

## **Valuation models for low-income housing: How does income approach reduce ambiguity of assessing property tax?**

**Yelin (Jenny) Li**

Salem State University, USA

Yelin.jenny.li@gmail.com

**ABSTRACT:** Property tax valuation and assessment for low-income housing remain a challenge for real estate assessors, developers, property managers, and local governments. This paper reported the research findings on the use of valuation methods for real estate tax abatement in low-income properties gathered from real data. Based on data from income statements and balance sheets of client's properties, valuation models for low-income housing versus market-price housing were proposed and the major variances were compared. From the examination of the major valuation methods used by states and localities, evidence was found to explain 1) How the fair market value method failed to apply to the tax assessment in Massachusetts that requires market-price value for property assessment purpose, and 2) why the income approach is preferred in the asset valuation of low income housing. The findings showed the effectiveness of income approach in the absence of statutory mandates in the State of Massachusetts where a disparate body of case law is used. The paper shined light on valuing real estate encumbered with restrictions for assessment purposes, especially for properties vulnerable to changes in property taxes. It further suggested the need for a legislative resolution for clarity and consistency in valuation of low income housing.

**KEY WORDS:** valuation models, low-income housing, real estate tax assessment.

## Introduction

This paper studies a low-income housing developer who appealed for property tax abatement for nine properties and received a refund of 67% of the tax value compared to the tax assessed by the city assessor. It is not surprising that the results showed a notable gap between the assessed tax by the local government and the appealed tax from the property owner. Massachusetts law requires real estate to be assessed at its fair cash value. However, the fair cash value method fails in determining the value of low-income housing in the study.

This paper examines the various case laws from the rulings of the Massachusetts Appellate Tax Board, and points out the difficulty of considering restrictions imposed on low-income housing using the fair cash method, and demonstrates the lack of precision and mathematical support associated with this method. The paper used operating data from profit and loss statements and balance sheets of nine properties. Based on the real data, models of income approach were constructed and a comparison made between this approach and the fair cash value.

## Research Methodology and Model

### Fair cash value approach vs. income approach

The client as a low-income real estate developer, manages the daily operations of nine affordable housing, totals 262 units. Some of the properties struggled with strapped operating accounts and had to give priority to paying bills when big payments were due. When the quarterly real estate tax bills arrived, they had to submit timely tax payments. For the last 7 years of operation, the client was neither aware of the tax abatement, nor it had the ability to file for appeal until an experienced CFO landed the job. The CFO took a deeper look of the cash situation. He then analyzed the income statements and focused on the big burden of operating expenses. Then the decision was made to fill for tax abatement.

The result was amazing: the organization was able to get back 67% of the tax payment for the past quarter. The method used by the Assessor's office was the fair cash value approach while the valuation of the client's abatement adapted income capitalization approach. Those two methodologies were analyzed and models were built to compare the differences between them. Further analysis were made based on the nature and practice of low-income housing.

## 1. Fair cash value

Fair market value is the price a willing buyer would pay to a willing seller for a specific property. Massachusetts law requires real estate to be assessed at its fair cash value.<sup>1</sup> The assessor usually decides the “fair cash value” by comparing the said property to those in the same location and condition for sale at the moment. The municipal assessors make a fair cash valuation of all properties, and then determine the taxation based on the assessed valuation of the property<sup>2</sup>.

However, when fair cash value is applied to low-income housing, which usually are government subsidized properties, assessors and real estate developers face significant uncertainty, as these properties are subject to different levels of restrictions by government housing agencies. Low-income housing offers tax credits to investors and provides the owners cash assistance in the form of government subsidies. Therefore, developers or owners are compliant with rent limitations or restrictions on the property for a set period of time, as long as 30 years (Youngman 2011).

These restrictions can be on rental income and they also bring about additional costs and expenses. Also the restrictions cause illiquidity thus, such housing projects are not easily traded for a set of period. This creates the problem that no potential buyer would be willing to pay market price to purchase such housing. So the price a buyer willing to pay is largely restricted, a fact that leads to a much lower fair cash value of the property. This is where tax disputes arise as the restrictions impose limitation on the price a potential purchaser would be willing to pay for a low-income property. It has been requested by the property owners and developers that the government rent restrictions be taken into account when assessing the property’s value for real estate tax purpose.

