



CRS Report for Congress

The Low-Income Housing Tax Credit Program: The Fixed Subsidy and Variable Rate

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Summary

The Low-Income Housing Tax Credit (LIHTC) program was originally designed to provide financing for rehabilitated and newly constructed rental housing with a subsidy equal to 30% and 70% of their construction cost, respectively. To ensure that the 30% or 70% subsidies were achieved, the U.S. Department of the Treasury designed a formula for determining the LIHTC rate. The formula depends in part on current market interest rates that fluctuate over time. These fluctuations have also caused the LIHTC rate to change over time.

The Housing and Economic Recovery Act of 2008, P.L. 110-289, temporarily changed the credit rate formula used for new construction. The act effectively places a floor equal to 9% on the new construction tax credit rate. The tax credit rate that is applied to rehabilitation construction remains unaltered by the act.

This report, which will be updated as warranted by legislative changes, explains the original method for determining the LIHTC rate, the relationship between interest rates and the LIHTC rate, and the temporary 9% tax credit rate floor instituted by P.L. 110-289. Historical data on the new construction credit rate is analyzed in order to gain insight into the potential effect of the temporary 9% floor.

Introduction

The LIHTC, created under the Tax Reform Act of 1986, is a federally provided tax incentive that is intended to encourage the development of affordable rental housing for low-income families. LIHTCs are allocated to each state according to its population. States, in turn, award LIHTCs to developers of qualified projects. Developers can either keep the tax credits to reduce their own tax liability, or sell them to investors to raise capital for their projects. The LIHTC, which is claimed annually over a 10-year period, is used to offset a portion of the project's cost. The cost offset provides developers of

affordable rental housing a production subsidy. As a result, the tax credit can, potentially, lead to the construction of more affordable rental properties.¹

The Original LIHTC Rate Formula

The LIHTC program was originally designed to deliver a 30% or 70% subsidy, depending on the nature of the rental housing project. Rehabilitated and federally subsidized construction projects receive the 30% subsidy, while new non-federally subsidized construction projects generally receive the 70% subsidy. For the purposes of the LIHTC program the subsidy is the present value of the 10-year tax credit stream expressed as a fraction of the project's eligible basis (costs).

To ensure that the 30% or 70% subsidies were achieved, the U.S. Department of the Treasury designed a formula for determining the LIHTC rate. The formula, which is still used today, depends on three factors: the credit period length, the desired subsidy level, and the current interest rate. The credit period length and the subsidy levels are fixed in the formula, while the interest rate changes over time according to current market conditions. Given the current interest rate, the formula determines the LIHTC rate that delivers the desired subsidy level. Because two different subsidy levels are possible, the formula produces two different tax credit rates. A lower tax credit rate, generally referred to as the "4%" credit rate, is used to obtain the 30% rehabilitation subsidy. A higher tax credit rate, generally referred to as the "9%" credit rate, has been used to ensure the 70% subsidy for new construction. Once the credit rate has been determined, it is multiplied by the project's cost to obtain the annual LIHTC.

Historically, the rehabilitation and new construction tax credit rates have not been exactly 4% and 9%, respectively. The actual credit rates depend on the current interest rate used in the Treasury's formula. The interest rate used by the Treasury is subject to market fluctuations, and these fluctuations have caused the LIHTC rate to change over time.² For example, since 1987, the annual tax credit rate that has delivered the 30% rehabilitation construction subsidy has approximated 4%, although it has fallen as low as 3.33%.³ At the same time, the annual tax credit rate implied by the 70% new construction subsidy has approximated 9%, with a range between 7.89% and 9.27%.⁴ While the tax

¹ For more detailed information and analysis of the LIHTC program, see CRS Report RS22389, *An Introduction to the Design of the Low-Income Housing Tax Credit*, by Mark P. Keightley; and CRS Report RL33904, *The Low-Income Housing Tax Credit: A Framework for Evaluation*, by Pamela J. Jackson.

² The interest rate used by the Treasury Department is equal to 72% of the average of the annual federal mid-term rate and the annual federal long-term rate (Internal Revenue Service Rev. Rul. 88-6).

³ U.S. Department of the Treasury, Internal Revenue Service, *Revenue Ruling 2003-71, Table 4, Appropriate Percentages Under Section 42(b)(2) for July 2003*, Internal Revenue Bulletin 2003-27, July 7, 2003.

⁴ U.S. Department of the Treasury, Internal Revenue Service, *Revenue Ruling 89-65, Table 4, Appropriate Percentages Under Section 42(b)(2) for May 1989*, Internal Revenue Bulletin 1989-19, April 20, 1989; *Revenue Ruling 2008-28, Table 4, Appropriate Percentages Under Section 42(b)(2) for June 2008*, Internal Revenue Bulletin 2008-22, June 2, 2008.

credit rates have fluctuated over time, the project subsidies themselves have remained constant at 30% and 70%.

There may be a difference between the tax credits a project is expected to be awarded and the tax credits actually awarded. A credit award does not occur until a project is placed in service. Potential developers and investors interested in pursuing a LIHTC project, however, will form an expectation about the amount of credit they believe will be awarded once the project is completed. The accuracy of their predictions will determine to what extent the expected and actual credit amounts differ.

