Appendix K



Chairman Edward S. Hochman Executive Director
Anita Visser

Memo

To: Jeffrey Coleman From: Anita Visser

CC: Edward Hochman

All Board Members
Date: May 13th, 1999

Re: Table 14's reliability; and

Comparing the Economic Condition of the Stabilized Stock, 1967 to 1997

Further to your request following the May 6th meeting, regarding, Part One: the history and validity of Table 14, and, Part Two: a comparison of the economic condition of the stabilized stock from 1967-97, this memo updates a staff report on these subjects from 1993.

PART ONE: Table 14's History and Reliability

Each year the Board estimates the current average proportion of the rent roll which owners spend on operating and maintenance costs. This figure is used to ensure that the rent increases granted by the Board compensate owners for the increases in operating and maintenance expenses. This is commonly referred to as the O&M to rent ratio.

Over the first two decades of rent stabilization, the change in the O&M to rent ratio contained in Table 8 (hereinafter, referred to as "Table 14" - its past designation) was updated each year to reflect the changes in operating costs as measured by the PIOC and changes in rents as measured by staff calculations derived from guideline increases. Over the years, some Board members and other housing experts have challenged the price index methodology and the soundness of the assumptions used in calculating the O&M to rent ratio in "Table 14". Several weaknesses in the table have been acknowledged for some time. These are outlined below, followed by description.

Several Weaknesses have been Identified in Table 14:

- Does not account for huge shifts in housing stock of units of different ages that fell under stabilization;
- Rent Index does not account for administrative rent increases: MCI's or Apartment Improvement increases;
- O&M Cost index base of .55 reflects only Post-War units;

- The first stabilized units were mostly Post-War—today about 7 out of 10 stabilized units are Pre-War;
- Faulty adjustments were made to the O&M index in the 1970s to account for the influx of Pre-War buildings-a one-sided adjustment;
- The PIOC may overstate actual cost increases as it outpaces Longitudinal I&E cost increases; and
- Any reliable longitudinal comparison cannot take place where there have been massive shifts in the universe being measured.

The first problem with Table 14 is that the calculation does not account for the changes in the housing stock and market factors which have certainly affected the relationship between rents and operating costs to some degree. Next, for the purpose of measuring the relationship between legal regulated rents and operating cost changes, the usefulness of "Table 14" is also limited. The rent index contained in the table does not adjust for administrative rent increases (MCI's and Apartment Improvement increases) and rents charged below established guidelines (preferential).

The operating cost index contained in the table is more troublesome. The .55 base contained in the table reflects an estimate concerning nearly all post-war units. The vast majority of stabilized units (about 7 out of 10) are now in pre-war buildings which had higher O&M ratios in 1970. The cost index was adjusted (departing from the PIOC) in the 1970's in an attempt to accommodate for this influx of pre-war buildings into the stabilized sector. This attempt was misguided. The rent index reflects changes in rents initially in the post-war sector - so adjustments to the cost index to reflect the influx of pre-war units results in a one-sided distortion of the changing relationship between costs and rents.

Staff's research suggests that the PIOC may overstate actual cost increases. While most of this bias occurred in the 1970 - 1982 period, recent comparative evidence from the Income and Expense studies suggests that a gradual overstatement of operating costs may still occur under the PIOC. Expenditures examined in the most recent I&E study suggest that from 1991 to 1997 actual costs rose by some 24% while the adjusted PIOC indicated a 26% rise, showing there is only a negligible difference between the two indices over the last seven years. However, from 1990 to 1997, the gap between the two indices is larger. From 1990 to 1997, the I&E rose 33% while the adjusted PIOC rose 38%, a difference of 5 percentage points. Since this longitudinal analysis covers only an eight-year period, a conclusive statement on this pattern cannot be made at this time. What remains clear, however, is that "Table 14," in its current form, presents a highly misleading picture of the changing relationship of operating costs to rents over time.

