trade-offs that are at the heart of public-private deal making as well as the ultimate financial payoff. In this way, government officials may learn what types of deals are most beneficial to cities.

Understanding how to price deals is important to a city's ability to manage its public resources, especially as the trend toward strategic management of publicly owned sites grows.⁴ Economic development strategies and land use policies rely heavily upon a growing inventory of financial incentives that make demands on local resources, and as the commitments accumulate, government officials and civic groups are calling for greater accountability.⁵ The payback revenue streams are important by themselves; in an era of sparse federal assistance, these revenue streams have significant political appeal and economic potential as a source of capital for future public investments.

Boston's Faneuil Hall Marketplace provides a good case for analysis. The negotiation process leading to the renovation of the three historic structures is well documented. The marketplace has a 14-year track record as one of the most successful downtown projects of its kind, and data on public costs and public revenues are available. Further, the city's agreement with the developer of the project, The Rouse Company, represents a prototype profit-sharing arrangement: in exchange for leasing the property and financing the heavy upfront costs of redevelopment, Boston receives in-lieu-of-tax payments tied to the annual financial performance of the project.⁶

The objective of this article is to analyze Boston's financial participation in a public-private development venture from an investment perspective. The analysis differs from traditional cost-benefit analysis of public projects, which factors in additional fiscal benefits from increasing property values in surrounding areas and employment

generation as well as other, more elusive public benefits. By focusing only on the project's direct financial payback, the article intends to clarify how the terms of the deal and their renegotiation shaped public financial returns. The first part of the article describes the city's deal with The Rouse Company. It is followed by an analysis of costs and lease-revenue flows. Next, the effects of inflation, time and the terms of the deal on investment returns are explained. Finally, the concluding section comments on the findings.

The Deal For Redeveloping The Faneuil Hall Markets

Attracting major new retail investment downtown was a formidable task in the early 1970s. With populations still growing and environmental regulations not yet restricting development, mall developers had numerous opportunities in the suburbs, and most were uninterested in tackling the thorny problems of building retail structures downtown. Construction was approximately 20% more costly on downtown's smaller and more congested sites. Large garages, needed to meet industry's standards for parking, were expensive because each downtown space cost about three times more than a developer typically spent to pave over suburban, open-field acreage. Department stores and national chain retailers, who insisted upon following the suburban mall formula, were skeptical of downtown locations, and lining up financing was close to impossible without these big name players. Given the times, cities that wanted a shopping center downtown had to put together big assistance packages to make development attractive.

Redeveloping Boston's Faneuil Hall markets presented additional, special circumstances. First, the city, through the Boston Redevelopment Authority (BRA), wanted to keep the historic buildings under public ownership and retain control over the project's design. Second, the city offered the deteriorated markets in "as-is" condition, and the high cost of interior rehabilitation in addition to the expense of the downtown land had to be borne. Third, a historic landmark preservation mandate imposed design constraints on any private developer's attempt to adapt the structures to the conventions of 20th Century retailing.

To meet its objectives and keep the economics of the deal manageable for a developer, the city decided to lease the buildings instead of following the typical urban renewal assistance formula and selling the site at a below-market price. Leasing offered the city an additional benefit: payments would not have to be returned to Washington as would proceeds from a sale disposition.

With the urban renewal formula out of the way, there was no obvious way to price the lease. First, the city wanted to secure guaranteed income from the property. In addition, officials no longer thought of themselves as donors who were making a grant to assist the development of a project in the public interest, but as co-investors in a potentially profitable venture. They consequently wanted a share of the Faneuil Hall markets' gross revenues. At the same time, officials recognized Rouse's interest in keeping development costs in line with the actual performance of

the project, which was hard to predict. For the city, the basic need was to make the project politically defensible; for the developer, the need was to ensure a strong bottom line. A workable deal had to take care of both of these considerations.

The negotiations over the Faneuil Hall markets' lease stretched out over 14 months. For both city and developer, projecting performance of the project was an exercise in uncertainty because suburban malls provided few reliable parallels to the innovative plan the developer and his architect had conceived for food merchandising and specialty retailing without department store anchors. Timing was a factor, too. By the early 1970s, Boston had added several new office buildings to its aged inventory, but its downtown area was still in the doldrums. As a result, lease negotiations took place in an atmosphere of economic stagnation and financial maneuvering as both sides worked to line up the necessary commitments.

