CBO STAFF MEMORANDUM

THE COST-EFFECTIVENESS OF THE LOW-INCOME HOUSING TAX CREDIT COMPARED WITH HOUSING VOUCHERS

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This Congressional Budget Office Staff Memorandum assesses the cost-effectiveness and long-run budgetary impact of extending the low-income housing credit. It was prepared in response to a request from Representative Willis D. Gradison, Jr., the ranking Republican member of the House Committee on the Budget.

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The low-income housing credit is a tax incentive for individuals and corporations to invest in low-income housing. Expenditures for new construction and rehabilitation of low-income housing are eligible for a credit paid annually for 10 years. Enacted as part of the Tax Reform Act of 1986, the credit had two objectives: it replaced a variety of incentives for investment in low-income housing, and it targeted more assistance to lower-income households than did the incentives available under prior law.1

The low-income housing credit represents one approach to providing affordable housing for poor people. The housing voucher program represents a different approach. The housing credit heavily subsidizes the construction and renovation of units that are set aside for low-income households at below-market rents. Under the housing voucher program, a low-income household receives a housing voucher equal to the difference between average rents for a suitable rental unit ("fair market rent") and 30 percent of the household's income. The voucher may be used like cash to pay for all or part of the housing costs on any rental unit that meets minimum quality standards set by the Department of Housing and Urban Development (HUD).

1. The incentives under prior law included special accelerated depreciation, five-year amortization of rehabilitation expenses, expensing of interest and taxes paid during construction, and tax-exempt bond financing for multifamily residential rental property.
The low-income housing credit is intended to address two problems: the shrinking supply of affordable housing for poor people, and the substandard quality of units typically available to poor people. However, the low-income housing credit, like other supply subsidy mechanisms, is unlikely to increase substantially the supply of affordable housing. Subsidized housing largely replaces other housing that would have been available through the private, unsubsidized housing market. Moreover, while the new subsidized housing is almost certainly better than the housing it replaces, the improvement in quality is generally worth much less to tenants than its costs to the government. As a result, the government can provide assistance of equal value to tenants through housing vouchers at a fraction of the cost of credits.

The relative efficiency of housing vouchers as compared with low-income housing credits stems from the different incentives created under the two programs, as well as from structural differences. Since housing vouchers are provided directly to low-income households, they are likely to be worth almost as much as cash to these families. The primary source of inefficiency in vouchers arises from the overhead costs of administering the program. In contrast, the tax credit may allow investors to capture much of the benefits for themselves rather than their tenants. Thus, the housing that is subsidized through credits is more suited to the needs of investors than poor renters.
Although many features of the tax credit, such as limited rent levels and oversight by state housing agencies, are designed to reconcile this conflict in favor of renters, available evidence suggests that the measures are ineffective. In addition, overhead and administrative costs appear to be much greater if a low-income housing unit is subsidized with tax credits than if it is subsidized with a voucher, thereby exacerbating the inefficiency.

However, in special situations, low-income housing credits can serve objectives that housing vouchers cannot. State and local housing authorities may use housing credits as part of a program to revitalize neighborhoods. In contrast, because vouchers are portable, they may encourage low-income tenants to abandon declining neighborhoods. In addition, credits may be more effective than vouchers in certain tight housing markets.

The question of the cost-effectiveness of low-income housing credits relative to vouchers is particularly germane because current funding levels allow only a fraction of qualifying families to receive rental assistance. At the same time, the low-income housing credit is becoming a substantial housing program. The tax expenditure on low-income housing credits was $0.6 billion in 1991, compared with $1 billion spent on housing vouchers. If the housing credit is not extended beyond its scheduled expiration in mid-1992, the tax expenditure will grow to $1.4 billion by 1997. But if new credits continue to
be authorized, the long-run cost of low-income housing credits could exceed $3 billion per year.