PART TWO: Comparing the Economic Condition of the Stabilized Stock: an update of Changes in Income and Expenses, 1967-97

To compare the economic condition of the stabilized stock over the thirty-year history of rent regulation, Table 14 has proven to be an insufficient measure. Using the best data that exists from the beginning of stabilization, however, it is possible to make point-to-point comparisons of O&M/Rent or Income ratios from 1967 to 1997. Because stabilization began in 1969 with primarily Post-War units, we will perform the following:

 Separate point-to-point comparisons of O&M Ratios for Post-War and Pre-War units from 1967-97 (Sections I & II);

- Examine the overall point-to-point O&M Ratio comparison from 1967-97 (Section III); and
- Compare inflation-adjusted NOI point-to-point from 1970 to 1997 for the Post-War stock to determine if NOI has increased or decreased in real terms for the units that have been stabilized the longest (Section IV). (The absence of actual dollar NOI at the outset of stabilization in the Pre-War stock prevents a similar comparison)

MAIN FINDINGS

Making like point-to-point comparisons:

- In the Post-War stock, the O&M to Rent (contract) ratio increased by 2.1 percentage points from .55 to .571 from 1969-97;
- In the Pre-War stock, the O&M to Income ratio decreased by 5.4 percentage points from .65 to .596 from 1967-97;
- The overall (Pre-War and Post-War) O&M to Rent/Income ratio declined by 3.4 percentage points from .623 to .589 from 1967-97; and
- Adjusting NOI for inflation in the Post-War stock, (the only stock for which comparative data is available), shows that from 1969-70 to 1997 average monthly NOI fell slightly from \$386 to \$378 (by \$8 or 2%).

I. Post-War units O&M to Rent (contract rent) ratios: Point-to-Point comparison

a) 1969-70 Post-War O&M to Rent (contract) ratio: .55

The data for the most reliable O&M Ratio for Post-War units comes from two sources. The average monthly O&M cost figure comes from a 1969 study of Stabilized Apartment Houses performed by the Bureau of Labor Statistics—\$110. The average monthly rent figure was calculated from the 1970 decennial Census data on contract rents, (not collected rents)—\$203.

A figure for average monthly gross income for 1969 in the stabilized stock is not available so to make a like-to-like comparison, the ratio we will use is O&M to Rent for Post-War units only. Furthermore, the rent in the Census data is a contract rent, not a collected rent, so to make a like-to-like comparison, we will use contract rents throughout. The \$110 cost and \$203 contract rent averages yield a O&M to Rent ratio of .54. Since the cost figure is from 1969 and the rent figure is from 1970, adjustment to bring the cost figure to 1970 levels could yield a ratio as high as .58. However, the "Table 14" O&M to Rent ratio of .55 for Post-War units in 1970 falls in this range and is a reasonable estimate.

b) 1997 Post-War O&M to Rent (contract) ratio: .571

Using the latest Income and Expense data from the NYC Department of Finance (1997 RPIE filings), we make a like-to-like comparison to the B.L.S/Census data ratio detailed above by dividing average monthly audited O&M Post-War costs: \$503.78, into average monthly Post-War rents. Because we need to make a like comparison monthly I&E rent (collected) must be adjusted to estimate contract rents. To do this, we increase the rent figure \$820.12 by the current gap between the mean RPIE (collected) and the mean DHCR (contract) rents—7.5%, yielding \$881.63. The resulting O&M to Rent ratio is .571.

\$503.78 audited Post-War O&M costs

\$881.63 collected Post-War rent increased to contract

- .571

c) The Post-War O&M to Rent ratio increased by 2.1 percentage points from 1969-97

Using a like point-to-point comparison, the O&M to Rent ratio in Post-War units increased by 2.1 percentage points from an estimated .55 in 1969-70 to .571 in 1997. This means that a slightly greater amount of contract rent was being consumed by O&M costs in Post-War units in 1997. This may be influenced, inpart, by the following factors which are unrelated to rent regulation:

- (1) the departure of more profitable units to co-op and condo conversion—there were 325,000 Post-War stabilized units in 1969, there were 288,000 in 1996;
- (2) the Post-War stock is 30 years older and rising O&M costs are a natural occurrence.

Notably, since the RGB Rent Index increase was higher than the increase in operating costs in 1998 by approximately 3.6%, (See Table 14 annexed attached—O&M increased by 0.1% and the RGB Rent index increased by 3.7%), the 2.1% increase in the O&M to Rent ratio from 1970-97 may have been eliminated in 1998.

II. Pre-War units O&M to Income ratios: Point-to-Point comparison

a) 1967 Pre-War O&M to Income ratio: .65

Based on a 1993 staff study, which constructed an estimate of a mean O&M to Rent/Income ratio for the Pre-War stock derived from extensive work by George Sternlieb in 1967, the true O&M to Income ratio estimate (Sternlieb combined rent and income) fell into a range from .65 to .70. We will accept the more conservative figure of .65

b) 1997 Pre-War O&M to Income ratio: .596

Using the latest Income and Expense data from the NYC Department of Finance (1997 RPIE filings), we make a like-to-like comparison to the Sternlieb ratio by dividing average monthly audited O&M Pre-War costs: \$389.08, into average monthly Pre-War income—\$652.79. The resulting O&M to Income ratio is .596.

