Deductibility of Home Mortgage Interest and State and Local Real Property Taxes from Taxable Income

Overall Effect on California Petroleum Use		Affects Petroleum Demand Through Intermediate Indicators:	
Magnitude	Low-Medium	**Primary**	Distance Traveled
Certainty	Low-Medium	**Secondary**	Other- building energy demand
Applicable Level of Government	Primarily federal, however deductions pass-through to state income tax returns and subsidize services and amenities funded by property tax.		
Relevant Laws or Cases Affecting Factor	Mortgage Interest Deduction: 26 USC § 163 Deduction of State and Local Property Taxes: 26 USC § 164(a)(1)		
Time horizon for implementation and maturity	If the U.S. Internal Revenue Code is changed, prices of new homes and resales would quickly adjust to reduce distortions. However, the effects on prior housing decisions would linger for many years.		
Relevant Topics	mortgage, income tax, deduction, financial incentives, tax expenditures, home ownership, housing		
Summary	Though most scholars agree these interest deductions do little to affect home ownership rates, there is less agreement about their effects. Some believe interest and property tax deductibility leads to larger lot size and larger houses. Others think they increase the price households are willing to pay for neighborhood amenities. Regardless of the impacts, the strongest effects are felt in California. Californians who itemize mortgage interest on their tax returns claim a higher value than in any other state, and growth limitations exacerbate any effects the deductions may have.		

Introduction

Federal tax treatment of mortgage interest and local real property tax payments has some effects on housing and locational choices. These effects likely lead to an increase in statewide petroleum demand.

While housing scholars are not in universal agreement, most believe that the mortgage interest deduction does nothing to increase homeownership rates and may have an overall negative effect on social welfare. Most scholars also believe that the mortgage interest deduction encourages additional spending by those who would already be homebuyers in the absence of the policy.

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The Home Mortgage Interest Deduction is an itemized deduction of taxable income equal to the amount of interest paid on the first $1,000,000 in principal of qualified mortgage debt and the first $100,000 in principal of qualified home equity debt. To qualify, mortgage debt must be secured by a qualified asset—a primary residence and up to one "second home" that meet certain conditions.

In practice, many low and moderate income homeowners elect to take a standard deduction rather than itemizing deductions, a practice which precludes their deduction of mortgage interest.

At one time all interest paid on debt was tax deductible, including interest paid on consumer credit cards. In 1986, Congress eliminated deductions of non-mortgage interest and capped the principal value eligible for mortgage interest deductions at $1,000,000 for home acquisition mortgages and $100,000 for home equity mortgages (Lowenstein 2006).

In California, the Franchise Tax Board allows for the many of the same deductions as on federal returns. A study of 2008 tax returns found the average mortgage interest deduction, which appeared on California 29.24% of tax returns, was $18,876. This amount is the highest of the 50 states (Fleenor, 2010).

Glaeser and Shapiro (2002) claim that the home mortgage interest deduction "creates tax savings overwhelmingly for the top deciles of the income distribution" and "impacts a subset of the population that almost never rents." Furthermore, because of the distribution of owners within housing types, the benefits are most likely to accrue to owners of single family detached homes: "85.5% of people living in single family detached homes are owners and 85.9% of people living in multi-family units are renters."

Voith (1999) argues that the home mortgage interest deduction has induced larger home sizes and, therefore, location choices at the periphery of regions. Glaeser and Kahn (2004) stop short of this claim, that the mortgage interest deduction induces people to consume more housing, but agree that subsidizing homeownership supports the move to sprawl. Glaeser and Shapiro (2002) argue that the price increase goes toward neighborhood amenities other than lot and unit size—effectively capitalizing amenities like parks, coastal access, education quality, and employment accessibility into housing prices.

Hilber and Hunter (2010) looked at the geographic distribution of the mortgage interest deduction effects on higher prices and larger homes: in areas where regulations and scarce land constrain the provision of additional housing units, the effects of federal tax policy are mostly capitalized into housing prices—leading to higher prices. However, in areas with fewer regulatory and land constraints to new development, federal tax policy leads to an increase in lot and unit sizes. Voith and Gyourko (1998) found similar results.

Voith (1999) claims that the deductibility of property taxes and mortgage interest may contribute to conditions which exclude low- and moderate-income residents in high-income areas. Because the deductions have a higher value in high-income areas, they may lead higher income residents to choose larger lot sizes and the deductions disproportionately subsidize public amenities in these areas. Larger lot sizes correlate with increases in travel distances, and larger lots within a neighborhood correlate with higher housing prices. Excluding low- and moderate-income residents may lead to additional displacement and travel by the excluded households.

The effects for California likely lead to greater increases in petroleum demand than the nationwide average effects. First, California's income tax rates are high relative to other

states. Second, California property values, and therefore mortgage values, are higher relative to the rest of the country. Because the deductions also apply to state tax returns, the result is that mortgage and property tax deductions have a higher value in California than in other states. When these higher-than-average magnitude effects are combined with California's tendency to restrict housing supply through regulations—the overall result is that the average effect that federal housing-related tax policy has on petroleum demand will be higher in California than in the rest of the nation. This is because the tax treatments are likely to lead to higher prices in areas with growth constraints (typically larger cities in Coastal California with lower-than-average driving), and the tax treatments are likely to lead to demand for larger lots and housing units contributing to sprawl in inland areas with fewer constraints (suburban, exurban, and some rural communities with higher-than-average driving).

Effects on Petroleum Demand

Research suggests that the Home Mortgage Interest Deduction has two effects: it leads to more expensive homes in areas with development constraints and to larger home and lot sizes in areas with lower development constraints. However, the magnitude of these effects is somewhat disputed, with some researchers thinking the mortgage interest deduction does very little in practice.

Some research combines analysis of mortgage interest and real property tax payment deductions—as many of those who utilize one deduction also utilize the other. Combined, the two deductions appear to create incentives for exclusionary zoning in high-income areas.

Increased unit and lot sizes on the in suburban and exurban areas contributes to increased sprawl and travel distances. Higher housing prices in high-income areas and areas with development constraints would lead to increased income segregation, causing low- and middle-income individuals to travel greater distances to jobs located in areas with inflated housing prices.

Inasmuch as the mortgage interest deduction leads households to consume larger homes, a secondary the result would be an increase in household energy use. In addition, the geographic distribution of the price effect within California (in general, there are greater growth constraints in Mediterranean climates near the coast) means that the larger homes are more likely to be in areas with in areas with higher-than-average annual cooling degree days, compounding the effects of the attributable marginal size.

Attributing all differences in residential and transportation energy demand from new suburban and exurban housing to the federal tax treatment of mortgage interest would not be valid, as other policies have greater effects on the spatial distribution of new residential construction in California. An educated, but arbitrary guess, would be that the policy has had a 1% to 20% effect on observed growth in VMT per licensed driver since it took effect in 1986. Possible outcomes on statewide vehicle fuel use range from 0.1% to 2.6%.

Estimating effects on statewide vehicle fuel use

Effect on VMT Growth	Change in VMT	Change in %VMT
1%	420,195,779	0.1%
3%	1,260,587,338	0.4%
5%	2,100,978,897	0.7%
10%	4,201,957,795	1.3%
20%	8,403,915,589	2.6%

While the policy may have had a secondary effect on household energy use, only 2.2% of California's residential energy use comes from petroleum-based sources. Thus, it's unlikely that the effect on residential petroleum use is significant.

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