

REAL ESTATE CENTER
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TEXAS A&M UNIVERSITY

STUDY OF
ALTERNATIVE TAX
PLANS FOR PUBLIC
EDUCATION IN TEXAS

A MICRO LEVEL ANALYSIS

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EXECUTIVE SUMMARY

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School tax reforms designed to reduce property tax burdens through sales tax expansion and caps on value increases have many potential consequences. The regressive nature of the sales tax concentrates higher taxes on the moderate to low income categories of taxpayers. Analysis of a specified plan to extend sales and use taxes to cover services and a 5 percent cap on reappraisals for property taxation suggests that:

- Many homeowners will pay higher net taxes in nearly all income classes.
- There would be especially large proportionate increases for a majority of Texas households.
- The measures would reduce economic and development activity. Past studies suggest that Texas could lose as many as 56,000 jobs from imposing a tax on services.
- Many Texans would face reductions in expected housing quality.
- Home values could decline or not rise as fast.
- The system would create incentives for tax avoidance behavior, possibly driving some business activity out of state and causing vertical integration in some business activities.
- Part of the current tax burden that is exported through reduced Federal income tax liability would remain in state as the non-deductible sales tax replaces a deductible property tax.
- Tax revaluation caps could actually cause assessed values to rise during times with declining real estate markets.

In many cases typical Texas taxpayers would be left with less disposable income when these assumed reforms were enacted.

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SPRING 2004

REAL ESTATE AND TEXAS SCHOOL FUNDING

Responding to public dissatisfaction with increasingly burdensome school property tax levies, policy makers have begun to debate a wide array of alternatives designed to diffuse public concerns. Many efforts to provide meaningful property tax relief while maintaining and enhancing the level of support for public schools largely focus on identifying an alternative tax base that can support required levels of expenditures. Others have focused on providing relief to homeowners saddled with rising property tax bills. Two notable efforts propose to: firstly, substitute sales tax gained from expanding the sales tax base and increasing the sales tax rate for approximately half of the current school property tax burden. Secondly, plans have been advanced to arbitrarily limit increases in the taxable value of properties to 5 percent per year. Both of these measures would impact the financial situation of many Texas citizens. In particular, shifting the tax burden to a non-real estate related base could substantially impact property owners. This paper examines some of the implications of these measures.

EXPANSION OF THE SALES AND USE TAX

Since the first successful litigation forced policymakers to redesign the system of finance for Texas schools, some have proposed widening the sales tax base to take in the ever-expanding service sector of the economy. As the Texas economy has migrated from a focus on natural resource development to dwell on services, much economic activity has taken place beyond the traditional reach of sales and use taxes. Similarly, exemption of intangible assets has transformed the property tax into a tax mainly applied to real estate. The maturation of the modern economy into a service driven engine fueled by intangible assets prompts some analysts to advocate extending the reach of the sales and use taxes to apply to all services.

ANNUAL EFFECTS FOR TEXAS TAXPAYERS

Various measures have surfaced over the years to address those concerns. Indeed, the compromise that produced the current school funding plan also presided over considerations of extending the sales tax base to cover some services in Texas as early as 1993. However, extending

the tax to cover nearly all services in Florida failed after precipitating chaotic conditions in the state's economy. The legislature subsequently repealed that measure and Massachusetts repealed a similar measure before it took effect. Students of public policy have offered numerous analyses of the wisdom of applying a general sales tax to businesses including the issue of exportability through deductions from the Federal income tax and a host of other potential financial and equity issues. Because those issues have been exhaustively addressed, this analysis focuses on the effects of a proposed sales tax expansion coupled with a simultaneous reduction in property tax burdens on particular categories of individual households.

A proposed expansion of the sales tax base that applies the 7.25 percent tax rate to virtually all individual household expenditures save medical expenses and expenditures on shelter would significantly alter current patterns of taxation. The projected burden from this expanded sales tax contrasts with a current tax burden based on a tax rate of 6.25 percent that applies to roughly 45 percent of typical household income¹. That percentage varies at various income levels based on differences in consumption patterns. Specifically, lower income households necessarily expend a larger percentage of their income on consumption while households at higher levels routinely save and invest a greater proportion of their income. In exchange for the expanded sales tax liability, households would enjoy a property tax reduction from current levels to \$0.75 per hundred dollars of value plus \$0.10 per hundred dollars of value for local enrichment, almost halving the property tax burden for many homeowners paying school taxes at rates of up to \$1.50 per hundred dollars of home value.² The difference between total sales and property tax burdens before and after shifting to the new tax base provides a measure of the change in the wellbeing of each type of household across the spectrum of income levels. Figure 1 shows the distribution of household incomes in Texas estimated for 2002 by the U.S. Census Bureau. Figure 2 shows changes in sales and property tax burdens for different household incomes based on Census Bureau statistics relating income to consumption and home values. Figure 3 reflects the combined impact of property tax reductions and sales tax increases for those households based on Census Bureau estimates.

As Figure 1 reveals, income levels for more than 60 percent of Texas households fall between \$15,000 and \$74,999 annually. In fact, more than 76 percent of Texas households make less than \$75,000 annually. At the upper end of the income spectrum, approximately 13 percent of Texas household incomes exceed \$100,000 with less than 5 percent making more than \$150,000 annually.

The Census provides estimates of the value of homes owned by households at various levels of income as well as an estimate of the typical expenditures for those households. Combining these statistics allows an estimation of the value of the home for a specific income class and its associated property tax burden. Using the income and expenditure information facilitates an approximation of the sales and use tax burdens both before and after the envisioned tax base expansion. Those estimates produce the results displayed in Figures 2 and 3.

Figure 2 reports the dollar amounts of the property tax reduction following the downward adjustment in the rate and associated increase in sales taxes for seven categories of household income. Figure 3 shows the net dollar effect of combining those figures along with the percentages that the tax increase represents for each income level. As the chart reveals, Texans at all levels face

¹ Household income used is based on income and expenditure levels for Dallas and Houston as estimated by the U.S. Bureau of the Census.

