Effect of Tax Rate on Apartment Rent

Report FAC/FCA-78

Frederick A. Costello March 19, 2012

Introduction: At the March 15 meeting of the Board of the Fairfax County Federation of Citizens Associations, the Board voted to recommend that the Board of Supervisors increase the real-estate tax rate from the current \$1.07 per \$100, plus a stormwater tax of \$0.015 per \$100 (a total of \$1.085 per \$100) to a FY2013 rate of on the order of 1.075 plus \$0.025 (a total rate of \$1.10 per \$100). The purpose of this report is to present data to illustrate the impact the increased rate will have on families living in rental and condominium apartments. We assume that rental rates will rise to match the increase in costs to the landlord.

Summary: The increase in the rental rate for the average apartment, which currently rents for \$1431 per month (\$17,167 per year), will be \$523 per year if the tax rate is raised to \$1.075/\$100 and the stormwater rate is raised to \$0.025/\$100 (Exhibit 1). The result is a 3.0% increase in rent and accompanies a 3.8% increase in food expenses. If the renter is paying 41% of his income for housing, he is earning \$42,000 per year. The rental increase amounts to approximately a one-month expenditure for food. We can hope that the renter's income will rise to match the CPI-W.



Exhibit 1: Effect of the Real-Estate Tax Rate on Apartment Rental Rates

Discussion: The recommended increase in real-estate tax amounts to a 1.4% increase (1.075+0.025)/(1.070+0.015). This amount is less than the CPI-W increase of 3.1% from February 2011 to February 2012; therefore, it seems reasonable. (The CPI-W is the consumer price index for clerical and blue-collar workers. The CPI-U, the index for all urban workers, was 2.9% for the same period.)

Comparing the 1.4% to the 3.1% is not a complete comparison. The assessed value of apartments increased 12.6% over this time period¹; therefore, the tax rate will be applied to a higher value. The landlord's increase in taxes and insurance will be passed on to the renter, as increased to account for the anticipated vacancy rate, usually one out of twelve months. The average apartment rental rate in 2012 was \$1,431 per month (\$17,167 per year)². The rent increase for this average apartment would be \$523 (Exhibit 2), or 3.0%. If the real-estate tax is \$0.914/\$100 with a stormwater tax rate of \$0.025, the rent would be unchanged (Exhibit 2, third column).

¹ <u>http://www.fairfaxcounty.gov/dmb/fy2013/advertised/overview/14_General_Fund_Revenue_Overview.pdf</u>, Pg 74

² <u>http://www.fairfaxcounty.gov/demogrph/pdf/rent2010.pdf</u>, extrapolated from 2010 to 2012 using the rental part of the consumer price index (<u>http://www.bls.gov/news.release/pdf/cpi.pdf</u> for 2011-2012).

			2012
	2011	2012	breakeven
Tax rate	1.070	1.075	0.914
Baseline rent per month	\$1,431	\$1,474	\$1,431
per year	\$17,167	\$17,690	\$17,167
Assessed value:	\$264,106	\$297,383	\$297,383
Tax + stormwater	1.085	1.100	0.939
Current tax:	\$2,866	\$3,271	\$2,792
Current insurance:	\$587	\$661	\$661
Mortgage:	\$15,846	\$15,846	\$15,846
Owner cost	\$19,299	\$19,778	\$19,299
Increase in owner cost	\$0	\$480	\$0
Vacancy rate	8.3%	8.3%	8.3%
Increase in rent	\$0	\$523	\$0

Exhibit 2: Effect of Two Different Tax Rates

The CPI's include weighting factors for each part of a consumer's expenditure³. The base CPI does not include food or fuel. CPI-U and CPI-W both include food and fuel. In our computation of the renter's income, we have used

Category	Percent
Food and beverages	15.26
Housing	41.02
Apparel	3.56
Transportation	16.88
Medical care	7.06
Recreation	6.04
Education and communication	6.80
Other goods and services	3.39

Exhibit 3: Summary of Categories of Their Weighting Factors

41.02% for his housing costs (Exhibit 3). Around 1995, the method of computing the CPI was changed to incorporate the concept of substitution. Prior to 1995, the food index, for example, was computed on the basis that a family would buy the same proportions of beef, fish and fowl. After 1995, the index was computed on the basis that the family would buy less beef and more fowl (if beef was more expensive than fowl). Substitution makes the CPI rise less than would be computed by the pre-1995 method.

If substitution is not considered, the impact of the rising cost of food prices can be seen for typical low-cost items (Exhibit 4). Substitution is not as effective for the blue-collar worker (CPI-W) as for the average urban worker (CPI-U).

Description	Increase
rice	-3.9%
CPI-U	2.9%
rent	3.0%
CPI-W	3.1%
all food	3.8%
milk	4.9%
eggs	5.3%
chicken	7.1%
sugar	8.2%
ground beef	10.8%
gasoline	12.8%
white bread	17.5%

Exhibit 4: U.S. City Average Price Increase from Feb 2011 to Feb 2012

³ See, for example, <u>http://www.bls.gov/cpi/cpid1202.pdf</u> and <u>http://www.bls.gov/cpi/cpi riar.htm</u>