

The Impact of Targeted Homeownership Tax Credit Program: Evidence from Washington, D.C.

Zhong Yi Tong

July 21, 2003

Do not quote or copy without the author's written permission. The author greatly appreciates comments by Peter Reuter, Jacqueline Rogers, Alex Chen, Robert Schwab, and Mark Lopez of the University of Maryland at College Park, Robert Goodman of Maryland Housing and Community Development Department, and Andrew Lyon of the U.S. Department of Treasury. The author gratefully acknowledges Charles Hicks of the Internal Revenue Services and Melissa Penkala of the First American Real Estate Solutions for their tremendous help in data provision and prompt response to data-related questions.

The author also thanks the following people for their helpful comments or assistance: Amy Bogdon, Patrick Simmons, Kris Rengert, and Tia Clark of the Fannie Mae Foundation, Michelle Mengel of the Local Initiatives Support Corporation, Amanda Elk of Georgetown University, Steve Fetter and Robert Nelson of the University of Maryland, Bradford Case of the Federal Reserve Board, Susan Wachter of the University of Pennsylvania, Charles Capone of the Congressional Budget Office, Anthony Pennington-Cross of the U.S. Office of Federal Housing Enterprise Oversight, Darryl Getter and Mark Shreiner of the U.S. Department of Housing and Urban Development, Joseph Harness and Michael Anikeeff of the Johns Hopkins University, Mark Obrinsky of the National Multi-Housing Council, Anthony Yezer of the George Washington University, Richard Green of Freddie Mac, and Scott Susin of the U.S. Census Bureau.

Other helpful comments were provided by the participants in the American Real Estate and Urban Economics Association mid-year policy conference held in Washington, D.C., May 2003; the University of Maryland School of Public Affairs Seminar Series held in March 2003; the Association for Public Policy Analysis and Management annual meeting held in Dallas, Texas, November 2002; the American Real Estate Society annual conference held in Naples, Florida, April 2002.

The views expressed in this study are those of the author's and do not necessarily reflect those of the Fannie Mae Foundation or U.S. Department of Housing and Urban Development, both of which supported this project in its two-year development span.

The Impact of Targeted Homeownership Tax Credit Program: Evidence from Washington, D.C.

Zhong Yi Tong

Third Version: July 21, 2003

Executive Summary

The goal of this study is to provide the first comprehensive assessment of the targeted homeownership tax credit program as implemented in Washington, D.C. The District of Columbia First-Time Homebuyer Credit program is the only federal program that provides an income tax credit (up to \$5,000) for targeted low/moderate-income families and individuals to purchase their first homes in a central city. The key findings indicate the following:

- The D.C. homebuyer tax credit is very successful and popular. Based on IRS data released only to Zhong Yi Tong, 21,821 claims (in the amount of \$76.7 million) were filed for the tax credit between 1997 and 2001. On average, the program participants accounted for about 77 percent of all home purchasers in the District each year. Among the participants, those who were the first-time homeowners (as understood by the common definition) represented 67 percent of all home purchasers in the District each year, which was 27 percentage points higher than the national average (40 percent) and 16 percentage points higher than the central city average (51 percent) in terms of first-time homeownership rate.
- The largest cluster of program beneficiaries was low-income homebuyers or those with incomes between \$30,000 and \$50,000, which corresponds to only about 42 to 69 percent of the area median income. While the vast majority of the credit claimants were D.C. residents, the homeownership credit also attracted a sizable number of homebuyers whose previous addresses were in the District's suburbs. These buyers accounted for about 14 percent of all home purchasers in the District each year studied.
- The program's impact and distributional effect on wealth creation through house price growth are also significant. The D.C. homebuyer tax credit could explain most of the house price appreciation differentials between the District and its surrounding suburban markets, estimated at 4.9 percent per year after adjusting for housing and neighborhood characteristics. Larger effects on house prices are observed in low/moderate-income and minority neighborhoods, compared to high-income and white neighborhoods. The homeowners of lower-priced townhouses/condos also experienced better appreciation than the owners of the traditionally more expensive single-family detached units.
- The impact on house prices was estimated through a three-stage intervention analysis, including hedonic regression and interrupted time series analysis, in the framework of the difference-in-differences approach. These outcomes are further verified by median house

price comparisons using three different geographic samples: census tracts adjacent to the D.C./Maryland border, D.C. vs. surrounding suburban markets, and D.C. vs. Baltimore City. Moreover, robustness checks were also performed to determine the conclusiveness of these results. They suggest that, in tandem with the “Williams gradual effect” large-scale investments undertaken by private-public partnerships and the D.C. Financial Control Board, the District of Columbia First-Time Homebuyer Credit could have accounted for most of the 4.9-percent price increase above its surrounding markets during the 1998-2002 period.