DESCRIPTION OF THE LOW-INCOME HOUSING CREDIT

The low-income housing credit equals a percentage of the depreciable costs incurred to provide low-income housing units. Individuals and corporations can claim the credit on their income tax returns over 10 years. For new construction and costs of renovation on qualified housing that does not receive other federal subsidies, the credits may have a present value of up to 70 percent of the depreciable basis in low-income units. A reduced credit with a present value of up to 30 percent is available for certain subsidized housing and for the purchase cost of existing housing that is rehabilitated. For January 1992, the annual credit limits were set at 8.70 percent for the credit with a present value of 70 percent, and 3.73 percent for the credit with a present value of 30 percent.2

To qualify for the credit, either 20 percent of units in a housing project must be rented to tenants with incomes below 50 percent of the area's median

2. The underlying after-tax discount rate, based on an average of medium- and long-term federal rates, is 5.2 percent.
income, adjusted for family size, or 40 percent of units must be rented to tenants with incomes below 60 percent of the median income. The rent on a low-income unit is limited to 30 percent of the qualifying income level, which is determined by assuming a family size equal to 1.5 times the number of bedrooms in the unit.

Past tax credits are recaptured with interest if the project fails to comply with the rent limits and set-aside requirements during the first 15 years. The percentage of credits recaptured phases out in the 11th through the 15th years. In addition, project owners must agree with the state housing agency to provide low-income units for at least 30 years. Owners may terminate this commitment after 15 years. However, the low-income housing units must be offered for sale at a price no greater than the owner’s investment adjusted for inflation to any buyer who agrees with the agency to continue restricted use. If the state housing agency cannot find a buyer, the low-income units may be converted to another use, but low-income tenants can remain in their units with restricted rents for three years.

Total credits are subject to statutory limits. Credit authority is allocated by designated state housing authorities, whose mandate is to limit the credit allocation for each project so that investors and project organizers do not reap excessive profits. The amount of new annual credits that each state may
allocate for projects that do not receive tax-exempt bond financing is limited to $1.25 per capita. Projects financed with tax-exempt bonds are subject to a separate cap that limits states in issuing tax-exempt bonds. The 1990 census estimated the U.S. population at 250 million. Based on that figure, the maximum amount of credits that states could have authorized in 1990 was $312.5 million, plus credits for bond-financed projects.

The low-income housing credit is scheduled to expire on June 30, 1992. The Congress has extended it three times beyond earlier scheduled expirations since it was enacted in 1986. It would have been made permanent by the tax bill passed on March 20, but the President vetoed the bill.

HOUSING SUBSIDIES: SUPPLY AND DEMAND

In theory, supply and demand subsidies can have the same effect on net (after-tax) prices paid by consumers and on the quantity of goods supplied. Thus, a rent subsidy can assist poor tenants, regardless of whether the subsidy is paid directly to the tenant or the landlord. But neither the low-income housing credit nor the housing voucher subsidizes rents. The low-income housing credit subsidizes the capital costs of producers of new low-income
housing, whereas housing vouchers subsidize the income of consumers of low-income housing. In addition, both programs impose limits on the use of the subsidies. These departures from theoretically pure form explain many of the limitations of both programs in practice.³

Two of the differences between the low-income housing credit and a theoretical supply subsidy pose problems. The first is that, because of government budget constraints, the credit is available only for a limited number of housing units. The second is that the subsidy applies only to capital investment rather than the output of housing services.

The first problem is serious. Without constraints on investors and landlords, a subsidy available only to certain projects would simply turn into profits for the investors lucky enough to get the subsidy. The problem was addressed in the design of the low-income housing credit by adding requirements on units subsidized by credits, the most important of which were limits on the rents charged to low-income tenants.

³ The former Deputy Assistant Secretary of the Treasury, C. Eugene Steuerle, raised many of these theoretical concerns in his testimony for the Administration before the House Ways and Means Committee on March 2, 1988. A more recent source is the Joint Committee on Taxation, Description and Analysis of Tax Provisions Expiring in 1992, Committee Print, JCS-2-92 (January 27, 1992), pp. 69-79.
Rent controls also create problems. Because rents are set below market levels, rental units may be worth less to tenants than they cost to produce. For example, developers may build projects in middle-income neighborhoods far from public transportation and the workplaces of poor tenants. Landlords can still attract tenants because the rents are limited, but some tenants might leave the project for more convenient housing if rents were increased only slightly. In addition, rent controls remove the incentive to keep units in good repair because there is an excess supply of tenants at the restricted rent levels. This excess supply also allows landlords to discriminate among tenants, although certain forms of discrimination are prohibited by federal housing laws. The result is that the benefit to tenants might be only a fraction of the cost of the subsidy to the government.