According to the Tax Appellate Board, there is a series of cases that show that restrictions subject to deed and lease by federal, state, and governmental agencies need to be taken into consideration. These restrictions are on the return to a property, such as the rent the company can received. Governmental restrictions on the return a property can produce must be taken into account in valuing the property.<sup>3</sup> Rent restrictions placed by federal regulations on the rent that the company could receive from the housing project must be taken into account.<sup>4</sup> The effect of a voluntary conservation restriction must be taken into account in determining the fair cash value of a property.<sup>5</sup>

Accordingly, Massachusetts courts have ruled in several relatively recent appeals that when determining fair cash value for governmentally regulated affordable housing, the restrictions must be taken into account.<sup>6</sup> Since there are restrictions that impose limitations on a property’s ability to generate income when determining its fair

cash value, what model can help determine the valuation of the property? Is there a mathematical support to determine the precise value of a low-income property? Or the big ambiguity in the valuation has to stay until for another mandatory ruling?

## 2. Income (capitalization) approach

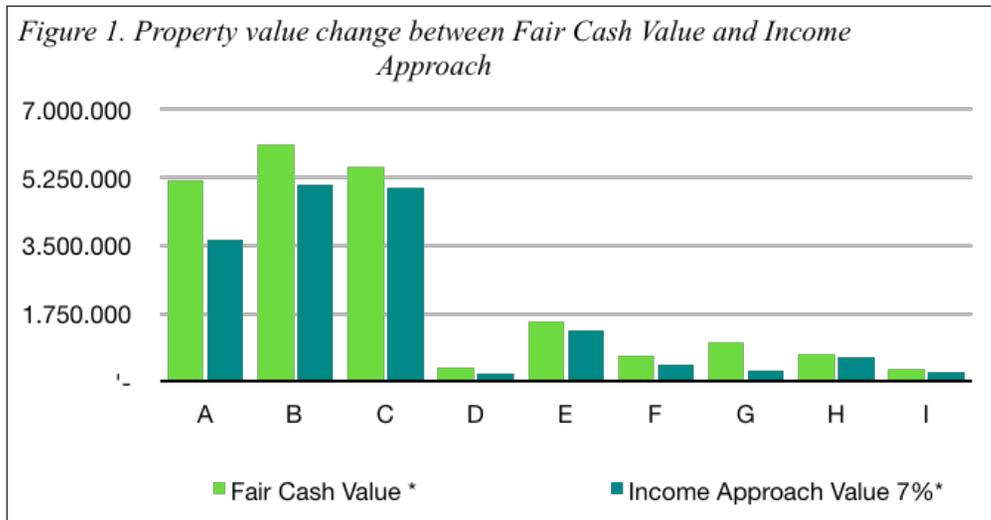
The income (capitalization) approach valuation method “analyzes a property’s ability to generate income and reversion and converts these benefits into an indication of present value.”<sup>7</sup> It directly takes the income and expense from an income statement. By eliminating the real estate tax, it calculates the net income. For the value of the property, the “Present value is then calculated by dividing the net operating income by a capitalization rate.”<sup>8</sup>

In Massachusetts, the income approach was also mentioned in several case laws. The Tax Appellate Board has used modified income (capitalization) approaches to ascertain the value of the property at issue.<sup>9</sup> However, the case law ruling and the results from the city assessor usually are conflicting and are not really utilizing the methodology.<sup>10</sup>

In order to calculate the present value of the property, data have to be chosen from income statements. For low-income housing projects, income is mostly rental income, which is restricted by the governmental agency; thus largely limiting the degree of which the property can generate revenue. The vacancy rate is normally low since low-income housing units are always in high demand and people need to be on the waiting list to be approved. However, due to the renovation or rehabilitation needed for most of the affordable housing projects, there can be a period of construction that the property has to carry big vacancy. Low income and high expense don’t provide a positive picture on the revenue side of the calculation.