Rouse and his negotiating team, represented by the project manager plus two attorneys, saw the Faneuil Hall markets as historic but worthless in economic terms. They bargained hard for economic concessions that would reduce their risk and enhance the ability to recoup their investment. They also pushed for total control over design and related matters, believing that the project would proceed more quickly if the entire job was placed in private sector hands. The city team was represented by the BRA's director, deputy director and two attorneys. Experienced in real estate matters, the BRA's deputy director looked critically at Rouse's numbers and, based on his own financial analysis, questioned the developer's demands. The city team did eventually give some on the economic terms of the deal because it wanted the developer to have sufficient incentive, but it did not compromise on design matters.

The city and Rouse finally settled on a 99-year lease and a two-tier formula in which rent took the form of annual payments in lieu of property taxes. Rouse agreed to pay the city 20% of gross rental income, *plus* 20% of revenues in excess of \$3 million. According to the agreement, the gross rental income included any tenant payments made to the developer for utilities, taxes and other passthrough expenses. To share the exceptionally high costs of maintenance and security downtown, however, the city allowed The Rouse Company to deduct 33.3% of the gross revenues from retail subtenants who were assumed to occupy 60% of the rentable space.⁷ Total payments in any one year were capped at 25% of this adjusted gross rental income. The deal had two politically desirable features: a guaranteed income from the property plus a chance to share in upside gains. At the same time, the deal limited Rouse's payments to the guaranteed minimum unless the project was a big success.

There were other parts to the tax agreement. For the first three years during construction, the guaranteed payment was abated. Originally, Rouse had agreed to a payment schedule of \$200,000, \$400,000 and \$600,000 corresponding to the successive completion of the three

market buildings. Within six months after the company had been selected to develop the markets, Rouse wanted to renegotiate the amount of these payments because restoration workers found the buildings in worse shape than anyone had realized. Water leakage over the years had rotted many of the old foundation beams, and Rouse estimated that their replacement would add \$1 million to construction costs. To compensate the company for this unanticipated burden, which the BRA could not afford to absorb under the terms of its federal renovation grant, and to avoid the problems of verifying costs, the city reduced Rouse's guaranteed payments over the three year phase-in period to \$50,000 per year, for a total abatement of \$1.05 million.

Analyzing Public Deal Making

Measuring the city's ex post financial return from the lease-tax agreement raises a number of conceptual issues and practical problems. They may be grouped in three categories: accounting for costs, adjusting for policy decisions and evaluating negotiated trades. Each entails a kind of probing atypical of traditional financial analysis. Yet to understand the financial dynamics of public-private deal making, a framework is needed to explain how the terms of an agreement contribute to performance outcomes.

Accounting For Development Deals

How much public money went into the project? Table 1 presents a static analysis of public development costs and net lease revenues.

Tracking project development costs is difficult because cities rarely attempt to document the full expenses of development, e.g., soft administrative costs as well as hard construction expenditures. Typically, cities do not spend money out of their own budgets but instead rely on federal grant dollars, tax-exempt revenue bonds and other off-budget financing techniques. In addition, costs often are spread across a number of different departments and agencies.

An accounting of the cash outlays for Faneuil Hall Marketplace reveals that over 14 years, Boston contributed \$12.4 million of public funds, or 28% of the total combined development cost. These dollars covered the cost of acquiring the two market buildings that were still in private hands, renovating the exteriors of all three buildings, relocating the remaining merchants, removing a poorly placed highway ramp, installing new utility lines and improving the streets and open spaces surrounding the market buildings. This figure also includes expenses for consultants and staff time associated with managing the project. Boston officials made financial commitments for these activities early, operating under the belief that the way to get a project done was to put together a complete package before searching for a developer. Thus, by the time The Rouse Company was designated as the developer of the project, nearly two-thirds of the funds had been committed.

