TAXABLE PROPERTY VALUE EXPLORATORY RESEARCH STUDY*

Melissa Braybrooks, Jennifer Charles, and *Brian Zamperini,*
U.S. Census Bureau

INTRODUCTION

PROPERTY TAX IS A PRINCIPAL REVENUE SOURCE of local governments within the United States, and acts as a critical indicator for the self sustainability and intergovernmental dependency of these autonomous governments. According to the U.S. Census Bureau's 2008 Annual Finance Survey data, at the local government level, property taxes comprised the largest source of revenue in 2008, amounting to $397 billion, or 72.3 percent, of total local tax collection. In comparison, sales and gross receipt comprised only 16.4 percent of local tax revenue. Additionally, property tax was 30.8 percent of all tax collected for general purpose governments and 64.2 percent of the total revenue for school districts in 2008. This dependency on property tax revenue illustrates the importance of this tax's role in the governments' ability to finance services at the county, city, township, special district, and school district levels. Understanding the property tax base is a key component in understanding local government financing roles and intergovernmental relationships.

Currently there is no comprehensive source of the taxable property inventory in the United States, nor does a consistent source exist to compare the property tax base and assessment quality of property values across jurisdictions. In an effort to better understand the tax capacity of the property tax base, the Governments Division of the Census Bureau has begun to examine methods for collecting data similar to that collected by the former surveys of Taxable Property Values (TPV). This TPV exploratory research study will explore the concepts of taxable property values and the feasibility of producing data products on taxable property. This paper examines the historical role the Census Bureau has played in reporting and producing TPV data, evaluates the current data available on taxable property, and describes the Census Bureau's plans to better understand this research need. This paper provides information on the property tax base, property tax autonomy, property assessments, property ratios, property classification, property tax exemptions and caps, and property tax rates. In addition to outlining these essential TPV features, this paper discusses the opportunities and challenges associated with each component, and provide considerations on the feasibility of a future TPV survey.

HISTORICAL PERSPECTIVE ON THE TAXABLE PROPERTY VALUES SURVEY

Data on taxable property values were first compiled by the Census Bureau in 1850 and continued in some form through 1992. The original survey measured the extent and value of property for the nation which allowed for comparisons in value from state-to-state. In 1850, valuation was limited to real and personal property according to assessed and cash value. From 1957 through 1982, the TPV survey consisted of a presentation of property values and property tax rate information on a national basis, covering taxable property, assessment-sales ratios, effective rates, and coefficients of dispersion.

Estimates and information of assessed values, property use, and sales were obtained from a two-stage probability sample. The first stage or jurisdiction sample consisted of sampling primary assessing jurisdictions within each state. The second stage of the sample design covered a sample of individual sales of real property selected at random from public records, typically from the Recorder of Deeds office. A questionnaire was then sent to the buyer to request or confirm the sales price of the transaction and to determine the "arm's length" status of the sale, with a non-response follow-up contact to the seller or the transfer agent. These data were then used to construct

a nationally-based assessment-sales price ratio study of real property, resulting in the following products:

- Aggregate assessment-sales price ratios,
- Unweighted mean assessment-sales price ratios,
- Median assessment-sales price ratios,
- Intra-area dispersion coefficients for non-farm house properties in select counties and other local jurisdictions,
- Estimated total market value, and
- Average market value per property.

For each sale selected, the applicable assessed value was obtained from the assessment roll. This assessment portion of the TPV provided assessment roll data, as well as use class data, which measured the value of property in terms of how it was actually being utilized. A second sample survey of individual parcel assessed values was conducted from the same assessment rolls using a stratified, systematic sample from the assessment roll. This sample produced the data on the number of locally assessed real properties and the distribution of the properties, by use class category. Combining both assessment and sales data allowed for a cross-jurisdictional study that provided insight on property inventory, use type, and assessment values relative to the sales price, coefficients of dispersion, and effective rates.

This survey was not undertaken without challenges. Throughout the 1970s and 1980s the survey encountered a number of cost, resource, and statistical quality issues that resulted in the TPV survey being scaled down throughout the 1980s and ultimately discontinued in 1992.