² Although many Texas school districts have not yet reached the limit of \$1.50 per hundred dollars of assessed value, many are rapidly approaching that mark. In addition, several districts that have reached the limit have filed a lawsuit to overturn the current system. This analysis examines the situation in districts that have reached the limit.

an increase in taxes following expansion of the sales tax base. Those households in the \$40,000 to \$80,000 range face annual increases of \$645 and \$454 respectively. The increases ranged from a low of approximately 0.02 percent of income for the \$200,000 household to more than 1.6 percent of income at the \$40,000 level.

These charts illustrate the regressive nature of a sales tax. Because households at the lower income levels spend a larger percentage of their income on taxable consumption, a tax that targets consumption necessarily falls disproportionately on those households. Even if the upper income levels consumed a higher proportion of their income raising their net tax burden, the increase would still comprise a small percentage of their income. Further, consumption at the higher income levels (more than \$99,999) would have to fall below 30 percent of income before those households would realize a significant net tax reduction. Therefore, this analysis suggests that, without special preferences, it is unlikely that many Texas households would experience tax reductions in the shift from property taxes to sales taxes. Further, because of home valuations and consumption patterns with respect to income levels, the shift would fall disproportionately on middle income households. In short, the Texas homeowner targeted for tax relief would more likely face a net increase in taxes. Additionally, that increase would substitute the sales and use tax that does not allow Texans to directly export part of the tax burden through Federal tax deduction for the property tax that does facilitate exporting the burden. This action may risk transforming dissatisfaction with high levels of property taxation into disgust with high levels of sales and use tax.

ADDITIONAL EFFECTS FOR HOMEBUYERS

Many Texans buy their homes so the added effect of taxing the services provided during a purchase would occasionally impact those citizens. That effect for active homebuyers could be substantial. Figures 4 and 5 demonstrate the estimated impact of the combined tax on real estate closing costs and the annual net impact of the shift from the property tax to the sales tax for the sale of an existing home and a new home. Figure 4 reflects sales tax on closing services while Figure 5 reflects those taxes, plus an added tax on the labor, involved in producing a new home.

Home buying involves a host of activities designed to ensure the quality of the house as well as the soundness of its legal title. Each of these many activities involves fees for services that add to the cost of moving into a new home. These closing costs act as a major impediment to home purchases by reducing the amount of cash available for purchase. Thus, any addition to the level of these fees makes a home less affordable. The services behind these costs have traditionally been excluded from the general sales and use tax. Therefore, extending the tax to cover those services would increase the cost of moving into the home. Homebuyers' ability to purchase a home would be adversely affected by any net increase in tax liability arising from the shift from property taxes to taxes on most consumption. Affordability would be reduced by both the tax on closing costs and the reduction in income following expanding taxes on normal household expenditures. Figures 4 and 5 contain those combined effects.

Figure 4 shows the situation of homebuyers that incur both the tax on closing services and the reduction in disposable income resulting from the increase in sales tax liability less property tax saving. The chart reveals an addition of more than \$683 in combined tax burden for households in the \$20,000 income range as they purchase the typical existing home for that income bracket.³ That

³ The home value used was estimated using the most recent 2000 Census Bureau of the Census figures relating home values to given income levels.

amount rises to \$1,860 for the \$200,000 income household. The total tax effect, both taxes on closing services and the added tax on normal consumption expenditures, composes a diminishing relative proportion as incomes rise, as evidenced by the blue line in Figure 4. Indeed, the burden for buyers at the \$20,000 income level amounts to approximately 3.5 percent of income while those at the \$200,000 level would face increased taxes of about 1 percent of income. Figure 5 shows the situation faced by homebuyers purchasing a newly built home sold by a real estate agent. The difference between Figures 4 and 5 arise from the tax on labor services used to construct the new home.⁴ Lower income households face an addition of \$1,090 in costs with the upper income home category registering an increased tax of \$4,035 in costs in the year of the closing. Those amounts compose more than 5.5 percent of income for the lower income category and 2.0 percent of income in the upper income category.

Undoubtedly, this increase in closing costs will impact home buying decisions at all income levels with the greatest proportionate impact occurring at the lower income levels. Figure 6 shows the anticipated influence that the added tax on services at closing plus the ongoing net increases in taxes for schools would exert on home prices for typical homebuyers in the various income categories. The results apply to an owner with an 80 percent loan-to-value ratio and a 6 percent mortgage. The analysis assumes that these buyers' ability to make monthly payments would decline by the net tax shifts identified in the above analyses. The combined effect would result from the reduction in income available for monthly house payments and the added lump-sum liability due at closing. The former effect would reduce the amount of mortgage that the buyer could support because of reduced monthly payments. The latter effect, taxes on services at closing, would reduce the amount available for a down payment, further reducing the dollar amount that could go toward the home purchase.

As the red bars in Figure 6 report, the value of the existing home purchased by the typical buyer in the \$40,000 income category would fall by 12.9 percent in response to reduced affordability. Because of variations in the levels of income expended on consumption and home value-to-income ratios, the percentage effect diminishes as incomes range higher than \$40,000 with the \$200,000 income household sustaining a 0.8 percent drop in home value through reduced affordability. Because of the tax on the labor in new construction, new homes would fall more than 13.6 percent for the \$40,000 household and 1.6 percent for the \$200,000 household.

These results will vary for those households who choose a 95 percent mortgage and pay 25 percent more for a home. The \$40,000 household would experience a 10.9 and 11.7 percent reduction respectively for an existing and new home. The \$200,000 income household would actually enjoy a small net tax reduction and resulting value decline of 0.8 percent under those circumstances when buying an existing home. Increased closing costs from taxes would force the purchase price of a new home for these taxpayers to drop by about 1.5 percent.