Regardless of the difference between the expected and actual credit award, the project subsidy value has always been fixed. This fixed subsidy feature of the LIHTC program was intended to insulate the value of the LIHTC from market fluctuations.

An Example

An example may be useful for understanding the original LIHTC rate formula, the relationship between the tax credit rate and the current interest rate, and the fixed project subsidy. Let us assume a newly constructed rental housing property with an eligible basis equal to \$500,000. Because the project is new construction, it is eligible to receive the “9%” tax credit. As previously mentioned, the actual tax credit rate awarded will not be exactly 9%, but rather set such that the project receives a subsidy equal to 70% of the project’s cost, or \$350,000. The tax credit rate that satisfies this requirement will depend on the interest rate used in the Treasury’s formula.

Table 1. LIHTC Rate Response to Interest Rate Change

	A	B	C
Eligible Basis (New Construction)	\$500,000	\$500,000	\$500,000
Current Interest Rate	1.90%	2.90%	3.90%
Tax Credit Rate	7.60%	7.93%	8.26%
Credit Per Year (Cost × Credit Rate)	\$38,035	\$39,668	\$41,322
Total Credit (Credit Per Year × 10)	\$380,350	\$396,680	\$413,220
Present Value of Credit Stream	\$350,000	\$350,000	\$350,000
Effective Subsidy (PV/Total Costs)	70%	70%	70%

Source: Author’s calculations (assumes 100% of building units are LIHTC).

To show the dependence of the tax credit rate on the current interest rate, **Table 1** presents three different interest rate scenarios. The middle column (B) assumes an interest rate of 2.90%, corresponding to the actual interest rate used by the Treasury to calculate the July 2008 tax credit rate. Given this interest rate and the fixed 10-year credit period, the LIHTC rate formula dictates a 7.93% tax credit rate. At this credit rate, the project generates \$39,668 in tax credits per year, or \$396,680 in total tax credits over 10 years. The present value of the tax credits, by design of the formula, equates to 70% of the projects costs.

Columns A and C of **Table 1** illustrate the relationship between the tax credit rate and the interest rate implied by the Treasury's original formula by considering a one percentage point deviation from the interest rate in column B. A decrease in the interest rate leads to a fall in the tax credit rate, whereas an increase in the interest rate causes the tax credit rate to rise. The subsidy, however, is constant at 70% of the project's cost across both of these interest rate changes.⁵

The relationship between the interest rate, the tax credit rate, and the subsidy follows from the original design of the formula used by the Treasury to fix the present value of the subsidy. To see this, consider an increase in the interest rate. All else equal, an increase in the interest rate would cause the present value of the tax credit subsidy to fall below 70%. As originally enacted, however, the law required that the present value remain constant. Thus, the tax credit rate increased to keep the present value of the total 10-year tax credit stream at 70%. Likewise, all else equal, a decrease in the interest rate would cause the present value of the tax credit subsidy to rise above 70%. Again, the original tax law prohibited this outcome. Therefore the tax credit rate declined in response to an interest rate decrease in order for the subsidy to be held constant.

The Housing and Economic Recovery Act of 2008

The Housing and Economic Recovery Act of 2008, P.L. 110-289, temporarily changes the LIHTC rate to not less than 9% for new construction placed in service before December 31, 2013. The change implies that the applicable tax credit rate for new construction will be the greater of 9% or the rate as determined under the original method described above.

