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

Updated September 1, 2015

Congressional Research Service
https://crsreports.congress.gov
RS22917

CRS REPORT
Prepared for Members and
Committees of Congress

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 construction costs, 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 LIHTC rate is a percentage of the initial qualified investment in a low-income housing project. A higher LIHTC rate generates a larger tax credit. The formula used to determine the rate depends in part on current market interest rates that fluctuate over time. These fluctuations have also caused the LIHTC rate to change over time. Developers and investors have expressed concern over the uncertainty that the variable LIHTC rate changes introduce into the program.

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 placed a floor equal to 9% on the new construction LIHTC rate. The 9% credit rate floor originally only applied to new construction placed in service before December 31, 2013. The tax credit rate (known as the 4% credit) that is applied to rehabilitation construction remained unaltered by the act. The American Taxpayer Relief Act of 2012 (P.L. 112-240) extended the 9% floor for credit allocations made before January 1, 2014. Most recently, the Tax Increase Prevention Act of 2014 (P.L. 113-295) retroactively extended the 9% floor through the end of 2014.

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, the temporary 9% tax credit rate floor instituted by P.L. 110-289 and extended by P.L. 112-240 and P.L. 113-295, and recent proposals to extend the floor again. Historical data on the credit rates are also analyzed in order to gain insight into the potential effect of the LIHTC rate floors.

Contents

Introduction 1
The Original LIHTC Rate Formula 1
An Example 2
Legislative Changes and the 9% Floor 3

Figures

Figure 1. Historical LIHTC Rates 4

Tables

Table 1. LIHTC Rate Response to Interest Rate Change 3

Appendixes

Appendix. Present Value of Low-Income Tax Credit Stream 6

Contacts

Author Information 6

Introduction

The low-income tax credit (LIHTC), created under the Tax Reform Act of 1986, P.L. 99-514, 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, and, as a result, the tax credit can potentially lead to the construction of more affordable rental properties. For a basic introduction to the LIHTC program, see CRS Report RS22389, An Introduction to the Low-Income Housing Tax Credit, by Mark P. Keightley and Jeffrey M. Stupak.

The Original LIHTC Rate Formula

Two types of LIHTCs are available depending on the nature of the rental housing project. The so-called 9% credit is designed to deliver a 70% subsidy to new rental construction, while the 4% credit is designed to deliver a 30% subsidy to rehabilitated housing and new construction that is financed with tax-exempt bonds.[1] For the purposes of the 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). It is the subsidy levels (30% or 70%) that are explicitly specified in the Internal Revenue Code (IRC), not the credit rates.[2] The credit rates are to be set such that the subsidy levels specified in statute are delivered.

It is important to distinguish between a project's eligible basis and its total cost of development. Only the costs that are included in a project's eligible basis can be offset with tax credits. Eligible basis, however, excludes a number of important costs, particularly the cost of land, which can be significant. Thus, while the credit subsidizes a project's eligible basis up to 70%, the credit does not provide a 70% subsidy for the total cost of development.

To ensure that the 30% or 70% subsidies are achieved, the U.S. Department of the Treasury uses a formula for determining the LIHTC rate. The formula 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 by law, 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.[3] Because two different subsidy levels are possible, the formula produces two different tax credit rates—the 4% credit to ensure the 30% rehabilitation subsidy, and the 9% credit to ensure the 70% subsidy for new construction. Once the credit rate has been determined, it is multiplied by the project's eligible basis to obtain the annual amount of LIHTCs a project will receive.

[1] A developer using federal tax-exempt bonds can qualify for the 9% credit if they reduce the project's eligible basis by the amount of the tax-exempt bond subsidy. The applicable federal rates are based on Treasury security yields.

[2] IRC §42(b).

[3] The interest rate used by the Treasury Department is equal to 72% of the average of the mid-term applicable federal rate and the long-term applicable federal rate.

Historically, the rehabilitation and new construction tax credit rates have not been exactly 4% and 9%, respectively.[4] The applicable credit rates depend on the Treasury's formula, which, in turn, depends on monthly interest rates. Since interest rates can change from month to month, so too can the LIHTC rates.[5] For example, since 1987, the tax credit rate that has delivered the 30% rehabilitation construction subsidy has approximated 4%, although it has fallen as low as 3.15%.[6] At the same time, the tax credit rate implied by the 70% new construction subsidy has roughly approximated 9%, but has fluctuated between 7.35% and 9.27%.[7] While the tax credit rates have fluctuated over time, the project subsidies themselves have remained constant at 30% and 70%.