TABLE 1

Static Analysis of Public Development Costs and Net Lease Revenues for Faneuil Hall Marketplace: 1962-1987

Public Cost Model *	Nominal Dollars (000)				Inflation-Adjusted 1962 Dollars (000)				Average Deflation Factor		
	Total Development Cost †	Net Lease Revenues ‡	Payback Status:		Total Development Cost	Net Lease Revenues	Payback Status:		Total Development Cost	Net Lease Revenues	
			1987	Year			1987	Year			
Base-Case Model:											
Static property tax assessment	\$14,333	\$15,450	1.08	1987	\$9,714	\$4,773	0.49	1995	0.68	0.31	
Perfect Foresight Model A: Property tax assessment adjustment for growth in downtown land values	\$15,541	\$11,723	0.75	1989	\$10,400	\$3,596	0.35	1999	0.67	0.31	
Perfect Foresight Model B: Property tax assessment adjustment for growth in downtown land values —minus 50% attributable to Faneuil Hall Marketplace's own effect	\$15,298	\$12,430	0.81	1989	\$10,259	\$3,818	0.37	1999	0.67	0.31	

* Public cost models differ with regard to the estimation of foregone property taxes.

† Total development cost = direct development costs (1962-1975) plus estimated foregone property taxes.

‡ Net lease revenues = in-lieu-of property tax lease payments minus estimated property taxes if the privately owned North and South Market buildings had remained unrenovated.

Implementation problems also affected the timing of cost/revenue flows. Even though it was pushed forward by the BRA director and a supportive mayor and city council, redevelopment of the markets took a long time. After Boston's downtown waterfront project was formally announced in 1960, more than four years passed as studies were conducted, plans were prepared and federal approvals for the urban renewal grant were secured. Six more years passed before the BRA completed site assembly and issued the request for development proposals. Then financing problems encountered by the first development team kept the project from moving ahead smoothly. After Rouse was selected as the second developer, negotiations over the tax-lease agreement and difficulties in lining up private financing consumed two more years. By the time The Rouse Company made its first full lease payment in 1979, 17 years had passed since the first public dollars had been committed.

Foregone property taxes on the unimproved buildings, vacant during the redevelopment process, were another cost. For nine years, beginning in 1970 after the last tenants had been relocated and ending in 1979 when The Rouse Company started making the full lease payments, the city did not collect taxes on the North and South buildings. Cumulatively, this added 16% to the public bill for the Marketplace.⁸

Adjusting For Policy Decisions

Between 1962 when planning for the Faneuil Hall markets started and 1979 when the renovations stopped, property values in downtown Boston increased at an average annual compound rate of growth of approximately 4%, after adjusting for inflation.⁹ A more exacting estimate of foregone property taxes would account for the opportunity costs associated with rising property values. On the other hand, it would also have to reflect restrictions or special conditions prescribed by the city as a matter of policy. In this case, the city was not prepared to let the land go for the highest and best use. The Faneuil Hall markets could not be razed and the site used for a new office tower or a hotel; the buildings had to be preserved, and they had to be renovated in accordance with strict design standards.

To account for these policy constraints, the improvements component of the assessed valuation of the site was fixed at the 1962 level, while the land component was adjusted annually based on estimates of changing land values in downtown Boston (Perfect Foresight Model A).¹⁰ As Table 1 indicates, this adjustment increased costs by 10% over the direct expenditure bill and brought the total public development cost up to \$15.5 million.

On the revenue side, the lease payments made by The Rouse Company represented the gross receipts collected by the city following renovation. (Sales tax receipts would be included, too, but the city of Boston does not have a sales tax, nor does it receive, by statute, a fixed proportion of state collections.) By the end of 1987, after nine years of full payments, receipts totaled \$17.9 million. After accounting for the property taxes the city would have

collected if the buildings had remained privately owned and unimproved, net lease revenues totaled \$15.5 million, under base-case model assumptions about property tax assessments.

Measuring Trades

Over the course of negotiations, the terms of a deal came to reflect several factors—different bargaining strengths among participants at the table and political considerations for the city at large and economic rationales for particular cost sharing arrangements. To understand the financial implications of negotiating development agreements, trade-offs made during negotiations must be quantified. This process involves tracking changes in the deal over the course of negotiations and measuring the impact of those changes on the ultimate financial return of the project.

For example, in negotiating the tax agreement with The Rouse Company, Boston officials made two key trades to enhance the feasibility of the project for the developer. Initially, city officials agreed to share the high costs of operating a downtown festival market in exchange for participation in the cash flow of the project. Later, they agreed to cover unanticipated renovation costs (by increasing the tax abatement) in exchange for greater participation in cash flow. In principle, the trades offered the city potentially higher revenues in the future in exchange for concessions today. In both instances, however, the trade was constrained by a cap on the developer's total payment to the city. How important was this cap? By breaking down the lease payment into its base and participation components and projecting returns for the deal as it changed over the course of negotiations, the marginal impact of these trade-offs may be analyzed.