These estimates vary considerably with income and the financial parameters used in the analysis. Further, they do not capture all of the anticipated effects of the tax changes. Specifically, the impact would be affected by the loss of the deduction from Federal income taxes as sales taxes substitute for deductible property taxes and declining values would tend to further reduce the property tax burden. This analysis concentrates only on the immediate effects that would follow from the envisioned changes. Nonetheless, these results indicate that the anticipated tax shifts will disproportionately impact households in lower income levels. Although the actual situation for individual taxpayers would likely vary from the estimated amounts, these results suggest that the envisioned changes will reduce the numbers of buyers who can qualify to buy the home that they could afford under current conditions. Given the level of tax increase, the Center estimates that as many as 75,000 potential

⁴ We assumed that labor represented 50 percent of construction costs for a new home.

homebuyers may no longer be able to afford the median-priced Texas home.⁵ Thus, many buyers would settle for less home than they could currently afford. Further, the differential between the added taxes for a new home compared to an existing one would tend to steer buyers toward existing homes. Additionally, some potential buyers at the low end of the income spectrum may find themselves being forced to abandon or postpone their plans to own a home. The National Association of Realtors has estimated that the a sales tax on services could precipitate a 2.7 percent decline in home sales in Texas leading to a more than \$200 million decline in home sales with an associated loss of economic activity in allied businesses.⁶ A study examining the expansion of the Texas sales tax to cover services in Texas in similar circumstances in 1987 concluded that the expanded tax would cause an increase in unemployment of 0.6 percent in its first year. Approximately 28 percent of that loss would occur in finance, insurance, and real estate with the remaining 72 percent coming from other services.⁷ Given January 2004 Texas employment, that would result in a loss of more than 46,000 jobs in the current economy.⁸ Given the vital role that home construction and buying plays in keeping the economy moving through difficult times, these effects could point to lower levels of economic activity and employment in Texas.

CAPPING PROPERTY TAX VALUE INCREASES

A series of sizable and continuous increases in taxable values on homes in California in the 1970s moved residents to arise in protest. This spiral in property taxes undoubtedly was the major contributing factor facilitating passage of the famous Proposition 13, a tax limitation rebellion. Part of that rebellion limited growth of property tax values so long as ownership continued in the same hands. This provision guaranteed that assessed values on homes would lag behind the market value in rising housing markets. Further, it also perversely ensured that assessed values would continue to rise after housing markets had begun to fall since the reduced market value continued to exceed the assessed value. Homeowners, faced with a diminished home value angrily demanded to know how their taxable value had risen, only to learn that the passage of time had produced unintended consequences from Proposition 13.

With more of the burden for Texas public schools migrating to the local property tax, Texas homeowners have faced escalating tax levies. These increases have come through rising school tax rates and, more recently as schools reached the tax rate limit of \$1.50 per hundred dollars of value, through rapid property value growth. Even sporadic revisions of homestead exemptions have done little more than temporarily reduce the increasing tax burdens on homeowners. The idea of capping value increases has again arisen as Texans face these escalating property tax liabilities with dismay.

Figures 7 and 8 illustrate the long-term implications of limiting tax value increases to 5 percent per year in a market where market values are rising at a 7 percent annual rate. In Figure 7, the gold

⁵ Jack C. Harris, Research Economist, Real Estate Center, Texas A&M University.

⁶ Research Division, *Potential Impacts of Sales Taxation of Services on the Real Estate Sector*, National Association of Realtors, August 2003, p4.

⁷ House, Donald R.; Morgan O. Reynolds; Vincent L. Wiggins, *The Economic Impact of the New Taxes on Services in Texas*, RRC, Inc. February 27, 1987

⁸ Texas Workforce Commission estimated seasonally adjusted non-farm employment in Texas of 9,388,500 in January, 2004.

line corresponds to the taxes that a homeowner would face with a constant tax rate of \$1.50 per hundred dollars of value. Beginning in 2004 with a home valued at \$100,000 the burden escalates each year as the assessed value matches the 7 percent rise in market value. The blue line traces the experience of an owner of an identically valued home when appraisal increases are limited to 5 percent per year. In 2030, the owner of the home where limits did not apply (the gold line) would face a tax burden of \$8,711 while the owner of an identical home subject to the limit would pay \$5,334 (the blue line). The owner of the non-limited home would pay 1.5 percent of property value in taxes while the limited home would pay less than 1 percent of market value in taxes. The pink line corresponds to the case of a homeowner who acquires a new home every seventh year. That homeowner would enjoy declining taxes for five years, paying 1.36 percent of value in the sixth year. The moving homeowner would then face taxes at 1.5 percent of value in the seventh year. These examples illustrate the inescapable fact that identical properties would bear vastly different tax burdens as time passes under a plan limiting increases in taxable value.

Figure 8 illustrates how these circumstances work to distort owner incentives. Specifically, the gold line shows the effective tax rate at a constant level of \$1.50 per hundred dollars of value for the uncontrolled property. Again, the pink line represents the effective rate for a property owner that moves every seventh year while the blue line shows the declining effective rate paid by a homeowner that remains in the same home. The gap between the blue line and the gold line indicates a penalty of sorts for moving from a protected home to one taxed without limits. As time passes, that gap widens until the homeowner faces a potential of more than a 60 percent increase in tax burden for moving from a protected home to another of equal value. From that homeowner's perspective, it becomes much more expensive to move than for the trading homeowner who would only face a 10 percent jump every seventh year. The longer the limit applies the greater the potential distortion and the greater the incentive for the homeowner to stay put. Thus, the limitation could reasonably be viewed as an impediment to the market for homes with a dampening effect on new construction and development.

CONCLUSIONS

The drive for school tax reform aims to relieve the crushing property tax burden faced by Texas homeowners while maintaining adequate revenues to support public education. The foregoing analysis of some suggested solutions to the problem illustrates the regressive nature of the sales tax option and suggests that an expansion of the tax base to cover virtually all consumption expenditures would visit proportionately large tax increases on the lowest income households. Under the assumed conditions, nearly all households in Texas would face a net tax increase even after property tax reductions act to offset the sales tax increase. On balance, past studies suggest that Texas could lose as many as 56,000 jobs to a sales tax on services. High-income households with relatively expensive homes would probably see a net tax saving.

A proposal to cap value increases at 5 percent per year similar to the California Proposition 13 model offers a promise of relief from climbing taxes, but the cure could produce undesirable side effects in the long run. In an escalating market, the cap would work to distort housing purchase decisions by keeping property taxes low for long term residents. Even moving after as few as six or seven years would inflict a 10 percent increase in the level of taxation for a homebuyer. Maintaining ownership for longer periods would cause the rate to rise much higher when moving to another home. Further, the cap could act to keep effective tax burdens rising even after markets had softened or declined inflicting more pain when taxpayers could least afford it.