The month-to-month fluctuation in credit rates, when combined with when the rates are actually determined, can result in developers and investors being awarded an amount of credits that is different than what they initially expected. Developers must begin arranging financing with investors early in the planning phase of a project, which requires that an expectation be made early in the planning phase about the amount of credits a project will generate. At the latest, however, tax credits may not be awarded until a project is placed in service (completed and occupied), which may be well over a year after the planning phase. This creates some uncertainty for those involved in the project.

There is also a potential issue with the method used by Treasury to ensure that the 30% and 70% subsidies are achieved; particularly, that the method may be overstating the subsidy that the LIHTC delivers. Treasury is required (by law) to use interest rates that are tied to the federal government's cost of borrowing when computing the present value of the stream of tax credits. Since U.S. government bonds are generally viewed as (practically) risk free, the interest rate they carry is generally below private market interest rates. But LIHTC projects are not risk free. Therefore, it may be more appropriate to compute the LIHTC subsidy based on a higher interest rate that reflects the riskiness of these developments. Doing so would likely produce a subsidy estimate below the 30% and 70% thresholds, unless the credit rate was increased to compensate for the use of a higher interest rate.

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.

[4] The Tax Reform Act of 1986 specified that only buildings placed in service in 1987 were to receive exactly a 4% or 9% credit rate. Buildings placed in service after that were to receive a credit rate that delivered a 30% or 70% subsidy.

[5] The interest rate used by the Treasury Department is equal to 72% of the average of the mid-term applicable federal rate and the long-term applicable federal rate. The applicable federal rates are based on Treasury security yields.

[6] U.S. Department of the Treasury, Internal Revenue Service, Revenue Ruling 2012-21, *Table 4, Appropriate Percentages Under Section 42(b)(1) for August 2012.*

[7] 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,* and *Revenue Ruling 2012-24, Table 4, Appropriate Percentages Under Section 42(b)(1) for September 2012.*

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%. 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 project's eligible basis, or $350,000.

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 eligible basis across both of these interest rate changes.[8]

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. Specifically, with no tax credit rate change, 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.[9] 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.

Legislative Changes and the 9% Floor

The Housing and Economic Recovery Act of 2008 (HERA, P.L. 110-289) temporarily changed the LIHTC rate to be no less than 9% for new construction placed in service before December 31, 2013. The American Taxpayer Relief Act of 2012 (P.L. 112-240) extended the 9% floor for credit allocations made before January 1, 2014. Most recently, the Tax Increase Prevention Act of 2014 (P.L. 113-295) extended the floor through the end of 2014. The change enacted by HERA and extended by P.L. 112-240 and P.L. 113-295 implied that the applicable tax credit rate for new construction was temporarily the greater of 9% or the rate as determined under the original

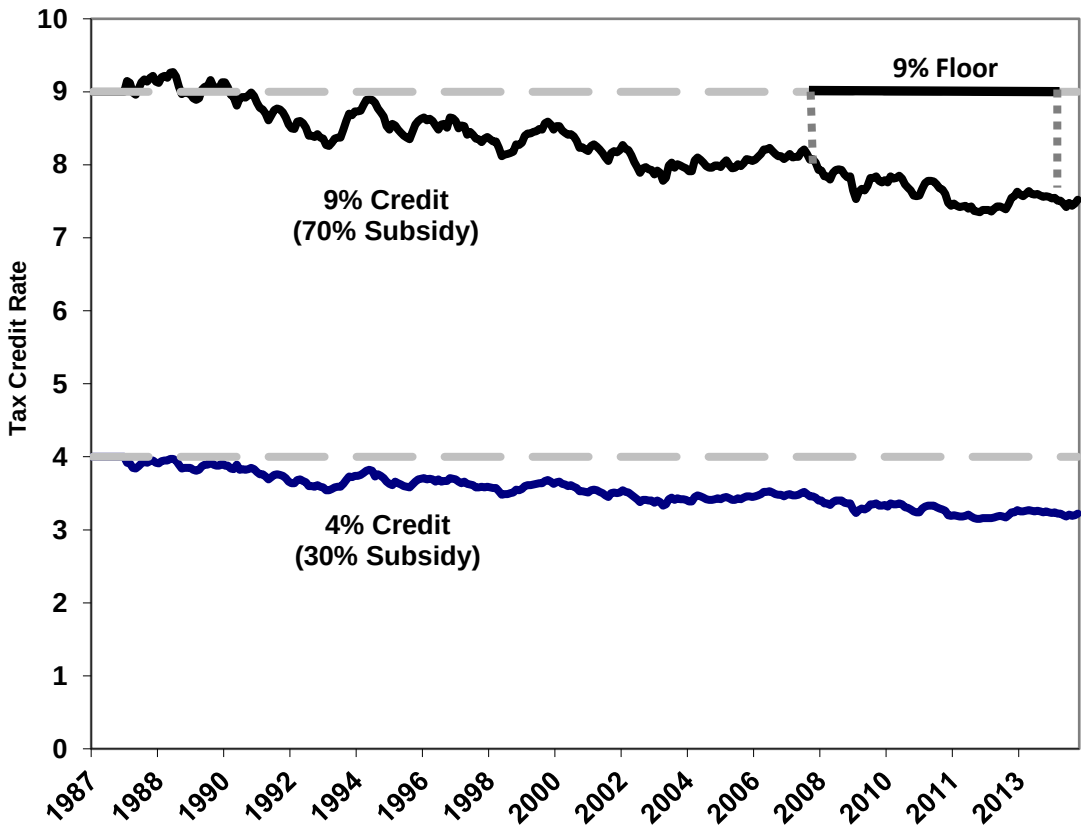
[8] The **Appendix** verifies that the subsidies in **Table 1** are indeed constant across all three interest rate scenarios.