The Return From Deal Making

One indicator of the project's performance was the steady increase in annual lease revenues collected by the city since Faneuil Hall Marketplace opened. Between 1979 and 1987, net lease revenues grew at an average annual compound rate of 10.9%, from nearly \$1.0 million to \$2.1 million. Measured as a single year return on total public development investment and adjusted for inflation, the real return for 1987 was 5.8%, up from 4.2% in 1979. The participation formula accounted for this level of performance, although it did not compensate for the 17 years during which the city was spending money but not getting returns.

To present a true picture of the financial performance from the public investment in Faneuil Hall, one that captures both the intervening inflation and the delayed returns, the yield and net present value are calculated using a discounted cash-flow model which applies a real interest rate to constant-dollar flows over a long-term holding period of 40 years.¹¹

Discounting lays bare the heavy impact of the delayed returns. Inflation-adjusted net lease revenues drop by more than 50%. Table 2 shows, as of 1987, the net present value of the base-case model (at 3%) is a negative \$4.6

TABLE 2
Inflation-Adjusted Costs, Net Lease Revenues and Returns: Faneuil Hall Marketplace
(Discounted, 1962-Dollars, 000)

Public Cost Model	Total Development Cost	Net Lease Revenues	Net Present Value	Net Present Value (with Residual)	40-Year Holding Period: 1962-2002	
					Internal Rate of Return	Internal Rate of Return (with Residual)
Base-Case Model:						
Static property tax assessment	\$7,070	\$2,476	(\$4,594)	(\$1,225)	2.54%	4.51%
Perfect Foresight Model A: Property tax assessment adjustment for growth in downtown land values	\$7,528	\$1,858	(\$5,670)	(\$2,301)	1.22%	3.62%
Perfect Foresight Model B: Property tax assessment adjustment for growth in downtown land values — minus 50% attributable to Faneuil Hall Marketplace's own effect	\$7,-32	\$1,974	(\$5,458)	(\$2,089)	1.48%	3.79%

million. If lease payments are projected to continue increasing at the 1982-1987 rate adjusted for expected inflation, the project breaks-even in 1999, 20 years after the city received its first full lease payment. After 40 years, the real-dollar yield, or internal rate of return, on the public investment in the marketplace is 2.5%.

Including an estimate for the residual value of the buildings at the end of the holding period nearly doubles the return to 4.5%. The substantial 200 basis point increase varies slightly with the assumption about cap rates but does not alter the conclusion that the city's direct return from the public investment in Faneuil Hall Marketplace is dependent upon long-term performance. Or, compare the investment yield to-date with and without the residual, -6.1% and 1.6% respectively.

Time had another hidden, if double-edged, impact. As the city worked its way through the redevelopment process, land values downtown were increasing gradually. Clearly, from the city's overall fiscal perspective this trend was important—it provided early evidence that the city's urban renewal efforts would produce a fiscal dividend. From the narrower perspective of project analysis, however, the process of putting the redevelopment package together was costly. Even small increases in land values downtown, compounding over many years, raised the foregone property tax bill and thereby reduced the net benefits from the markets' lease payments. After accounting for increased land values downtown, as shown in Table 2, the real-dollar yield of the project for the 40-year period drops to 1.2%; 3.6% with the residual value. To some unknown extent, the success of the marketplace itself contributed to this incremental land-value effect. (According to some participants in the Boston downtown market, the success of the marketplace raised surrounding property values by approximately 25%.¹²) If the land-value adjustment is cut back by 50% to account for the marketplace's own spillover impact (Perfect Foresight Model B), the real-dollar yield is 1.5%; 3.8% with the residual value. These are competitive returns for the city, even though they seem low in today's high rate environment.

When the tax-lease agreement was signed, city officials took comfort in their financial advisor's estimate that the project would generate annual revenues of \$1.5 million by the mid-1980s. This was almost seven times what the old dilapidated markets yielded before renovation. In addition, the city faced no additional public expense because, under the terms of the lease, The Rouse Company was responsible for maintaining the streets and providing security for the marketplace.