The combination of these measures threatens to impact the marketability of new homes and retard demand for new development by increasing the burden of purchasing new homes or even

moving to another existing home. As time passes that impediment would continue to grow into a sizable distortion of the housing market. Although it is important to find a method of easing the tax burden on homeowners, policy makers should consider all of these important implications as they choose a path designed to accomplish reforms.

Finally, the study did not address an analysis of some other implications of distorting the price system through an expanded tax on services. That kind of measure could impact the economy in a variety of ways. Firstly, business could move out of Texas. Multi-state firms could begin to conduct meetings in their offices beyond Texas borders. That business would escape taxation and would further impact revenues by reducing the other commerce following from that activity. Secondly, larger business would see an advantage in directly employing consultants, attorneys, accountants, brokers, and others to avoid the expense of paying taxes on their services. Homebuilders may even directly employ the laborers to avoid paying taxes on their services. Presumably, a homebuilder's directly employed sales staff would not be subject to the services tax while a listing with a real estate agent would incur a tax on services. At some point it may become beneficial to hire a sales staff rather than use an outside broker. It would be impossible to realistically estimate the extent of this kind of behavior, but the incentives for such activity would emerge as the measures took effect.

ASSUMPTIONS AND LIMITATIONS

The above analyses are subject to the following assumptions and limitations:

No secondary effects were estimated.

The analyses represent “typical” cases. Homeowners with homes that are a larger multiple of their income, that is those with more expensive homes, could experience smaller tax increases or even net gains. The extent of gain depends on the amount of property tax saving on the high valued home.

Consumption patterns for upper three income levels were estimated from those reported by the U.S. Bureau of the Census for lower income levels.

The numbers shown are based on the best available data. However, the dollar amounts shown may differ from the actual shifts because of factors outside the scope of this study. Nevertheless, because low-income homeowners will experience a relatively small property tax reduction and consumption represents a large portion of the household budget, the general patterns of tax burden liability shifts will quite likely remain the same.

Deductions from the Federal income tax are not addressed. The shift from property tax would include an added expense for losing that deduction. Thus, the results tend to understate the actual out of pocket expense of the tax shifts. This is probably especially relevant to individuals in the upper income categories.

Estimated consumption, home value, and income characteristics are based on statistics obtained from the U.S. Department of Commerce – Bureau of the Census and the following assumptions:

Property tax:

- Home values are a multiple of income as specified by the US Bureau of the Census.

- Property tax rates are \$1.50 per hundred dollars of value before reform and \$0.75 after the reform with an added \$0.10 local enrichment.
- The analysis includes the mandatory \$15,000 homestead but no other local option exemptions.

Sales tax:

- Based on analysis of typical expenditures for Dallas and Houston and current sales taxes related to total state income, approximately 45 percent of income is subject to current state sales tax at the typical income level. That percentage was adjusted for the lower and higher income levels according to relative levels of consumption expenditures.
- Sales tax base after reform will include all consumer expenditures less medical and shelter expenditures.
- Current state sales tax rate is 6.25 percent.
- Proposed state sales tax rate will be 7.25 percent.

Census Bureau figures provide a reliable indication of the percentage of income dedicated to taxable expenditures.

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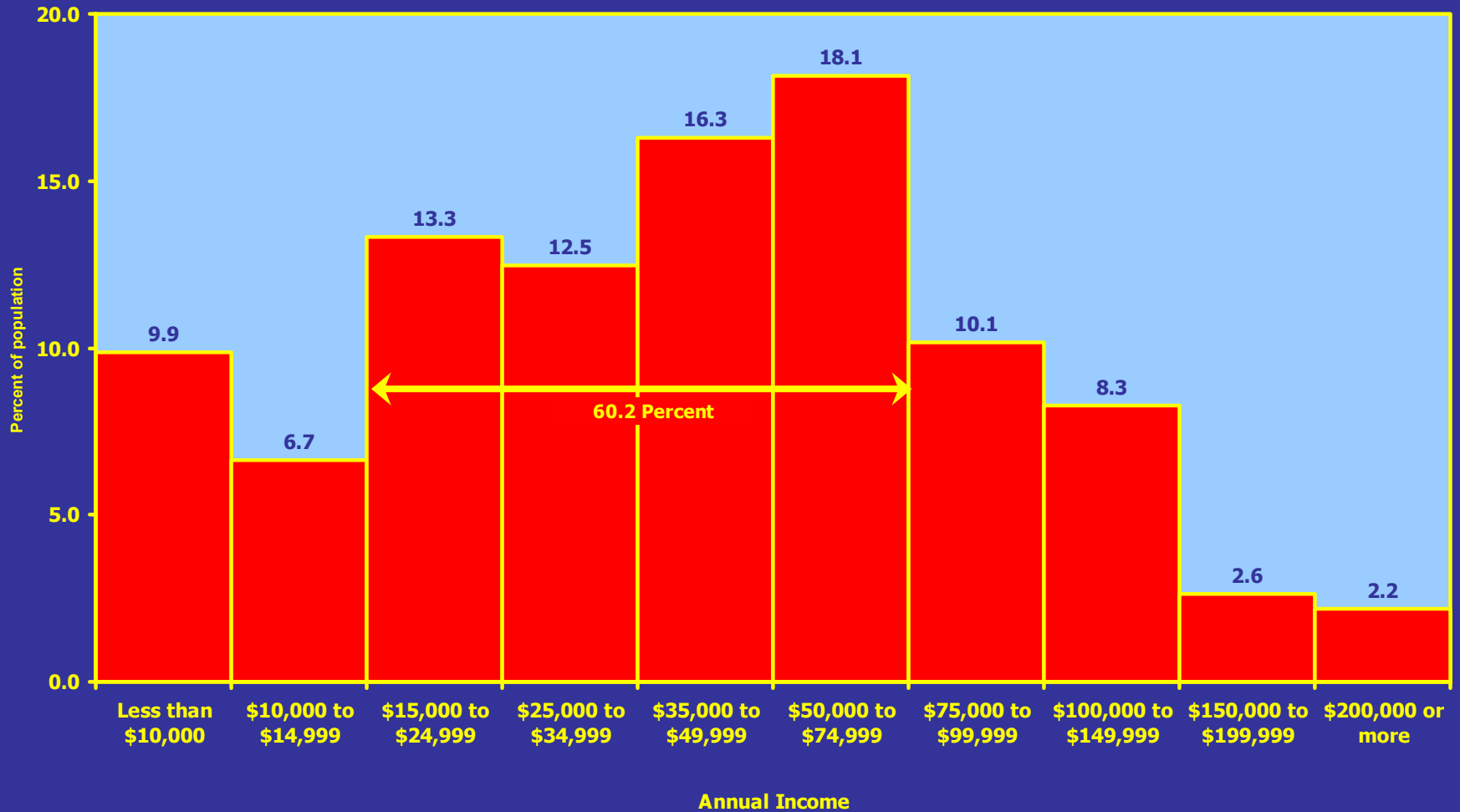
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APPENDIX