In 2007 the National Academy of Sciences, Committee on National Statistic (CNStat) issued a review of the Census of Governments and its related programs in a report entitled, *State and Local Government Statistics at a Crossroads*. The CNStat issued 21 recommendations to improve the Census of Governments and its related programs. One recommendation, Recommendation 3-3, sought for the reinstatement of the Census of Governments report on TPV. Specifically, the recommendation stated:

"In view of the importance of consistent, comparable, objective data on property tax valuation and other features or property taxation by state and local governments, the Governments Division should carry out a program of research and testing to explore conceptually sound and cost effective means of collecting data, which could be in conjunction with, or independent from, the Census of Governments." (National Research Council, 2007)

This recommendation, along with suggestions from other users, including the National Tax Association, has encouraged the Census Bureau to examine the feasibility of a future version of the TPV survey.

ENVIRONMENT OF THE PROPERTY TAX

Although the general structure of property tax has remained consistent throughout the years, the specific policies affecting the application of property tax have evolved over the past three decades. This evolution has primarily occurred through property tax relief measures such as assessment and rate caps, as well as exemptions based on property types.

Assessment limit programs can come in different forms. Some can restrict the annual increase in assessed value to a specified percentage of the prior year's figure, some restrict the tax rate to a specified limit, while others restrict the amount of revenue a government can collect via property taxes by imposing levy limits. According to Haveman and Sexton (2008), assessment limit programs typically follow a period of dramatic inflation in housing prices. For example, in 1978, as housing inflation went from five percent per year to five percent per month; California's Proposition 13 was introduced which reset assessment values to 1975-76 levels and limited assessment increases to no more than two percent per year. Only the sale of the property would trigger a reassessment of the property to market value based on the new purchase price (Haveman and Sexton, 2008).

Since California's introduction of Proposition 13 in 1978, many other states have introduced similar assessment cap measures aimed at curbing the rise of property tax bills for constituents. Assessment cap programs vary in structure from state to state, such as by property type, or timing on when caps are removed or property is reassessed (Haveman and Sexton, 2008). For example, Michigan and Oklahoma passed constitutional amendments similar to California's Proposition 13, allowing for all properties to qualify for the five percent assess-

ment limit. Connecticut, Maryland, and Montana phase in assessment increases over multiple years. Maryland follows a three-year assessment cycle, phasing in increases by one third each year of the cycle (Maryland Department of Assessments and Taxation, 2010). Arizona, Minnesota, and Oregon do not reset the assessed value with the sale of the property (Haveman and Sexton, 2008). Oregon, for instance, sets the assessment level to 90 percent of 1995-1996 levels with Measure 50, and limits annual growth to three percent. Oregon's Measure 50 does not assess new development or improvements at current market value, but at the same ratio (assessed value to market value) as similar standing properties.[1] In addition, in Oregon there is no periodic recalibration of assessment value to market value. Delaware provides another unique assessment example, where assessments appear to be infrequent: Kent County was last assessed in 1987, New Castle County in 1983, and Sussex County in 1974 (Industry Research & Analysis Center, 2010).

Assessment caps, tax rate limits, and tax caps are three of the most common types of property tax relief programs. Others programs, such as homestead exemptions, levy limits, circuit breakers, tax deferral, and classified tax rates are alternative means for property tax relief (Mikhailov, 1998).

Property tax is complex and it can be difficult to compare property tax standards across jurisdictions. Without the ability to easily identify the tax capacity, and compare the affect of property measures at an aggregate level, the understanding of the property tax, and its effects, remains limited relative to other broad tax categories such as sales or income.

EXPLORATORY RESEARCH STUDY PRODUCT ALTERNATIVES

In order to determine the property tax effect, including the ability to understand if the base is shrinking or growing, the change in local capacity over time, the fiscal disparities in metro areas, and the impact of caps, there is a need for a comprehensive source of the taxable property inventory and the ability to examine property trends across jurisdictions. Given the TPV product background, constraints of the Census Bureau's previous TPV survey, and consideration for the changes that have occurred in the property tax environment over the past three decades, this exploratory research study is examining a number of alternatives. Each alternative involves a different level of feasibility. The following discussion is intended to examine the benefit of each type of property variable and to provide a description of the Census Bureau's plans to conduct this exploratory research project.