If the lease arrangement is considered a form of financing and the public financial return is compared with local government's cost of capital, the deal provides the city with an inflation-hedged investment. Assuming the city earned interest on dollars which were invested in high grade municipal bonds and following the same disbursement pattern for the marketplace, the return would have been -1.6% after accounting for inflation; 1.9%

A. First-Year Expected Revenue (000): 1979 (Nominal Dollars)			
	Designation Deal	Preliminary Deal	Final Deal
Base payments	\$1,375	\$1,001	\$1,001
Additional kicker	—	\$ 210	\$ 250
Total	\$1,375	\$1,211	\$1,251
B. 40-Year Holding Period Internal Rate of Return: 1962-2002 (No Residual)			
	Designation Deal	Preliminary Deal	Final Deal
Nominal dollars	9.10%	8.45%	8.46%
Inflation-adjusted dollars	3.10%	2.53%	2.54%
C. The Role of the Cap: 40-Year Internal Rate of Return (No Residual)			
	Final Deal with Cap	Final Deal without Cap	
Nominal dollars	8.46%	10.55%	
Inflation-adjusted dollars	2.54%	4.40%	

Notes:

For the preliminary deal, the additional kicker payment was 10% of gross revenues above \$3 million, 11% above \$4 million and 12% above \$5 million. Total payments were capped at 25% of gross revenue. For the final deal, the additional kicker payment was a flat 20% of gross revenues above \$3 million. Total payments were capped at 25% of gross revenues.

Gross revenues as defined by the BRA-Rouse Co. agreement equaled total revenues minus a 33 1/3% deduction from retail revenues for extraordinary operating expenses downtown.

Inflation-adjusted dollars = 1962 dollars

including the redemption value of the bonds at the end of 40 years.

If the lease arrangement is considered a form of property tax and is compared with the productivity of major new downtown Class-A office buildings, it again compares favorably. In general, the lease arrangement is in line with prevailing agreements for downtown buildings that peg property tax payments to 20% of gross income.¹³ On a parcel-to-parcel basis, first-year payments on the marketplace were between 1.4 and 1.7 times the property tax revenues generated by several nearby office towers that were completed during the same period.

Costly Compromises

The city's competitive rate of return is only one side of the story; the other involves a series of trade-offs. During the two year negotiation process, three successive deals were

TABLE 4

Financial Net Gains (Losses) from Renegotiating the Faneuil Hall Marketplace Agreement
(Nominal Dollars)

A. With Cap from Designation Deal to Preliminary Deal				A. With Cap from Preliminary Deal to Final Deal		
Year	Cost of 33 $\frac{1}{3}$ % Deduction	Benefit of Additional Payment	Net Gain (Loss)	Cost of Tax Abatement	Benefit of Additional % Payment	Net Gain (Loss)
1976				\$ 150.0		(\$ 150.0)
1977				\$ 350.0		(\$ 350.0)
1978				\$ 550.0		(\$ 550.0)
1979	\$ 373.9	\$ 210.5	(\$ 163.4)		\$39.7	\$ 39.7
1980	\$ 476.8	\$ 319.0	(\$ 157.8)		\$ 0.0	\$ 0.0
1981	\$ 461.5	\$ 308.8	(\$ 152.7)		\$ 0.0	\$ 0.0
1982	\$ 568.8	\$ 380.6	(\$ 188.2)		\$ 0.0	\$ 0.0
1983	\$ 616.0	\$ 412.2	(\$ 203.8)		\$ 0.0	\$ 0.0
1984	\$ 683.0	\$ 457.0	(\$ 226.0)		\$ 0.0	\$ 0.0
1985	\$ 733.1	\$ 490.5	(\$ 242.6)		\$ 0.0	\$ 0.0
1986	\$ 706.1	\$ 472.4	(\$ 233.6)		\$ 0.0	\$ 0.0
1987	\$ 736.8	\$ 493.0	(\$ 243.8)		\$ 0.0	\$ 0.0
Total	\$5,356.0	\$3,544.1	(\$1,811.9)	\$1,050.0	\$39.7	(\$1,010.3)