The second difference between low-income housing credits and a rent subsidy is that credits are available only for the costs of constructing new housing or restoring existing units, not for the housing services for which tenants pay. This approach allows allocating authorities to choose how and where the credits are spent. Thus, the credit may be used as part of a program to preserve or revive neighborhoods.

The drawback of this approach is that new housing is the most expensive source of supply. Without subsidies, most low-income housing would come
from the existing stock of housing. In economic terms, this means that production of housing with the credit is more capital intensive than it would be without a capital subsidy. This increased capital intensity is inefficient in the sense that the capital could be more productive if used elsewhere. In addition, because the subsidy applies only to the initial capital costs rather than the services actually produced and because rents are capped, as explained above, there is no incentive to maintain the units. Experience with HUD programs that subsidize new investment suggests that many subsidized units cannot remain in the low-income stock for long without additional subsidies.

Similarly, housing vouchers are different from a theoretical demand subsidy. For tenants who would spend more than 30 percent of their income on housing without a subsidy—the vast majority of low-income households—housing vouchers are essentially an income supplement. To the extent that the housing problems of poor families stem from a lack of income, vouchers address that problem.

The advantage of this approach is that vouchers can have the same value to tenants as the cost to the government, net of overhead costs. Nonetheless, a smaller fraction of housing vouchers would be spent on housing than would be the case with a rent subsidy of equal cost to the government. Households
that receive vouchers may spend the additional income on other goods and services that they otherwise would have trouble affording, such as food and clothing. From an economic point of view, the ability to spend the subsidy on other goods makes it more efficient. However, if society has a special interest in earmarking the subsidy for housing, then vouchers may be inferior compared with a rent credit or other supply subsidy.

The simple analysis of supply and demand assumes a state of equilibrium wherein tenants find the best apartment they can afford, and developers produce every housing unit that will earn them a competitive rate of return. A special problem in the housing market is that adjustment to a new equilibrium may be slow. Tenants who receive a housing voucher will not move if better housing is not worth the costs of moving. Similarly, high development costs and local regulations may make the supply of housing slow to adjust to higher rent levels.

In the long run, supply and demand adjust to new levels of equilibrium. But in the short run adjustment costs may diminish the effectiveness of vouchers as compared with low-income housing credits, especially in tight housing markets. When tenants will not move, none of the housing vouchers would go to improved housing, and landlords can capture part of the subsidy by raising rents. If the supply of housing does not adjust, then rent levels will
increase, which means that part of the housing vouchers would pay for higher rents and households that do not receive vouchers could be worse off in the short run.

The final consideration in comparing housing credits with housing vouchers is the cost of administration and financing. These costs depend on how efficiently government agencies administer the programs and on the efficiency of financial markets and are thus hard to predict based on theory alone. In addition, constraints imposed by the government in an effort to achieve other objectives can exact a cost in terms of efficiency. For example, HUD requires voucher recipients to find housing that meets housing standards in an effort to guarantee that subsidized units are of decent quality. However, for very poor tenants whose housing often falls far below standards when not subsidized, the standards might substantially diminish the value of the vouchers. Thus, some households that qualify for vouchers choose not to take them because they would have to move out of their existing housing. In the case of the housing credit, rent controls cause a similar inefficiency, as described above.

In addition, efforts to target the low-income housing credit so that more of the subsidy reaches tenants have significantly increased the administrative costs of the allocating housing agencies, HUD, and the Internal Revenue
Service (IRS). The fundamental problem is that minimizing the excess profit on individual projects requires a great deal of information on the part of regulators, and that information is costly to obtain and evaluate and costly for the taxpayer to provide. Consequently, at least part of the excess profits reclaimed cover additional overhead costs rather than assisting low-income households.

