

Chapter 40B: Is there an Adverse Impact on Home Values and Family Income?

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Ever since it was introduced in 1969, Chapter 40B has been used to encourage the production of affordable housing in Massachusetts. Now, for the first time in 41-years, Chapter 40B will be up for repeal on this year's November state ballot. Some voters in Massachusetts may be motivated to support the repeal of 40B because they have been led to believe that an increase in affordable housing units imposes adverse effects on local neighborhoods. To test this assertion, we developed a statistical analysis which looks at whether communities with 40B developments have been harmed in terms of changes in their property values and family incomes.

Methodology

To assess the impact of Chapter 40B developments on property values and family incomes we obtained median home values and nominal median family incomes for 1980 and 2000 from the *State of Cities Data Set (SOCDS)* (<http://socds.huduser.org>) published from Census data by the U.S. Department of Housing and Urban Development. We also obtained Chapter 40B data from the Citizens' Housing and Planning Association. These data include for each municipality in Massachusetts the presence of one or more Chapter 40B developments and the total number of 40B units constructed between 1980 and 2010. These time periods were chosen because they capture the majority of when Chapter 40B developments were constructed and thus the period when community impacts would likely have been experienced.

We used two measures to test the impact of Chapter 40B developments on property values and family income. The first tested whether the presence of at least one Chapter 40B project affected property value and family income growth between 1980 and 2000. Communities with at least one unit of housing constructed under Chapter 40B were given a dummy variable of "1". There are 196 communities with at least one Chapter 40B housing unit. Communities with no housing units constructed under Chapter 40B were given a dummy variable of "0". The dependent variables used in this analysis were percent change in median home value between 1980 and 2000, and percent change in nominal median family income between 1980 and 2000. The independent variables used were the Chapter 40B dummy variable ("1" or "0") and control variables (1980 median home value and 1980 real median family income). All but two of the 351 communities in Massachusetts were included in this analysis as we had full data on each of these. The control variables are added to the model in order to take into account a variety of factors that might affect the change in property values and the change in family income related to the relative value of homes in each community and the relative wealth of their families.

The second measure tested the impact of Chapter 40B on community property values and family income depending on the percentage of total housing units in a municipality constructed under Chapter 40B. Data on the total number of housing units in a municipality were obtained from the U.S. Census Bureau for the year 2009. The Chapter 40B proportion of total housing units was used as the chief independent variable, along with the same control variables used in the first analysis. Again, the dependent variables used in this analysis were percent change in median home value and percent change in real median family income for the period between 1980 and 2000.

Results

In both analyses, the relationship between the dependent and chief independent variable proved to be statistically insignificant, as shown in **Table 1**. To be statistically significant, the t-statistic would need to be at least 1.96, a test that suggests a 95 percent probability that the relationship between dependent and independent variable is different from zero. In the case of the dummy variable regression, the t-statistic was just 0.78 while in the regression featuring the proportion of Chapter 40B housing stock is just 0.55. (The t-statistics are in parentheses directly under the regression coefficients.) The presence of Chapter 40B, regardless of the number of units, has no statistically significant impact on property values in Massachusetts. Between 1980 and 2000, the average property value across all municipalities in Massachusetts increased by 183 percent, or \$150,209. On average, Massachusetts communities experienced the same increase in property values, regardless of the presence of Chapter 40B housing units, even in communities with a large number of 40B units. Indeed, just relying on point estimates, property values rose by 191 percent in communities with at least one Chapter 40B housing unit as opposed to 172 percent in those without any Chapter 40B housing.¹

Table 1 Statistical Results of Percent Change in Median Home Value and Percent Change in Median Household Income and Presence of at Least One Chapter 40B Unit

Independent Variables	Dependent Variables	
	Percent Change in Median Home Value (1980-2000)	Percent Change in Real Median Family Income (1980-2000)
40B Dummy Variable	0.056 (0.78)	0.002 (0.04)
Median Home Value (1980)	0.00002134 (10.25)	
Median Family Income (1980)		0.00001756 (4.03)
	N = 349 R ² = .240	N = 349 R ² = .042

In addition, we tested the impact of Chapter 40B on family income in the Commonwealth. The first analysis entailed examining the impact of the presence of at least one Chapter 40B unit on the 1980-2000 percentage change in real median family income and the second was the impact of percent of total housing units constructed using Chapter 40B. As in the first set of analyses, these results were statistically insignificant, as shown in **Table 2**. The presence of Chapter 40B, regardless of the number of 40B units, had no systematic impact on the growth in median family income using the same test for

¹ The coefficients on the control variables are interesting in their own right. The positive coefficient on median home value (1980) suggests that, other things equal, municipalities that had higher property values in 1980 saw proportionately higher home appreciation between 1980 and 2000. Similarly, the positive coefficient on median family income (1980) suggests that the higher income communities in 1980 experienced somewhat larger proportionate increases in family income over the next twenty years. Essentially, the rich became richer. But Chapter 40B had no impact on either real estate values or family income growth.

statistical significance as in the first analysis. Between 1980 and 2000, median household incomes in Massachusetts grew by 204 percent, or \$45,694. In fact, communities with Chapter 40B housing units experienced an increase of 106 percent in nominal family incomes, slightly more than the 102 percent increase in communities with no 40B developments.

Table 2 Statistical Results of Percent Change in Median Home Value and Percent Change in Median Household Income and the Percent of Total Housing units constructed using Chapter 40B

		Dependent Variables	
		Percent Change in Median Home Value (1980-2000)	Percent Change in Real Median Family Income (1980-2000)
Independent Variables	Percent of Total Housing Units constructed using Chapter 40B	1.466 (0.55)	0.108 (0.06)
	Median Home Value (1980)	0.00002179 (10.53)	
	Median Family Income (1980)		0.00001745 (3.99)
		N = 349 R ² = .240	N=349 R ² = .042

Conclusion

Based on these results, there is no reason to believe that the presence of one or more Chapter 40B projects in a community has any impact on either home value appreciation or family income. The increase in both property value and family income was not statistically lower for communities with Chapter 40B developments – and, if anything – a bit higher. The development of Chapter 40B housing units has not harmed property values or family incomes in the Commonwealth.