Tax Base and Classifications

The tax base is the collective value of property, the total amount of taxable property, and the total assessed value of all taxable property, minus exemptions. The first step to quantifying total taxable assessed values and exempt amounts on a common basis, such as market value, begins with clarifying and quantifying the property tax base. The factors affecting the aggregate value of the tax base are infinite and can include situations such as the effect of new construction, changes in market value, nontaxable and tax-exempt property, as well as legal and economic factors.

The Census Bureau has traditionally defined real property as land plus any improvements permanently attached to the land, as well as all rights and benefits from ownership of any lifetime or greater interests therein. The Census Bureau has used five main use classes of real property in past TPV surveys: nonfarm residential, commercial/industrial, acreage, vacant platted land, and other and un-allocable.[2]

A state's definition of its tax base is often dictated within the state's constitution, but local governments also play an essential role in determining some of the property policies. Given the locally complex and dynamic nature of the property tax, the maintenance of a national scale collective base remains largely unavailable in the present day.

Property Assessment

Once property is defined, for taxing purposes, its value is assessed. The assessed value of the property is the best method to determine the tax liability (Bell, 2005). Historically, the Census Bureau has defined general and special property taxes as levies on ownership of property and measured by its value (U.S Census Bureau, 1992). Ad valorem taxes are in part set by the assessed value of property as determined by an appraisal. The legal standards for determining assessed values vary greatly across states. For example, California Proposition 13 stipulates that properties are only reassessed if they are sold (Haveman and Sexton, 2008), but Fairfax County, Virginia conducts

annual assessments (Real Estate Tax Assessment, Fairfax County, Virginia, 2010). Such standards can be affected by constitutional amendments which can set caps on rates and/or assessment values, dictate treatment of use class, etc (Bell, 2005). For example, classified property tax systems use the defined tax base in a system of classification that specifies different ratios for different classes, or subclasses of property. This is contingent on how the property is being utilized and may involve exemptions from taxation. Given this information, it is evident that a wide variety of assessment standards exists throughout the nation, and there remains a large degree of ambiguity regarding property legislation nationwide.

Effective Rates and Assessment to Sales Ratios

The provision of effective tax rates, the actual percentage of true market value represented by the tax bill, provides a common base for comparing property tax burdens in different jurisdictions over time (The Civic Federation, 2010). This is different from the nominal rate, or statutory rate. "Being able to standardize property tax burden across the nation provides a compelling argument for obtaining effective tax rates over nominal tax rates." (The Civic Federation, 2010)

An assessment ratio is the ratio of assessment value to the market value, which can be used as an indicator of assessment uniformity (Bell, 2005). Additionally, coefficients of dispersion measure the variability of assessments in a jurisdiction. Assessment practices can, over time, lead to over-or-under valuations, however it remains unclear what this means about the property tax base. For example, do changes in the ratio reflect an increase or decrease in the base, a consistent or significant over-or-under assessment, or a reflection of law or rates? Analysis of the trend in the growth of assessed values by Census Bureau categories could potentially help answer these questions. Furthermore, comparing assessment ratios by class may illustrate state and local government preferences for relying on a particular class for the basis of taxation and how this has changed over time.

One major constraint to producing the effective rate and assessment ratio is the availability of sales data in non-disclosure states. Such non-disclosure terms mean that the transaction sales prices are not available to the public, therefore sales data must be provided willingly by the buyer or seller of the parcel. External entities vary on the states considered to be non-disclosure states. To date, the Census Bureau has identified twelve possible non-disclosure states: Alaska, Idaho, Kansas, Louisiana, Mississippi, Missouri, Montana, New Mexico, North Dakota, Texas, Utah, and Wyoming.

EXPLORATORY RESEARCH PROJECT

With an understanding of the factors that make up property tax, the exploratory research study must examine various data options in order to determine which data products can realistically be provided of sufficient quality. In-scope activities affecting this consideration include, but are not limited to:

- Establishing a universe of assessing jurisdictions,
- Exploring a national uniform classification system of property use classes,
- Researching data availability options of sales records and information from non-disclosure states,
- Researching legal and legislative aspects of assessment, including tax rates,
- Evaluation of third-party vendor lists and assessment of record-keeping practices of jurisdictions.