Based on these considerations, it would appear that a dollar spent on housing vouchers is likely to be worth more to poor tenants in most housing markets than a dollar spent on low-income housing credits.

EVIDENCE ON THE EFFECTIVENESS OF LOW-INCOME HOUSING CREDITS WHEN COMPARED WITH VOUCHERS

The housing voucher program has been studied extensively. Its theoretical advantages and disadvantages, described above, have largely been borne out in practice. The primary advantage of vouchers is that, for households that are willing to move and that place at least a minimal value on decent housing, the value of the voucher to tenants is close to the cost to the government, net of administrative costs, which average about 8.2 percent of fair market rent for a two-bedroom unit.
However, vouchers may not be effective in all housing markets. In tight housing markets, some families have been unable to find suitable housing because of local shortages of certain types of units that meet HUD's rental guidelines for vouchers. Moreover, families in substandard housing who are unwilling to move cannot benefit from vouchers, at least in the short run. In addition, vouchers increase housing consumption by only a fraction of the amount of the voucher (the rest is spent on other goods and services). Finally, vouchers cannot be targeted to assist particular neighborhoods.

There is little direct evidence on the current low-income housing credit. However, available evidence on direct supply subsidies similar to the low-income housing credit and evidence from the 1988-1989 tax credit program, before some important reforms, suggest that the implications of theory, presented in the last section, have been borne out.

Experience with direct housing supply subsidies suggests that many of the housing units subsidized by credits will simply replace private housing, although targeting by income reduces this problem. A study of the effect of supply subsidies that HUD administered in the 1960s and 1970s estimated that for every three units of subsidized housing constructed, starts of unsubsidized
housing declined by at least two units.\textsuperscript{4} For subsidies aimed at middle-income households, this crowding out approached 100 percent. The study could not examine the effect of subsidized new construction on the quantity of existing housing available to the poor. To the extent that subsidized housing removes households from the market for unsubsidized housing, it lowers the demand for unsubsidized housing and would thus be expected to cause some of those units to leave the low-income housing stock. As a result, subsidized housing may largely displace unsubsidized housing without having much effect on market rents or the availability of housing in the unsubsidized sector.\textsuperscript{5}

Even when units subsidized by the credit represented net additions to the housing stock, the cost of providing these units has been greater than the cost of providing affordable housing for low-income families through vouchers. One reason is that the credit subsidizes newly constructed housing, which is much more expensive than existing housing. In 1988, about half of the units subsidized through the low-income housing credit were newly constructed.\textsuperscript{6}

\begin{itemize}
\item[5.] The private unsubsidized market currently provides more than 70 percent of low-income rental housing.
\item[6.] Department of Housing and Urban Development, "Evaluation of the Low-Income Housing Tax Credit: Final Report" (February 1991). The study, prepared under contract by ICF, Inc., was based on samples of developers and state housing agencies. The study cautions that the statistics may be biased because of lack of response. In
But without tax subsidies almost all low-rent housing would come from older existing housing rather than new construction. Thus, the subsidy necessary to make new housing "affordable" is larger than the subsidy required for existing housing.

HUD has estimated that newly constructed housing costs twice as much as housing vouchers, which draw primarily from the existing housing stock. The HUD-commissioned study of early experience with low-income housing credits estimated that, for units not receiving other subsidies, the present value of low-income housing credits for the 15-year set-aside period was 1.8 times what it would cost to provide vouchers to allow tenants to rent similar units.\(^7\) The cost of the credit reflects the combined average cost of newly constructed and substantially rehabilitated housing, both of which are more expensive than existing unimproved housing.

As with all project-based (rather than tenant-based) housing subsidies, the low-income housing credit does not guarantee that the housing produced will be of the appropriate size, quality, or location for low-income tenants. For example, experience with public housing programs suggests that segregating low-income residents in massive housing projects creates social addition, the applicable law was modified twice since 1988, so inferences about characteristics of new projects eligible for the credit may not be valid.