Figure 1. Estimated Household Income Distribution - Texas 2002



Source: US Bureau of the Census



Figure 2. Changes in Estimated Tax Liabilities

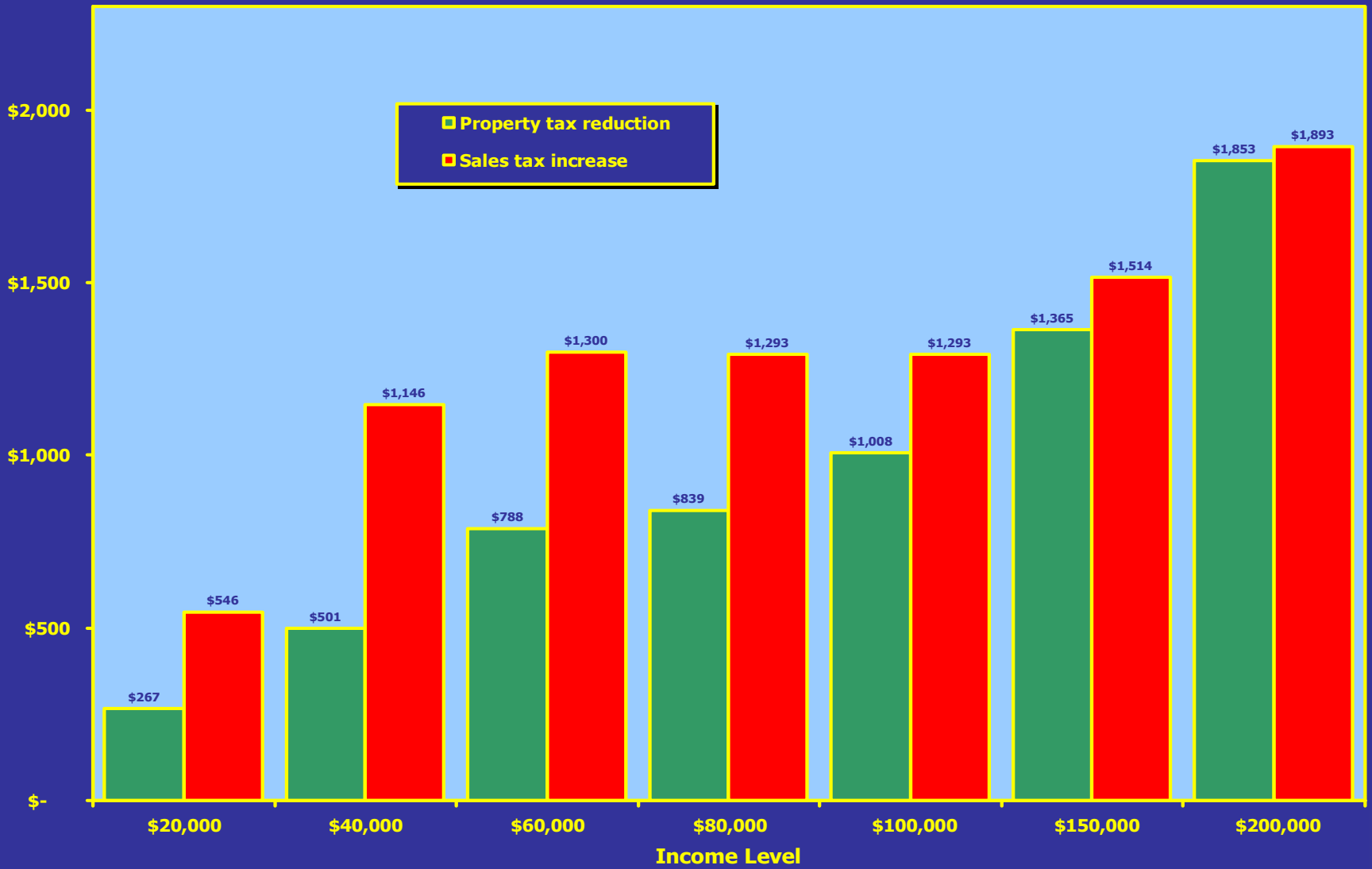