B. Without Cap from Designation Deal to Preliminary Deal				B. Without Cap from Preliminary Deal to Final Deal		
Year	Cost of 33 $\frac{1}{3}$ % Deduction	Benefit of Additional Payment	Net Gain (Loss)	Cost of Tax Abatement	Benefit of Additional % Payment	Net Gain (Loss)
1976				\$ 150.0		(\$ 150.0)
1977				\$ 350.0		(\$ 350.0)
1978				\$ 550.0		(\$ 550.0)
1979	\$ 373.9	\$ 210.5	(\$163.4)		\$ 190.3	\$ 190.3
1980	\$ 476.8	\$ 375.7	(\$101.1)		\$ 300.5	\$ 300.5
1981	\$ 461.5	\$ 351.1	(\$110.4)		\$ 284.1	\$ 284.1
1982	\$ 568.8	\$ 523.5	(\$ 45.4)		\$ 399.0	\$ 399.0
1983	\$ 616.0	\$ 599.3	(\$ 16.7)		\$ 449.5	\$ 449.5
1984	\$ 683.0	\$ 706.8	\$ 23.8		\$ 521.2	\$ 521.2
1985	\$ 733.1	\$ 787.2	\$ 54.1		\$ 574.8	\$ 574.8
1986	\$ 706.1	\$ 743.9	\$ 37.8		\$ 545.9	\$ 545.9
1987	\$ 736.8	\$ 793.2	\$ 56.4		\$ 578.8	\$ 578.8
Total	\$5,356.0	\$5,091.1	(\$264.9)	\$1,050.0	\$3,844.1	\$2,794.1

made: a set of terms that were agreed upon when Rouse was selected as developer, or the *designation deal*; an interim agreement that was reached after detailed negotiating sessions, or the *preliminary deal*; and a revised set of financial terms that was formalized in a three page letter of agreement, or the *final deal*. In negotiating each deal, city officials made concessions that help explain the project's competitive returns.

Table 3 shows the projections for lease payments under the successive deals. Under the preliminary deal (when city officials allowed the developer a deduction to compensate for extraordinary operating expenses), the projected first year base payment was 27% lower than what it would have been under the designation deal. Yet more than half of this lost revenue was recovered through the additional participation payment; so the net drop was

only 12%. In the second round of compromises, however, the participation or "kicker" failed to play the same role. In this instance, the city agreed to a \$1.05 million tax abatement as a way to finance unanticipated rehabilitation costs. But, as shown in Part B of Table 3, the increased kicker resulted in little marginal gain: the projected 40-year return for the final deal was the same as that expected under the terms of the preliminary deal.

In retrospect, the problem was that nobody knew just how successful the marketplace would be. When they negotiated for a share of project gross revenues, city officials also agreed to cap total payments. When they renegotiated the deal, giving three year's tax abatement in return for a higher degree of participation in the revenues, the cap limited the additional upside of the trade-off. A comparison of the different trade-offs in Table 4 shows that the cost of the obvious concession—the tax abatement—was relatively small because, in the absence of the cap, the trade was a potential winner. In hindsight, the cap was an error, as the results in Part C of Table 3 indicate. Over the 40-year investment period, the cap cost the city approximately 200 basis points in yield; without it, the kicker payment would have been almost two-and-a-half times as large.

Conclusions

Did the city get a good deal? Could it have done better? Did it give away too much? In retrospect, the tremendous unexpected success of Faneuil Hall Marketplace prompts these questions. Although they are fair questions, their answers cannot be found by applying financial logic but rather by looking at the political calculus of the negotiations. Acting as a co-investor in the project meant renegotiating the deal when there were major problems, and this renegotiation involved financial compromises. The concessions were costly, even though at the time they appeared reasonable. In the early 1970s when city officials were searching for a plan that would renew the deteriorated historic buildings, Rouse's proposal for a festival marketplace was a radical departure from the norms of retailing, notably off track in light of industry's abandonment of the downtown. In cutting a deal for the marketplace, city officials were motivated by a broad set of goals for downtown. They considered the project very risky and wanted Rouse to have financial incentives to get it done as soon as possible. When they analyzed the deal based on the most realistic numbers available at the time, the financial trade-offs appeared to be an equitable way of sharing risk.

The results of this ex post analysis suggest that cities can earn competitive returns from risk taking. As a financial player, the city took many risks to get the project started: it put up the early investment dollars, leased the property and renegotiated the deal when the project ran into problems. With its payments linked to project performance, the city also took a risk that those payments would vary—go down as well as up—as did happen twice in nine years. However, the deal gave the city limited exposure to downside risk with potential for

upside gain. Because the marketplace was an overnight success, the upside started flowing sooner than anyone expected. Lagging only a short while, the true upside was the fiscal dividend that flowed into city coffers from the marketplace's impact on surrounding property values. Not yet quantified, these spillover benefits would be critical components of any future expanded cost-benefit analysis.