7. The required set-aside period was 15 years for credits allocated before 1989.
problems. For this reason, the credit was designed to facilitate mixed-income housing. But almost all of the low-income housing credits issued in 1987 and 1988 were used on projects that were substantially low-income: 91 percent of units qualified for the tax credit. The average project, weighted by units, was large: 146 units in 1988. In addition, although large low-income housing units are in short supply in many localities, only 12 percent of units subsidized by tax credits had three bedrooms and only 1 percent had four or more.

Subsidized housing has had much higher overhead costs than unsubsidized housing. The HUD study found that the syndication costs of finding investors for low-income housing projects were substantial, averaging around 20 percent in 1988. Moreover, a 1977 study by the Congressional Budget Office estimated that less than half of the low-income housing tax subsidies under 1977 law actually reached the builder/developer or low-income renter. Under the lower and flatter tax rates prevailing after the Tax Reform Act of 1986, tax windfalls to high-bracket investors are probably reduced. However, limits on the use of tax credits and the risk of recapture if a housing project fails to comply with the credit requirements may raise required returns to investors. The administrative costs of state housing agencies, the IRS, and HUD must also be added to overhead.

Finally, the credit may exacerbate the problems of availability for the poorest tenants. Since rent levels are keyed to the qualifying income levels—usually 60 percent of the area’s median income—they are likely to be out of reach of very poor households. For example, nationwide, median family income was $21,423 in 1990. Based on 60 percent of that income, the maximum rent in a low-income housing credit unit would be $321 per month. Although that rent is nearly 10 percent lower than the median rent paid by poor households for unsubsidized housing in 1989, it would still be 44 percent of the income of a full-time worker earning the minimum wage, which exceeds HUD’s affordability criterion—30 percent of income—by half.9 Moreover, some of the units that are replaced with housing subsidized by credit are likely to be those that would otherwise have been available at lower rents.10 This displacement could occur, for example, because deteriorated housing is renovated by using the tax credits. Although the renovation improves the average quality of the housing stock, it can make things worse for the very poor unless the government is willing to commit itself to helping them afford better housing.


10. For example, the Joint Center for Housing Studies estimates that 1.4 million unsubsidized housing units rented for $200 or less (including utilities) and that 3.6 million rented for between $200 and $299 in 1989.
State housing agencies and HUD have addressed some of these problems by combining the low-income housing credit with other subsidies, such as rental assistance through Section 8 of the United States Housing Act of 1937. That assistance makes the housing affordable to lower-income tenants, but at higher cost to the government. The HUD study estimated that the direct cost of low-income housing credits and other subsidies, amortized over the 15-year life of projects started in 1987 and 1988, was 2.4 times as much as the cost of vouchers that would allow tenants to obtain units with the same fair market rent. By comparison, as discussed above, the cost of the credits was 1.8 times that of vouchers for units that did not receive other government subsidies.

The estimates of the relative cost of vouchers and credits compiled in the HUD study have limited relevance to the low-income housing credit under current law. To the extent that tenants would choose different housing if they had vouchers, the cost of credits relative to vouchers is understated. The study also ignored the administrative costs of credits and vouchers. Perhaps most important, the HUD estimates do not reflect the effects of reforms to both the tax and housing laws enacted in 1989.

11. HUD, "Evaluation of the Low-Income Housing Tax Credit."
By 1989, it was clear that some projects receiving low-income housing credits and other subsidies were being excessively subsidized. In particular, some housing projects assisted through housing credits and HUD's Section 8 moderate rehabilitation program received credits worth more than 100 percent of the cost of the projects. In response to concerns about the inefficiency of these subsidies, in 1989 the Congress repealed the Section 8 moderate rehabilitation program and imposed additional limits on credit projects.