The launch of this project in the spring of 2010 focused on research and outreach. These tasks included familiarizing staff with original TPV products and procedures, identifying changes in the property tax environment, and conducting outreach to government entities, academia and special interest groups.

In September 2010, the Census Bureau purchased data files from a third party vendor, which provide parcel level assessment and sales data for the country. The purchased vendor assessment and sales files provide variables of county and municipality, land use type, assessed value, sales information, and land and building characteristics.

Moving forward, the project milestones by fall 2011 are anticipated to include, but are not limited to:

- Comparison study of data collection methods to examine options for collection that meet statistical standards. The study will evaluate the availability and quality of data from various sources including data from third party

vendors; data provided by directly assessing jurisdictions; and data found on government websites. This will assist in determining the availability and usability of the data across all sources.

- The development of a universal classification system to measure variables of property use class across all jurisdictions.
- The establishment of the assessment and deeds jurisdiction universe with contact information for assessing and deeds offices.

With an examination of the different iterations of the historical TPV survey and with an understanding of current property tax needs, the Census Bureau has identified a number of components to TPV. Each component varies in the amount of resources required.

The first aspect of the exploratory research study is to explore possible methods for establishing a national tax base and developing a universal use classification schema. Establishing a national inventory of all assessed properties in the country is a central focus of a taxable property values survey. We will explore the various alternatives available to develop the tax base, including the use of a database of assessed properties provided by a vendor, and directly surveying jurisdictions using Census Bureau methods. The chosen method will be guided by funding and adhere to statistical quality. Alternatives for developing a tax base will be analyzed using comparative studies of data from a data vendor and the assessing jurisdictions. Furthermore, a comparison study will be conducted to examine the quality of the information received from both sources, and statistical methods will be developed to ensure that the Census Bureau's statistical quality standards are met.

A universal use classification schema will need to be developed and standardized through extensive research of the jurisdiction's classification schema and recordkeeping practices, and through cognitive interviewing. The five main categories of use class, nonfarm residential, commercial/industrial, acreage, vacant platted land, and other/unallocable are generally used by the Census Bureau. There are also sub-categories within these categories that can be used for classification of property. Sub-categories examples may include, single family housing and multi-family housing in residential; office space, shopping centers, or apartment buildings in commercial; and factory or warehouse under industrial. We will explore the scope of use classification within each state and study the option of expanding our classification categories to include some of the sub-classifications of property. A classification system will allow the Census Bureau to universally classify use class functions across all states and jurisdictions, thus allowing for cross-jurisdiction comparison. A universal classification system could also show variation of use classes by state or jurisdiction.

The second aspect of the exploratory research study is to examine the possibility of conducting an assessment-sales ratio study, and providing coefficients of dispersion and effective rates. Historically, the assessment-sales ratio study has been difficult to conduct due to the nature of collecting information on the market value of properties in non-disclosure states. Conducting an assessment-sales ratio study in these jurisdictions will be a resource intensive activity, as vendor databases that include sales data do not include data from non-disclosure states. It will be necessary for the Census Bureau to explore different means of assembling the property market value data from these non-disclosure states.

The exploratory research study will also explore providing effective rates and coefficients of dispersion. We will examine this possibility in conjunction with the feasibility study on the assessment-sales ratio, because both the assessment-sales ratio and effective rate products use the sales price as the base of the ratio. The coefficient of dispersion is a by-product of the assessment-sales ratio.

CONCLUSION

An exploratory research study is being conducted on all aspects of the TPV survey. The past surveys will be analyzed, new methods of data collection and analysis will be explored, and new survey products will be researched and investigated. Any new TPV survey will have to meet statistical and survey standards and be cost effective on an ongoing basis. The study will be comprehensive and all alternatives will be examined to determine the feasibility of the Census Bureau producing a new Taxable Property Values Survey.

Notes

[1] Oregon Rev. Stat. § 308.146.

[2] Information on past TPV surveys can be found on the Census Bureau website at: http://www.census.gov/govs/pubs/title.html.

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