The city's insistence on a lease-tax payment which tied its revenues to project profitability was a key factor contributing to the strong financial performance of the deal. Unlike conventional property tax revenues, payments were, in effect, automatically indexed and thereby not dependent upon value reassessments or city council approvals of higher tax rates. As a source of revenue for ongoing city operations, the profit-sharing revenue stream represented a small sum for any big city budget, but it offered another, non-financial advantage: political protection for city officials who were investing public funds up front and taking risks to further public interest objectives.

Evaluations of public development projects generally do not use profitability as a measure of success because, as in this case, cities most often seek a broader set of benefits when they initiate redevelopment. When public investments in private projects involve financial risk, however, profitability is a starting point. If the project earns a competitive rate of return, presumably it is producing benefits in excess of costs. Moreover, in an era of public-private deal making, understanding the financial consequences of the trade-offs cities make in their negotiations with private developers is as important as projecting their ultimate financial return. In bargaining with developers, cities are handicapped if they do not understand the financial value of the resources they bring to the negotiating table.

NOTES

1. Profit sharing accelerated in the early 1980s. An important stimulus was the federal Urban Development Action Grant program which placed heavy emphasis on loan payment and cash flow participations when making grant awards. For more on this topic see, Clark, Susan E. and Rich, Michael J. "Making Money Work: The New Urban Policy Arena," *Research in Urban Policy*, Vol. 1 1985: 101-115.
2. See Frieden, Bernard J. and Sagalyn, Lynne B., *Downtown, Inc.: How America Rebuilds Cities*, Cambridge, MA: MIT Press, Fall 1989.
3. See Kayden, Jerald, *Incentive Zoning in New York City: A Cost-Benefit Analysis*. Cambridge, MA: Lincoln Institute of Land Policy, 1978.
4. Dowall, David E., "Public Land Development in the United States," *The Journal of Real Estate Development*, Vol. 2 (Winter 1987): 19-28.
5. See "Accountability for the Development Dollar," a report prepared by the Role of Cities in Real Estate Development Committee, (Minneapolis) Citizens League, June 20, 1985; Association of the Bar of the City of New York Special Committee on the Role of Amenities in the Land Use Process, "The Role of Amenities in the Land Use Process," June 1988; Office of the New York State Comptroller, Office of the State Deputy Comptroller for the City of New York, "New York City Planning Commission Accountability for Cash Contributions," August 15, 1988, Report A-10-88; Office of the New York State Comptroller, Office of the State Deputy Comptroller for the City of New York, "New York City Planning Commission Granting Special Permits for Bonus Floor Area," September 15, 1988, Report A-23-88.

6. Financial returns were not the motivating factor behind Boston's initiative—city officials wanted to save the historic markets—but they were critical of the city's deal with the developer. The discussion of the deal draws from the account presented in Gordon, Jacques, "Case Study: Faneuil Hall Marketplace, Boston," prepared for curriculum use under the supervision of Frieden, B.F., and Sagalyn, L.B., revised March 1986, author's files.

7. By definition, Rouse would be paying 16% of total gross income when paying 20% of adjusted gross income.

8. Annual estimates of these foregone property taxes were derived using 1962 assessed values and current-year city tax rates; they averaged \$275,000 a year. This figure did not include the Quincy Market building because it has been city owned since its construction in 1826.

9. The data on property values in downtown Boston were estimated from a sample of 195 transactions (predominately repeat-sale transactions) covering 110 parcels. The transactions cover a 30-year period (1956-1986) and include more than 50% of the parcels in the area immediately surrounding Faneuil Hall Marketplace and stretching southward into the financial district of downtown Boston. To keep the trend analysis as close as possible to the renovated-building prototype, the sample included only parcels with existing structures, and it excluded vacant lots and other parcels acquired as part of a major office-building land assembly. In addition, parcels were removed from the sample if major renovation altered their quality.

10. There is no index of land values in downtown Boston. To estimate changing land values as a factor in the estimate of foregone property taxes on the Faneuil Hall markets, a subset of the above referenced sample data that included only repeat-sales transactions was analyzed. This subset included 149 transactions covering 55 properties. The average annual compound rate of growth for the period between two sales was calculated for each transaction, and these rates were used to derive average annual estimates of the change in property values for the study area. Changes in land values were derived as a residual, using the replacement-cost index (from *Means Square Foot Costs* for Boston) as a proxy for the building-value component. This was a roughly derived estimate; yet as the difference in returns for Perfect Foresight Models A and B in Table 2 attest, substantial changes in this estimate did not significantly affect the conclusions drawn from the results. The trend is in line with a recent study by Avault, John, with the assistance of Fitzpatrick, Elizabeth, "An Overview of Factors Influencing Commercial Real Estate Values in Boston 1977-1990," Boston Redevelopment Authority Research Department, October 9, 1986, draft.