\$398.08 audited Pre-War O&M costs

\$652.79 Pre-War income

O&M to Rent ratio

= .596

c) The Pre-War O&M to Income ratio decreased by 5.4 percentage points from 1967-97 Using a like point-to-point comparison, the O&M to Income ratio in Pre-War units decreased by 5.4 percentage points from an estimated .65 in 1967 to .596 in 1997. This means that less income is being consumed by O&M costs in Pre-War units from 1967-97. This may be explained by the fact that as rent controlled units gradually transitioned into stabilization, they experienced substantial increases in income. As a result, their O&M to Income ratios fell.

III. How have conditions changed for the stabilized stock as a whole?— Overall O&M ratio Point-to-Point comparison 1967-97

To make a like comparison of the economic condition of the overall universe of stabilized units, the ratios detailed above will be weighted by the proportion of Pre- and Post-War units found in the 1996 HVS. Note however, that the ratio for the Pre-War stock is O&M to Income and the ratio for the

Post-War stock is O&M to contract Rent. While these two ratios measure slightly different things, we can still derive reasonable evidence of changes in the stabilized stock as a whole.

a) 1996 HVS proportion of stabilized units by age:

# of Units	Proportion	
Post-War	288,344	27.4%
Pre-War	763,956	72.6%
Total	1,052,300	100%

b) Point-to-Point Comparison 1967-97

Calculating the 1967-70 Overall ratio:

Proportion =	Product			
.55	27.4%	0.1507	(O&M to I	Rent ratio)
.65	72.6%	0.4719	(O&M to I	ncome Ratio)
Overal	1 1967 Ratio:	0.6226	=	.623
	.55 .65	.55 27.4% .65 72.6%	.55 27.4% 0.1507	.65 72.6% 0.4719 (O&M to I

Calculating the 1997 Overall ratio:

Ratio *	Proportion = Pro	duct	
Post-War	.571	27.4%	0.1565 (O&M to Rent ratio)
Pre-War	.596	72.6%	0.4327 (O&M to Income Ratio)
	Overall 19	97 Ratio: (0.5892 = .589

c) Overall the O&M to Rent/Income ratio has declined 3.4 percentage points from 1967-97 Using a like point-to-point comparison, the overall O&M to Rent/Income ratio for stabilized units decreased by 3.4 percentage points from an estimated .623 in 1967-70 to .589 in 1997. This estimate means that less rent and income is being consumed by operating expenses in 1997 than in 1967-70. As a whole, this analysis suggests that owners of stabilized units experienced relative gains in NOI over the thirty-year period of rent stabilization.

IV. Is NOI being kept whole for inflation?—a Comparison of inflation-adjusted NOI point-to-point from 1970 to 1997 for the Post-War stock

Finally, we will compare inflation-adjusted NOI in the Post-War stock, the units that have fallen under stabilization the longest, to determine if owners are being kept "whole" for inflation, and to use another measure to assess the general economic condition of stabilized units.

Post-War NOI Calculation

Rent O&M Expenses NOI	1970 \$203 \$110 \$ 93	1997 \$881.63 (\$820.12*1.075 inflates collected to contract) \$503.78 (audited O&M costs) \$377.85
CPI Urban NY-NJ	41.2	170.8 = 4.1456 inflation factor*
Real Term NOI	\$385.54	\$377.85 difference = -\$7.69

This analysis shows that by making a like comparison and adjusting 1970 NOI for inflation, NOI in Post-War units declined slightly by 2% from 1967-97. The estimated drop in NOI in the Post-War stock may be attributed, in part, to non-regulatory factors such as co-op conversions and the natural rise in maintenance costs due to aging. Moreover, rent increases authorized in 1998 may have had the effect of eliminating this 2.1% decline in NOI.

Notably, the 1999 I&E Study, found that inflation-adjusted NOI in stabilized buildings of all ages has remained roughly constant from 1989-97, growing by 3% in real terms since 1989.

It should be noted that NOI is not the sole criteria for profitability as leveraging, interest rates, mortgage terms and rates of income tax all play a role in determining the ultimate profitability of a stabilized housing investment.

*Inflating 1970 NOI to 1997 dollars: \$93 * 4.1456 = \$385.54

Attached are the following:

- 1) Copy of Table 14 from the Explanatory Statement plus additional guidelines tables;
- 2) Copy of 1993 RGB staff report:

A Review of Changes in Income and Expenses, 1967-91.