Economic Effects of Eliminating Texas' Business Margin Tax

March 2015
Vance Ginn, Ph.D.
and The Honorable
Talmadge Heflin

Texas Public Policy
FOUNDATION

March 2015
Vance Ginn, Ph.D. and The
Honorable Talmadge Heflin

Center for Fiscal Policy
Texas Public Policy Foundation

*This report was subjected
to a blind peer review by an
independent third party.*

Table of Contents

Economic Effects of Eliminating Texas' Business Margin Tax

by Vance Ginn, Ph.D. and The Honorable Talmadge Heflin

Executive Summary

Texas has substantial funds available for the upcoming 2016-17 budget, making the 2015 legislative session the ideal moment in the state's history to eliminate the costly, inefficient margin tax without replacing it with another tax. This would free capital that businesses could use to invest and create new jobs and allow all Texans to have greater opportunity to prosper.

Studies modeling the dynamic fiscal and economic effects of phasing out or repealing the margin tax find substantial economic benefits. These include potentially tens of thousands of net new private sector jobs created and billions in net new investment and personal income across Texas, increasing sales tax and other tax revenues that could replace much of—if not all—the loss from eliminating the margin tax.

Building on the capital and margin tax literature, this paper considers an econometric model that estimates the responses of real personal income and private sector nonfarm job creation statewide to eliminating this costly tax. Given a 2014 baseline, our forecast results support the findings in previous research that eliminating the margin tax could be highly beneficial for all Texans, including:

- *More prosperity.* Texas could gain $10.8 billion in new real (inflation-adjusted) personal income after the first year and accumulate a total $16 billion increase after five years compared with the baseline.

- *More jobs:* Net new private sector nonfarm employment could increase by 67,800 after the first year and add a cumulative 129,200 net new jobs five years after eliminating the margin tax compared with the status quo.

By eliminating the margin tax, Texas will join three other states (Nevada, South Dakota, and Wyoming) without a direct business tax or an individual income tax.[1] While this will enhance the future of Texas' economy, the stakes are much higher than one state's prosperity alone. This transformational policy would make Texas a leader for America—and even the world—in tax policy. By spurring job creation and reducing the tax burden, the combination of no business tax or income tax supports the potential to lift hundreds of thousands of Texans, and possibly many more Americans, out of poverty.

Key Points

- The state's revised franchise—or margin—tax is a poor and inefficient mechanism for generating state revenues and represents a tremendous burden for entrepreneurs and small businesses that affect all Texans.

- With a sizable fund balance available during the 2015 Legislative Session, this would be the ideal moment in the state's history to eliminate this tax without replacing it.

- We find that eliminating the margin tax could increase real personal income by $16 billion and private sector nonfarm job creation by 129,200 after five years compared with the baseline.

- By spurring job creation from a lower tax burden, the combination of no business and income taxes support the potential to lift hundreds of thousands of Texans out of poverty.

- This would further advance the Texas model providing more opportunity for everyone to fulfill his or her hopes and dreams that other states would be wise to follow.

The margin tax has been a failure. It has failed to help keep local property taxes low. It has failed to meet revenue expectations. It has failed to keep the state out of court over the financing of public schools.

Overall, the state's margin tax is a poor and inefficient mechanism for generating state revenues, placing a tremendous burden on entrepreneurs and small businesses that affects all Texans. The costly, complex nature of the margin tax makes it highly unpopular. Texas Republican primary voters said yes by a nine-to-one margin when asked whether legislators should "abolish the franchise tax to encourage business growth."[2]

It's time to end this complex, inefficient tax that places a substantial burden on businesses, individuals, and families across the income spectrum and unleash Texas' entrepreneurial spirit so that all Texans, including the working poor, will enjoy the benefits of more jobs and greater economic prosperity.

Introduction

Texas' relatively low-tax and less regulated environment contributes to many economic and commercial advantages over other states, but policymakers and elected officials must be careful not to overlook potential problems as the nation's economic situation improves and other states follow Texas' lead in their efforts to attract investors and entrepreneurs.[3]

A recent poll released by the Texas Public Policy Foundation (TPPF) shows that 89 percent of Texans believe that having a job is the best path to prosperity.[4] Findings throughout the economic literature along with common sense support this view whereby a growing economy generates opportunities for people to improve their well-being.

Given that the more you tax something the less you get of it, state legislators would be wise to eliminate our current tax on capital, the state's business franchise tax, otherwise known as the margin tax.* Capital provides the means for businesses to hire workers; in other words, a tax on capital leads to less capital available to support job creation. The substantial economic costs associated with this tax make it an opportune time in the state's history to repeal it.