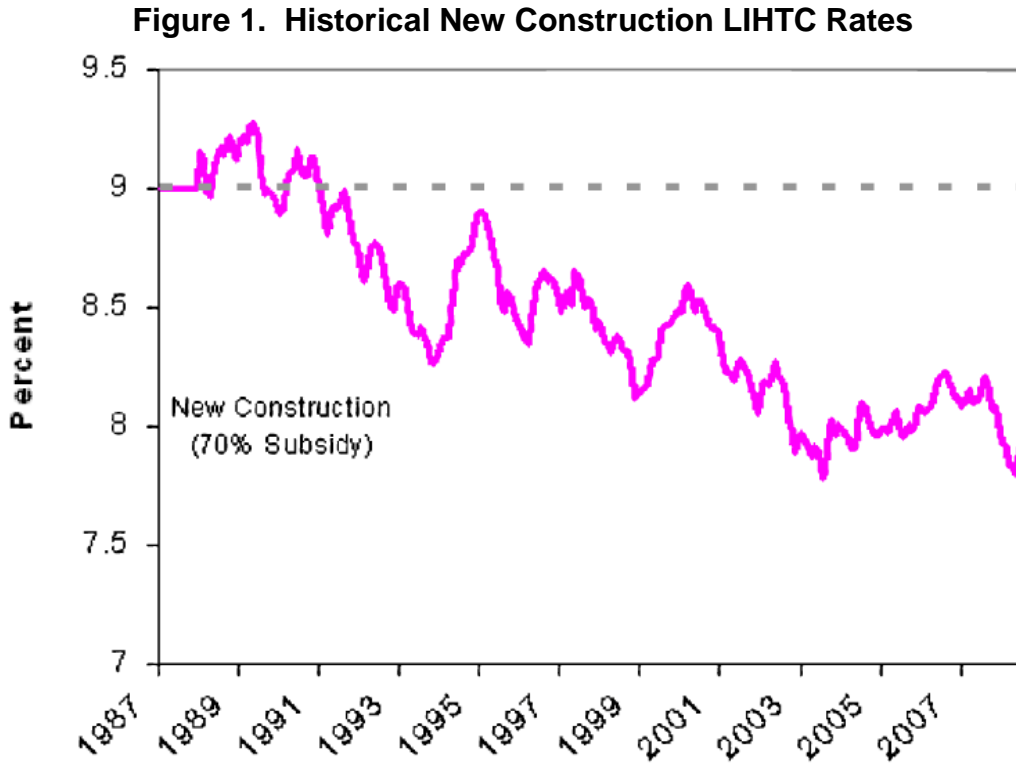
The effect of the 9% tax credit rate floor on the applicable new construction tax credit rate and the size of the subsidy will depend on the spread between the original variable credit rate, and the new, temporary floor. The credit rate floor will have no effect if the variable credit rate is greater than the 9% floor. This is because the credit rate floor imposes a lower bound below which the credit rate cannot fall. If the variable rate is above the floor, the floor becomes non-binding and therefore has no effect. In this scenario, the value of the subsidy remains at 70%

On the other hand, if the variable credit rate is below the floor, which has been the case recently, then the effect will be an increase in the credit rate. As a result, new construction projects will likely be conferred a subsidy above the 70% level. The size of the subsidy increase will depend on the extent to which the variable credit rates fall below the floor. The greater the difference, the larger will be the increase in the subsidy.

As previously mentioned, the new construction credit has recently been less than 9%, suggesting that the applicable credit rate and subsidy levels will likely increase. **Figure 1** provides some indication as to how much the value of the new construction subsidy may increase. The solid line in the figure represents the monthly new construction LIHTC rate since January 1987, while the dashed line indicates the temporary 9% floor. In the recent past there has been a downward trend in the new construction credit rate. If this trend

⁵ The **Appendix** verifies that the subsidies in **Table 1** are indeed constant across all three interest rate scenarios.

continues then the credit rate as determined under the original formula may be expected to be below the 9% floor, and the new method for determining the new construction credit may be expected to increase the value of the subsidy new construction projects receive. Current conditions, however, may not accurately predict future conditions, and **Figure 1** must therefore be interpreted with some caution.



Source: Novogradac & Company LLP, Affordable Housing Resource Center, Tax Credit Percentages, [http://www.novoco.com/low_income_housing/facts_figures/tax_credit_2008.php], visited on July 14, 2008.

Appendix. Present Value of Low-Income Tax Credit Stream

This example illustrates empirically that the present value of the 10-year tax credit stream presented in **Table 1** is constant across all three interest rate scenarios.

$$PV \text{ tax credits} = \sum_{t=1}^{10} \frac{k \times Q}{(1+r)^{t-1}}$$

Qualified costs are equal to \$500,000 in the example presented in **Table 1**. The middle column of **Table 1** assumes an interest rate of 2.90% which results in a credit rate of 7.93%. Plugging these values in to the formula above gives

$$\begin{aligned} PV \text{ tax credits} &= \sum_{t=1}^{10} \frac{7.93\% \times \$500,000}{(1+2.90\%)^{t-1}} \\ &= \frac{7.93\% \times \$500,000}{(1+2.90\%)^0} + \frac{7.93\% \times \$500,000}{(1+2.90\%)^1} + \dots + \frac{7.93\% \times \$500,000}{(1+2.90\%)^9} \\ &= \frac{\$39,668}{(1+2.90\%)^0} + \frac{\$39,668}{(1+2.90\%)^1} + \dots + \frac{\$39,668}{(1+2.90\%)^9} \\ &= \$350,000. \end{aligned}$$

The scenario presented in the first column of **Table 1** differs from the middle column only in the assumed interest rate and credit rate. The interest rate and credit rate from the first column were 1.90% and 7.60%, respectively. Inserting these values into the present-value formula produces

$$\begin{aligned} PV \text{ tax credits} &= \sum_{t=1}^{10} \frac{7.60\% \times \$500,000}{(1+1.90\%)^{t-1}} \\ &= \$350,000. \end{aligned}$$

The last column assumes that the interest rate is 3.90% and that the credit rate is 8.26%. Using these rates and the present-value formula gives

$$\begin{aligned} PV \text{ tax credits} &= \sum_{t=1}^{10} \frac{8.26\% \times \$500,000}{(1+3.90\%)^{t-1}} \\ &= \$350,000. \end{aligned}$$

Thus, while the credit rate varies across the three interest rate scenarios in **Table 1**, the present value of the 10-year tax credit stream remains constant at \$350,000, or 70% of the project's total cost.