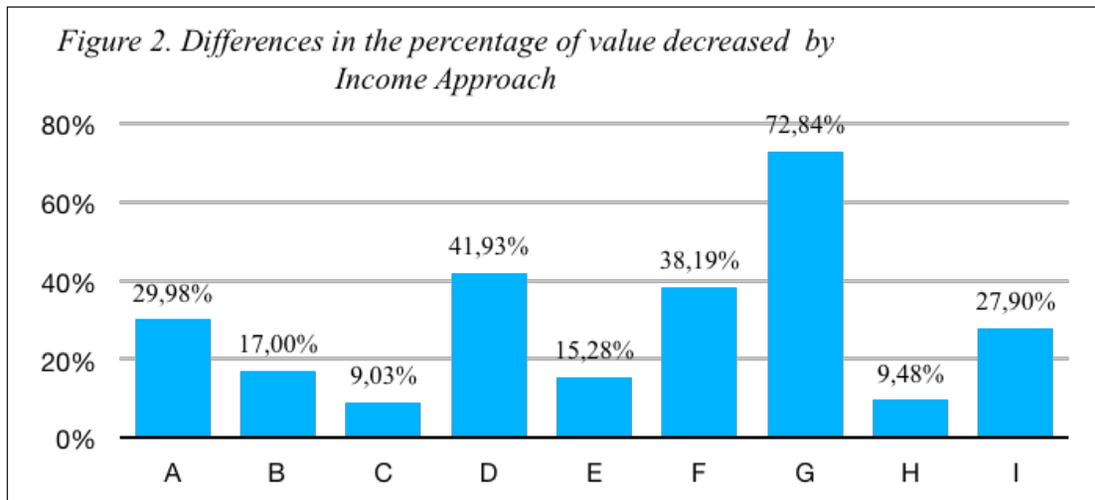
On the expense side, the administrative, operating and maintenance expenses consist of the expenditures related to the property’s daily operation. The administrative expenses include payroll, leasing, accounting services and other office-related expenses. The operating expenses include utility for monthly electricity, water and sewer, and gas payments. The maintenance expenses also include payroll, repair materials, extermination, appliance repairs, decorating, trash removal, snow removal and other contract services. These three major expenses, together with property insurance, resident service fees and management fees equal the total expenses on the income statement. When calculating the net income for real estate tax assessment purpose, the expense of real estate tax is eliminated, and the replacement reserve deposit is deducted. The resulting number is then divided by the cap rate, the choice of which is in a gray area. Using the above data from the income statement of the client, value

of the nine properties was calculated by dividing the net income divided the cap rate chosen. Using a cap rate of 7%, one can calculate the value of the properties [see Figure 1]. The light green bar is the value assessed by the city and the dark green bar represents the value determined by the client.



Variant gaps between the above two methods from nine properties can be seen from Figure 1. The further analysis is done by the results of [Figure 2], visualizing the value change by using fair cash value and income approach. The bars in Figure 2 depict the reduced value change when using the income approach. The income approach reached a much lower valuation for all but one (property H). The major reason is that operating costs in affordable housing are higher than in market rate housing. One can see the dramatic results shown by the nine properties. Properties B, C, E are properties operating with a good amount of cash flow with change ratio under 20%. Property H is an exception since the city reached a very close valuation with the client based on the condition and location of this unique property. The property itself is not in good condition and has to borrow from the developer to keep up with the daily operation. Property A, D, F, G and I are properties with troubled cash flows and their valuation changed by more than 27%.

Property G is in the extreme situation since it has a change ratio of 72.84%. This particular property has taken three loans from different housing agencies and maintains a parking lot which does not generate enough income either to help with maintenance or with the repayment of the loans. A big “due to developer” account as a zero interest loan has stayed on the balance sheet and has increased each year.



The big expenses to keep in compliance with the restrictions on low-income housing, and the huge mortgage loan payment on the balance sheet hindered the property's ability to generate income and it had to rely on the developer to keep operating. Without a closer look at the property's condition itself, the fair cash value failed to reflect the real value of the property which is located in the downtown area. By providing a way to mathematically analyze the property's operating ability, the income approach method offers a better alternative for reaching the valuation of low-income housing units.

## Conclusions

The client's real estate tax appeal showed a successful model for a reasonable mechanism for appropriately valuing low-income housing units. It first demonstrated the failure of fair cash value method in the absence of the restriction consideration. Then it used income approach to arrive at the appropriate value based on calculation. It shows how when considering restriction on income, income approach comes into play as a support for the mathematical mechanism to value properties for real estate tax purposes. The valuation process is ambiguous and the application of appraisal techniques remains complicated and uncertain. However, the income approach provides a better calculation. Even the cap rate is still a challenge, but using comparable from other states provides mathematical evidence to shine a light through the murky sky of real estate evaluation.