11. The following model was used to calculate the public financial returns from Faneuil Hall Marketplace:

$$0 = \sum_{t=1}^{26} \frac{-TDC_t + NLR_t}{(1+r)^t} + \sum_{s=27}^{40} \frac{NLR_{87} (1.x)^{s-26}}{(1+r)^s} + \frac{NLR_{87} (1.x)^{14}}{(1+r)^{40}}$$

where:

- TDC = DC + (FPTB + FPTI), total development costs
- NLR = (BLP + PLP) - (PTB + PTI), net lease revenues
- DC = Direct development costs
- FPTB = Foregone property taxes, 1962 base-year assessment
- FPTI = Foregone property taxes, post-1962 land-value increment (for Perfect Foresight Models)
- BLP = Base lease payment in lieu of property taxes
- PLP = Additional, participation lease payment
- PTB = Property taxes on North and South Market buildings, if privately owned and unimproved, 1962 base-year assessment
- PTI = Property taxes on North and South Market buildings, if privately owned and unimproved, post-1962 land-value increment (for Perfect Foresight Models)
- r = Real discount rate for public investment at 3%
- x = Real growth rate in NLR at 2.4%, the 1982-1987 average (5.5%) adjusted for expected average inflation

All in 1962-constant dollars adjusted by the Consumer Price Index for Boston, all items, all urban workers.

12. Bolan, Lewis, "Harborplace and Faneuil Hall Area Study." Report prepared for Schlichter, Jerry, East St. Louis, Illinois, Legatt McCall Advisors, July 29, 1985.

13. Property assessments in Boston have a history of irregularity and nonuniformity. The conventional rule-of-thumb was that commercial properties might be assessed at rates that produce tax payments representing 20% to 23% of gross income. The city also negotiated tax payments covering parcels sold under urban renewal disposition procedures, so-called Chapter 121A agreements following the authorizing statute identification. There also were informal, non-binding tax letters of agreement. See Avault, J.E., and Ganz, A., *Tax Constraint and Fiscal Policy: After The Property Tax*. Final Report of the Tax Policy Analysis and Planning Study Effort, 1976-81, Vol. I, Ch. 4, October 1983.

The Appraisal Journal

Subscription (1 year):
Members, \$20
Nonmembers, \$25
Single Copy: \$7.50

Published quarterly:
January, April, July,
and October by

AMERICAN INSTITUTE OF
REAL ESTATE
APPRAISERS
430 North Michigan Avenue
Chicago, Illinois 60611-4088

JANUARY 1990

The Appraiser as an Arbitrator

Lloyd D. Hanford, Jr., MAI

Writing Effective Appraisal Reports

William P. Pardue, Jr., MAI

Real Rates: Judging Discount Rates and Inflation Hedges

Ken Barnes

A Decade of Supreme Court Decisions—An Appraiser's

View, Part 3

J.D. Eaton, MAI

Economic Life of Improvements Associated with Salt
Production

Joseph J. Caivanico

Stepped Rate/Stepped Payment Loans and Cash

Equivalency: Conventional Techniques

Charles A. Smith

Functional Form Choice in Applied Real Estate

William N. Weirick and Franklin J. Ingram

Japanese Investment in U.S. Real Estate

Victor E. J. Orth

Reviewing Discounted Cash Flow Analysis

Vernon Martin III

The Weighted Average Cost of Capital is the Correct
Discount Rate

Stephen C. Kinchloe

Comparative Accuracy of Seven Timber Appraisal Methods

Ervin G. Schuster and Michael J. Niccolucci

The Integration of Mortgage and Capital Markets

Mike Devaney and Karen Pirkerill

Adjusting Comparable Sales for Floodplain Location

Bobby A. Newsome and Dennis Bialaszewski

Appraising by Probability Analysis

Kenneth Jay Gain, MAI

Application of Geographic Information Systems to Real
Estate Market Analysis and Appraisal

Bruce R. Weber, MAI