Figure 3. Net Changes in Tax Liability

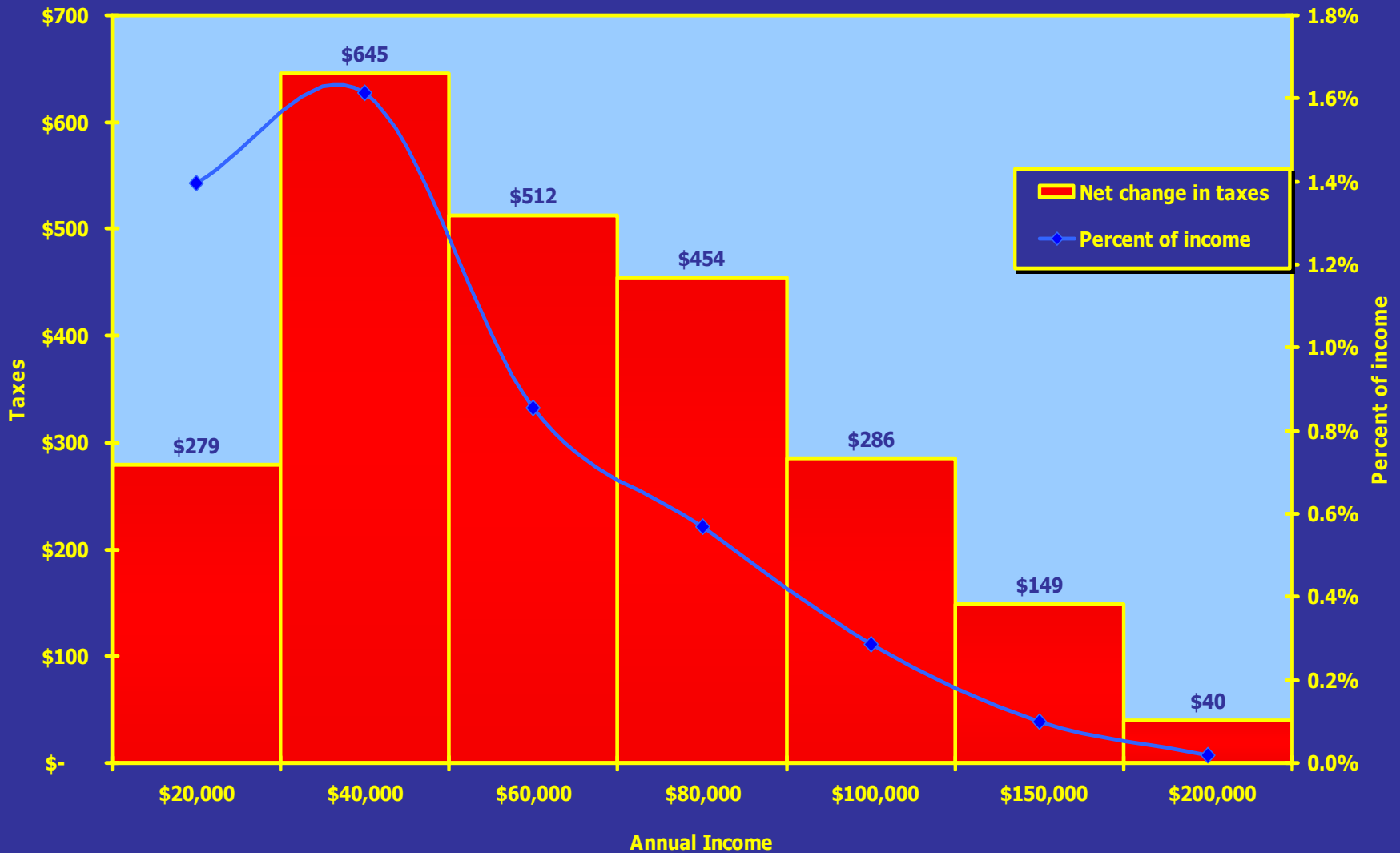


Figure 4. Added Tax on Closing Costs -- Existing Home

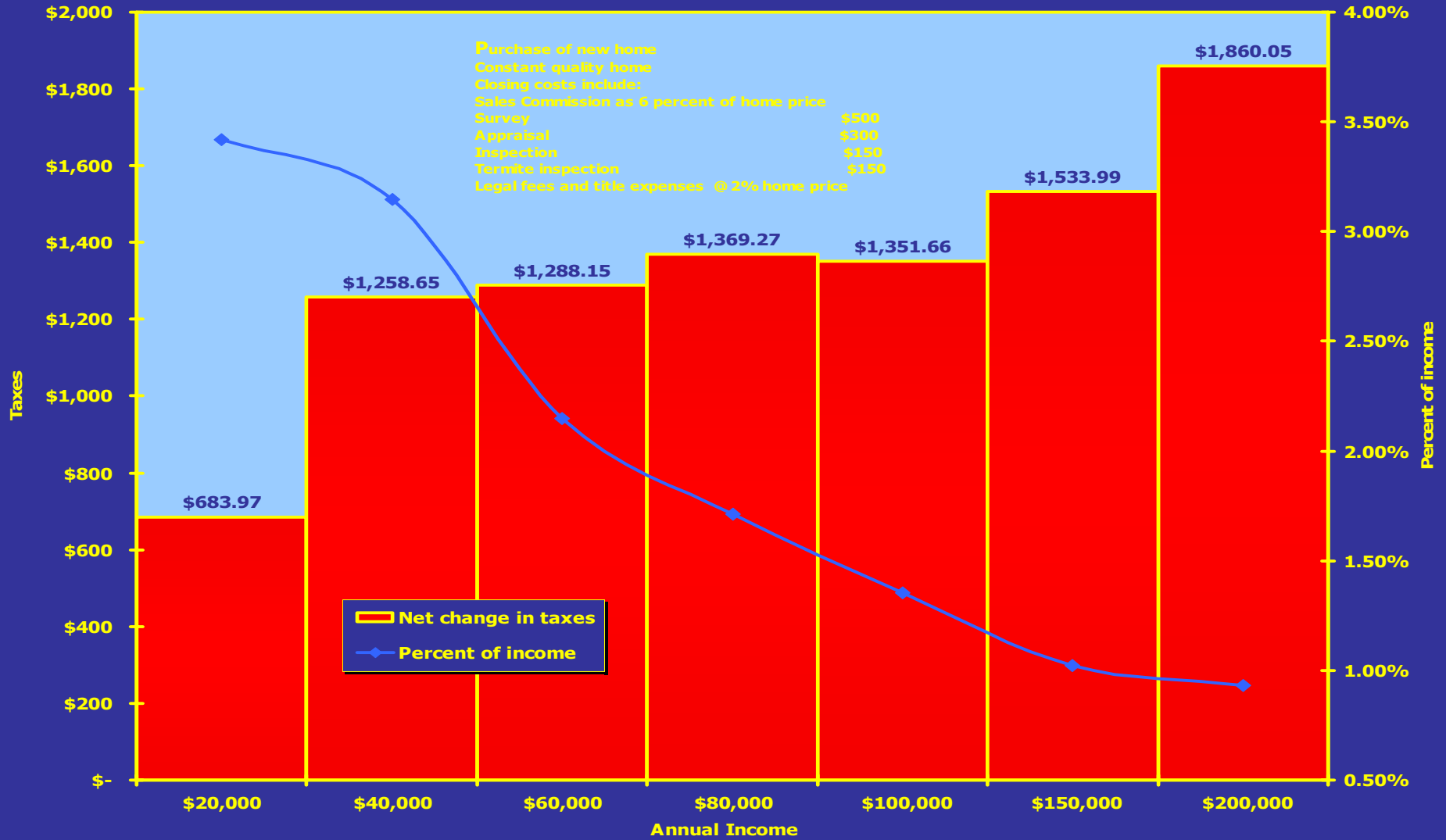