[9] Except buildings placed in service in 1987. See footnote 4.

method described above. In the 114th Congress, H.R. 1142 and S. 1193 would permanently extend the 9% floor and introduce a permanent floor for the 4% credit, while S. 1946 would only extend the 9% for any credit allocations made through the end of 2016.

The effect of the 9% tax credit rate floor (or 4% floor) depends on the spread between the original variable credit rate and the credit rate floor (see **Figure 1**). The credit rate floor has no effect if the variable credit rate is greater than the 9% floor. This is because the credit rate floor only imposes a lower bound below which the credit rate cannot fall. If the variable rate is above the floor, then the variable rate is used to determine the credits a LIHTC project will receive. In this scenario, the value of the subsidy remains at 70% of eligible basis.

Figure 1. Historical LIHTC Rates



Source: CRS analysis of data from Novogradac & Company LLP, Affordable Housing Resource Center, Tax Credit Percentages, http://www.novoco.com/low_income_housing/facts_figures, visited on July 16, 2015.

If, however, the variable credit rate is below the floor, then the credit rate increases to 9%. As a result, new construction projects will receive a subsidy above the 70% of eligible basis, with the subsidy increasing as the difference between the variable credit rate and the 9% floor increases. This had been the case while the 9% floor was in place, leading the effective subsidy flowing to new LIHTC construction to rise above 70%.

The increase in the subsidy resulting from the floor can be significant. For example, based on interest rates in July 2015, the 9% floor would produce a subsidy equal to 84% of a project's

eligible basis.[10] Absent the floor, the subsidy, by design, would have been 70%. Thus, the floor increased the subsidy for construction by about 20% (or 14 percentage points). As mentioned previously, however, there is the issue of what is the appropriate interest rate to use when computing the LIHTC subsidy. The subsidy presented here for when the 9% floor is in place was computed using the Treasury method, which may be overstating the subsidy that is generated.

As **Figure 1** shows, there has been a recent trend downward in the 4% credit, similar to that exhibited by the 9% credit. If this trend continues then the 4% credit rate as determined under the original formula may be expected to be below the proposed floor, and the new method for determining the 4% credit would increase the value of the subsidy these projects receive to above 30%. For example, 4% credit-financed housing placed in service in July 2015 would have received a 37% subsidy had the floor been in place.[11]

[10] The subsidy was calculated as the present value of the 10-year stream of annual tax credits the 9% floor provides to a hypothetical project relative to the project's cost. The discount rate used was equal to 72% of the average of the mid-term and long-term applicable federal rates (AFR) for July 2015 as listed in Internal Revenue Bulletin 2015-15, http://www.irs.gov/pub/irs-drop/rr-15-15.pdf. This is the same discount rate used in the Treasury's tax credit formula.

[11] The subsidy was calculated as the present value of the 10-year stream of annual tax credits the 4% floor would provide to a hypothetical project relative to the project's cost. The discount rate used was equal to 72% of the average of the mid-term and long-term applicable federal rates (AFR) for July 2015 as listed in Internal Revenue Bulletin 2015-15, http://www.irs.gov/pub/irs-drop/rr-15-15.pdf.

Appendix. Present Value of Low-Income Tax Credit Stream

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

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

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

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

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

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

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

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

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.

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