An important component of the 1989 reforms was a mandate that state housing agencies study each credit application to determine the minimum amount of credit necessary to pay investors a fair rate of return. In addition, syndication fees were limited. If the housing project also received assistance from HUD, then that agency also had to evaluate the subsidies provided to make sure that the total subsidy was not excessive. Consequently, the administrative burdens on both HUD and state housing agencies have been multiplied and the amount of information that must be provided by developers has vastly increased. Thus, the reforms may have converted excess profits into excessive overhead costs, with little or no increase in the overall efficiency of the housing credit.
Another reform enacted in 1989 required that new projects have a plan for providing low-income housing for 30 years. If 10 years of credits can produce good quality housing for 30 years, the efficiency of the credit would be significantly understated by the HUD study. The 1989 law, however, did not include meaningful penalties for investors who fail to provide housing beyond 15 years. A problem explained earlier is that landlords may be able to let units deteriorate without losing tenants because rents are below market levels. In addition, by requiring ongoing low-income use far beyond the subsidy period, the law may give investors an incentive to let their projects run down to the point where the units are worth no more than the applicable limits on rent. By following this strategy, project owners could continue to provide low-income housing without losing money; otherwise they could sell the units after 15 years, subject to the limit on the resale price, without losing the capital invested for maintenance and improvements.

Moreover, by allowing the projects to decay, the owners lessen the chance that a new owner will find it profitable to purchase the units to provide low-income housing, which would allow the project owners to convert projects to other, more profitable uses. Consequently, the value of the subsidy to tenants is likely to fall and be essentially nil after 15 years, whether or not the units are retained as low-income housing. That behavior would be consistent with past front-loaded capital subsidies, such as mortgage subsidies through
Section 236 and public housing projects built in the 1960s and 1970s. Many of the units subsidized under these programs decayed rapidly and required additional subsidies to maintain them as adequate low-income housing.

In summary, although the reforms enacted in 1989 may stem the worst abuses of the credit mechanism, they cannot be counted on to increase the overall efficiency of the tax credit mechanism.

LONG-TERM VERSUS SHORT-TERM COSTS

Cost estimates for temporary extensions vastly understate the long-term cost of a permanent and fully phased-in low-income housing credit. Based on 1990 census estimates, the annual cost of a single year's credit authority could be as high as $312.5 million, plus any credits allocated for housing that receives tax-exempt bond financing. Those credits are paid out over 10 years, so the long-term cost is approximately 10 times the annual cost. Hence, in the long run, the cost could be $3.125 billion a year or more at 1990 population levels.

Temporary extensions produce a misleading picture of the long-run cost, as illustrated by Figure 1. As noted above, credits cumulate over as many as
10 years as more vintages of projects receiving credits are added to the housing stock. However, under a one-year extension of the low-income housing credit, this cumulation is not evident because only a single year's credit allocation is included in estimates of revenue lost (represented by the lowest trapezoid in Figure 1). A two-year extension adds a second vintage, and so the cost is roughly double after two years, but it does not grow beyond that. The pyramid grows as the number of years of credit are added—up to 10 years. Thus, the fully phased-in cost of permanent extension (represented by the right-most point in Figure 1) is 10 times the cost of a one-year extension. If a permanent credit is achieved by a series of one-year (or shorter) extensions, the estimates of revenue losses for annual extension vastly understate the cost of a permanent credit.

If repeatedly extended or made permanent, the low-income housing credit would become a large and expensive housing program. The $3 billion long-run cost of low-income housing credits is three times the 1991 outlays for housing vouchers of $954 million. If the Administration’s 1993 budget proposal of $2.7 billion of new budget authority for vouchers is enacted, the annual spending on vouchers for the next five years would still be only half of the potential cost of the low-income housing credit.

12. In fact, newly authorized credits may take several years before they are claimed because of time lags in development and because credits may be carried over, subject to certain limits. Thus, the annual cost of an extension would not reach a maximum until several years after the credits are allocated.
Figure 1. Annual Cost of Permanent Versus Temporary Extension of the Low-Income Housing Credit
(In millions of dollars)

SOURCE: Congressional Budget Office
NOTE: Assumes $300 million of new credits per year
Put another way, outlays of $3 billion per year could assist 555,000 households with vouchers at 1992 levels. The same money spent on low-income housing credits, however, is unlikely to assist even half as many households.