Figure 5. Added Tax on Closing Costs -- New Home

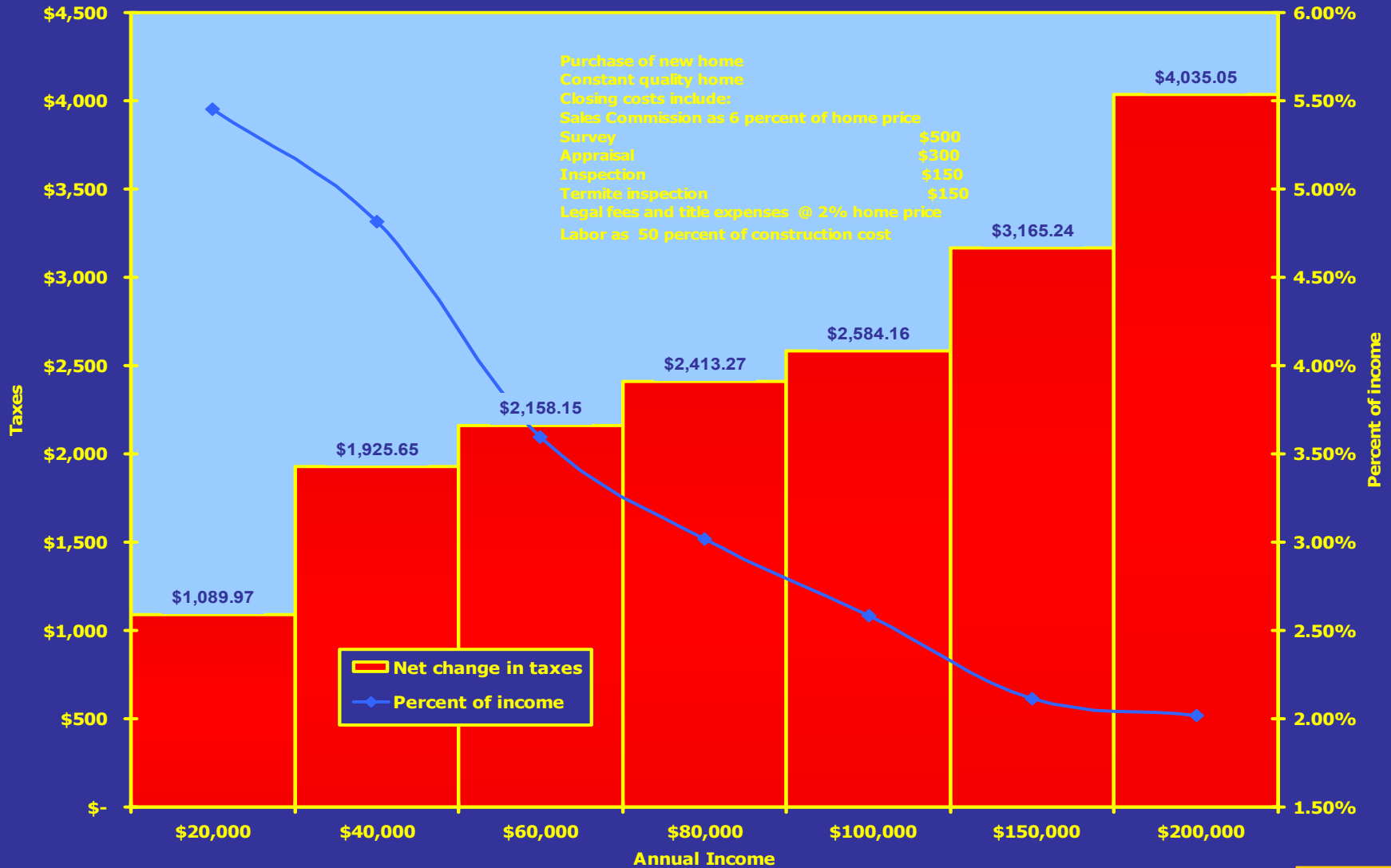


Figure 6. Reduction in Prices of Typical Homes