- The impact of the D.C. homeownership credit was so substantial that it seems to be inconsistent with the standard theory of public subsidies. However, at least two unique features of the homebuyer credit program that emerged from the practice or were built into the design may explain the inconsistency. One is that the tax credit subsidizes not only housing consumption but also housing investment or wealth creation, a critical point that is assumed away from the standard subsidy model. The other is that the credit is able to remove or reduce some important homeownership market “imperfections,” such as the entry barriers of wealth and income to homeownership for a typical low-income and first-time homebuyer. In comparison, the standard subsidy theory is built upon the assumption that there are no market “imperfections.”
- The D.C. homebuyer tax credit helped stabilize distressed District neighborhoods. House price movements during the impact period were only about 43 percent as volatile as those observed prior to the intervention. House price volatility in the low/moderate-income neighborhoods was also reduced by over 50 percent after the homebuyer credit took effect.
- The tax credit also helped increase the overall homeownership rate, drive up homeowner housing supply through conversion of rental into owner units, and reduce vacant housing units for rent in the District of Columbia.
- Although new construction (measured by residential building permits) increased significantly during the impact period, the increase was almost exclusively attributable to the HOPE VI revitalization program. The credit did not seem to be effective in stimulating a significant supply response in new construction from private investments.
- The empirical evidence also suggests an adverse effect of the homeownership credit on housing affordability for future homebuyers and especially for renters. With a substantial increase in house prices and reduction of rental housing stock, the credit appears to have spurred a significant increase in voluntary displacements of District renters because of rent burdens and other financial reasons.

The findings have important implications for public policies and research:

1. The income-targeted homebuyer tax credit as implemented in D.C. can indeed serve as an effective tax incentive to increase first-time, low-income homeownership rates and reverse the exodus of population in a central city.

2. The program also serves as a viable supplement or remedy to the existing tax treatments to homeownership (mortgage interest and property tax deductions). It has been well documented that the existing national homeownership tax policy provides significantly fewer economic benefits and weaker incentives for low-income families.
3. The substantial impact and distributional effect on house prices indicate that the homeownership tax credit is an effective policy instrument that can create home equity wealth for low-income individuals/families and also contribute to tax revenues for state and local governments.
4. The D.C. homeownership tax credit also represents an innovative approach that could help solve urban problems by stabilizing the distressed neighborhoods, increasing owner housing supply, and reducing vacancy.
5. The targeted homeownership tax credit program facilitated two types of income and wealth redistribution that advance social goals of resource allocation. One is income/wealth redistribution from high-income to low/moderate-income households and neighborhoods. The other is the income/wealth transfer that takes place from suburbs to central cities or from federal government to state/local governments.
6. To maximize its effectiveness, equity, and economic efficiency, any future design of a homeownership tax credit shall target low/moderate-income first-time homebuyers. It should explicitly build a mechanism allowing homebuyers to transfer the credit into cash for the down payment and closing costs at the time of home purchase. It should include a larger incentive to attract homebuyers into minority neighborhoods. It also should be refundable to encourage very low-income households to participate in wealth creation through purchasing a piece of their own property.
7. To minimize the unintended adverse effect, any future homeownership tax credit program should seek to incorporate a form of compensation for the losers of the intervention, particularly the existing low-income renters who would be at the risk of involuntary or voluntary displacement. It should also be accompanied by a supply-side policy action to stimulate at least the short-term supply of private investments on new construction to improve housing affordability for future homebuyers.
8. This paper has developed an innovative research methodology (a three-stage intervention analysis), three verification methods, and a number of important benchmarks that can be used to assess the impact and effectiveness for other urban/housing policy interventions. It also substantially improves our understanding of public subsidies and their actual values in a reality where the assumptions of the standard subsidy theory are no longer held. Such an improvement makes an important contribution to the literature of public policies, public/welfare/urban economics, and housing markets.