For the purpose of promoting affordable housing in Massachusetts, this study suggests that the state enact clarifying statutes to address affordable housing valuation issues. Due to unpredictable appeal result, the state should direct resources to educate property owners on available valuation models and assessment methodologies, such as income capitalization method using actual rents, and applicable capitalization rate. It is recommended since this method provides sufficient mathematical support for determining a precise valuation by property owners and assessors.

## NOTES:

- <sup>1</sup> G.L. c.59 § 38.
- <sup>2</sup> *Boston Gas Co. v. Assessors of Boston*, 334 Mass. 1956. 549, 566.
- <sup>3</sup> *Community Development Co. of Gardner v. Assessors of Gardner*, 337 Mass. 1979. 351.
- <sup>4</sup> *Sisk v. Assessors of Essex*, 426 Mass. 1998. 651, 654-55.
- <sup>5</sup> *Mass. ATB Findings of Fact and Reports at 1998-770*; cf. *Parkinson*, 398 Mass. 112.
- <sup>6</sup> *Assessors of Weymouth v. Tammy Brook Co.* 368 Mass. 1975. 810.
- <sup>7</sup> *Cascade Court LTD. P'ship*, 105 Wn. App. at 565.
- <sup>8</sup> *Inst. of Real Estate Appraisers, The Appraisal of Real Estate*, 1992. 409-17.
- <sup>9</sup> *Woburn Services, Inc. v. Assessors of Woburn, Mass. ATB Findings of Fact and Reports 1996. 565, 574.*
- <sup>10</sup> *Wayland Business Center Holdings, Inc. v. Assessors of Wayland, Mass. ATB Findings of Fact and Reports. 2005. 557, 595-97.*

## References

- Assessors of Weymouth v. Tammy Brook Co.* 368 Mass.1975. 810.
- Boston Gas Co. v. Assessors of Boston*, 334 Mass. 1956. 549, 566.
- Cascade Court LTD. P'ship*, 105 Wn. App. at 565.
- Commonwealth of Massachusetts, General Law, Section 38 G.L. c.59 § 38.
- Koppelman v. Board of Assessors of the City of Amesbury.* 2012. Commonwealth of Massachusetts, Appellate Tax Board, No. F314355. Available at: <http://www.mass.gov/anf/docs/atb/2012/12p950.doc> [Accessed 5 Aug. 2017].
- Gurge, Kenneth. 2006. *A Publication of the Department of Revenue's Division of Local Services. Affordable Housing valuation issues*, Volume 19, No.1. Available at: <http://www.mass.gov/dor/docs/dls/publ/ct/2006/january.pdf> [Accessed 4 Aug. 2017]

- Inst. of Real Estate Appraisers 1992. *The Appraisal of Real Estate*, 409-17.
- Mass. ATB. 1998. *Findings of Fact and Reports*, cf. Parkinson, 398 Mass. 112.
- Loeb, Annie. 2016. *Valuation of Deed and Lease Restricted Property in Massachusetts*. Boston: Preservation of Affordable Housing.
- Owen, Matthew et. al. 2015. *Assessing the Value of Low-Income Housing for Property Tax Purposes Whether and How to Consider the Value of Low-Income Housing*. Tennessee: Tax Credits. Report of the Tennessee Advisory Commission on Intergovernmental Relations. Available at: <https://www.tn.gov/assets/entities/tacir/attachments/2015LIHTC.pdf> [Accessed 4 Aug. 2017]
- Rosenblum, Joseph. 2006. *Assessing the Value of Affordability: Ad Valorem Taxation of Properties Participating in the Low Income Housing Tax Credit Program*. Chicago: John Marshall Law school fair & affordable housing commentary. Available at: <https://www.jmls.edu/clinics/fairhousing/pdf/commentary/assessing-the-value-of-affordability.pdf> [Accessed 4 Aug. 2017]
- Sisk v. Assessors of Essex, 426 Mass. 1998. 651, 654-55.
- Wayland Business Center Holdings, Inc. v. Assessors of Wayland, Mass. 2005. *ATB Findings of Fact and Reports* 2005-557, 595-97.
- Woburn Services, Inc. v. Assessors of Woburn, Mass. 1996. *ATB Findings of Fact and Reports* at 574.
- Youngman, Joan. 2011. *The Valuation of Federally Subsidized Housing: Ten Questions for the Property Tax*. Lincoln Inst. of Land Policy, No. WP11JY1.