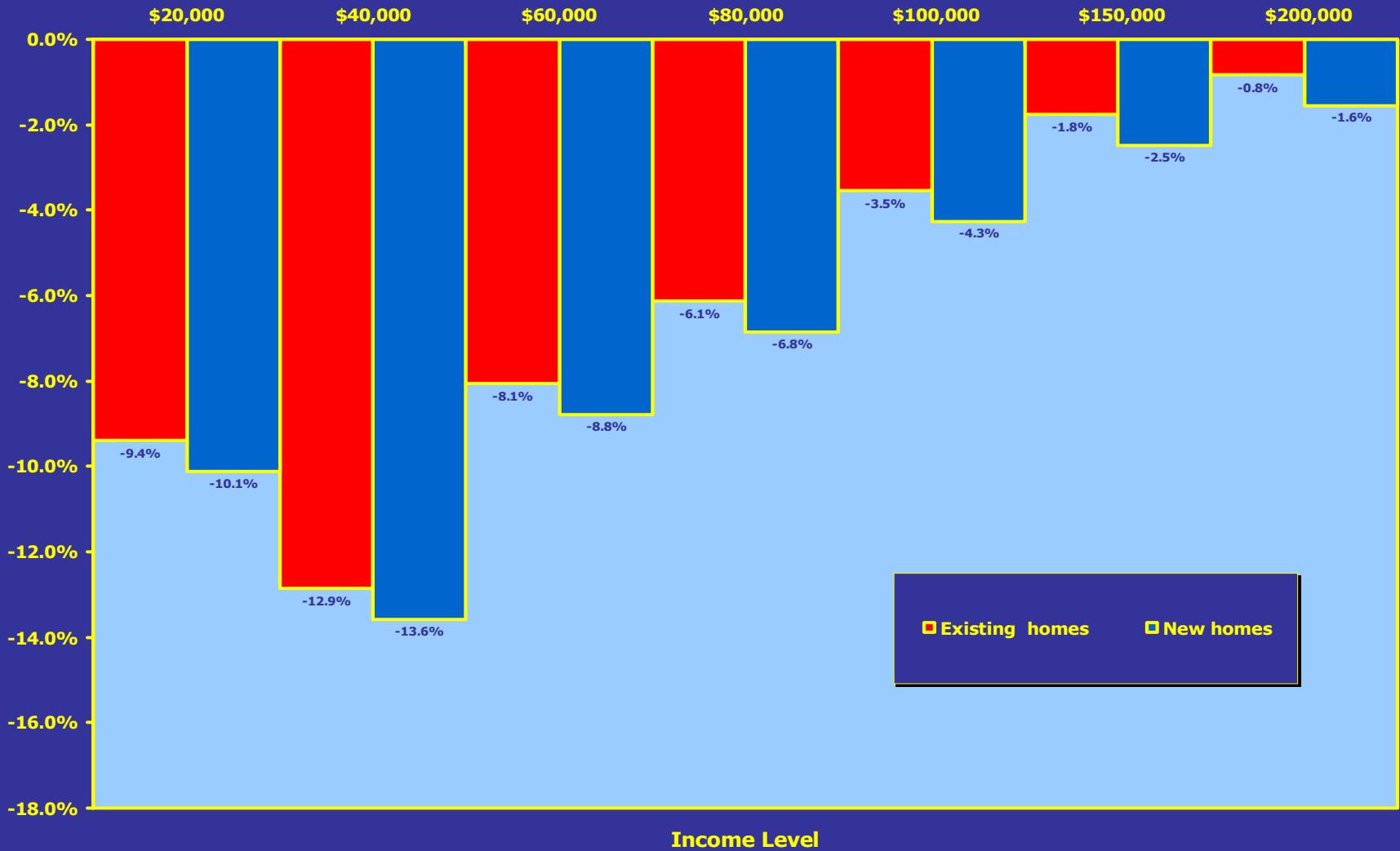


Figure 7. Long-Term Effects of Tax Value Limits

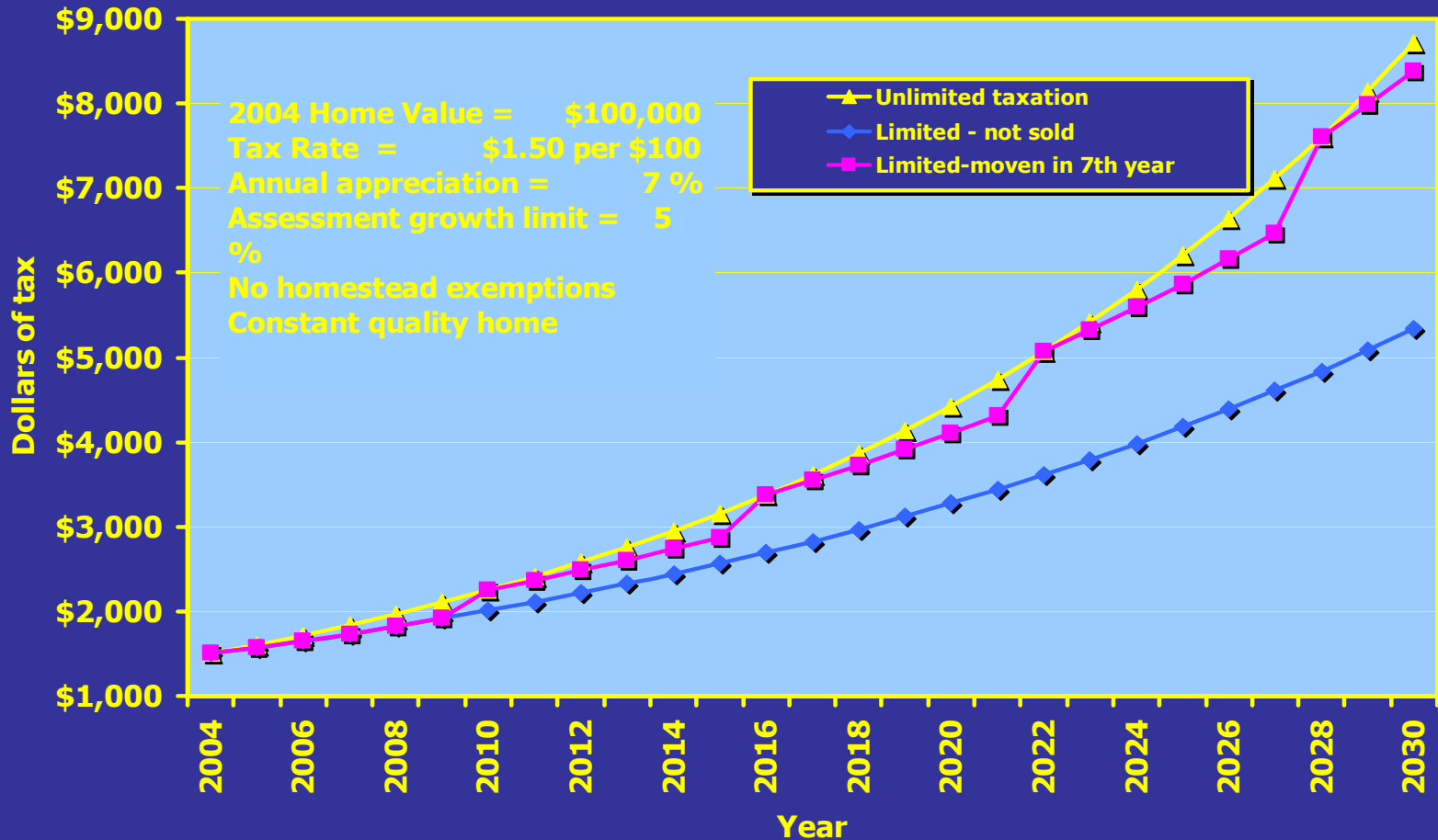


Figure 8. Effect of Tax Limits on Effective Tax Rates