Cost of Texas' Business Margin Tax

Texas has had a business tax since the 1800s. Though the state's business tax has been through multiple iterations over the years, its provisions of taxing corporations under the franchise tax were enacted in 1992.

---

* While Texas' business tax is technically the "franchise tax," we use the more general term "margin tax" that better reflects its reformed structure since 2008 throughout most of the paper, unless we specifically refer to the earlier franchise tax period.

During the mid-2000s, the franchise tax rate was 0.25 percent on net taxable capital—total assets minus debt—or 4.5 percent of net taxable earned surplus.[5] In 2006, the Texas Supreme Court ruled that the state's school finance system based on local property taxes was unconstitutional.[6] In response to this ruling, the Legislature attempted to reduce local property taxes and replace the lost revenue by reforming the franchise tax, broadening its base to include more businesses, changing its tax basis to a firm's "margin," and adopting two tax rates.

The reformed tax that went into effect in January 2008 was coined the "margin tax" because it taxes a firm on the lowest of four taxable margins:

- Total revenue minus 30 percent of total revenue,

- Total revenue minus cost of goods sold (COGS),

- Total revenue minus compensation, or

- Total revenue minus $1 million (EZ computation).[7]

After calculating the lowest taxable margin, businesses must multiply that amount either by 0.5 percent for a wholesaler or retailer or by 1 percent for all other types. A rationale for wholesalers and retailers paying a lower rate is that they typically operate on a lower profit margin.

The complex nature of calculating taxable margins and two tax rates create substantial compliance costs and confusion by businesses resulting in litigation over the appropriate definition of "cost of goods sold" and other determinations by highly paid tax accountants.[8] In general, businesses struggle with this tax, often devoting more time and resources in determining one's tax bill than what is required to pay the tax itself. This incentivizes businesses to find ways to reduce their tax liability or avoid it altogether contributing to higher costs of doing business and less margin tax revenue collected.
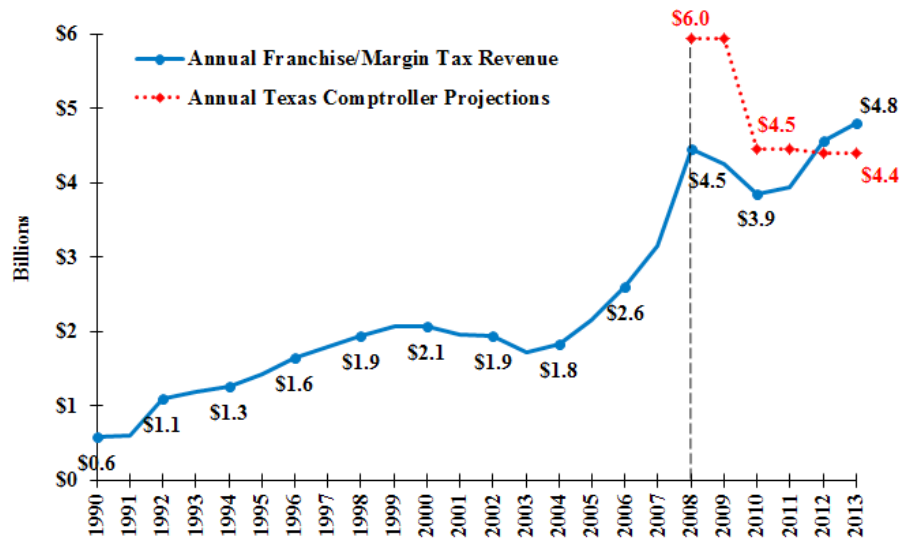
Making matters worse, the margin tax is a type of gross receipts tax, meaning that the tax is levied regardless of profitability, whereby a business owner may be subject to paying the tax even if they lose money.[9] Additionally, this business tax structure, along with practically all business taxes, creates costs by requiring businesses to pay a tax at each stage of the economic chain. This structure, also known as "tax pyramiding," increases the costs of doing business and passes them on to consumers.[10]

The margin tax is unique to Texas and requires a totally different way of calculating than any other tax nationwide. Other states have adopted modified gross receipts-style taxes, but none exactly resemble Texas' margin tax. In addition, some states have repealed their versions of the margin tax, such as Michigan that replaced it with a flat rate corporate income tax effective January 2012. Nevada voters turned down a margin tax similar to Texas' in November 2014.

The margin tax is a very costly, complex tax on businesses that is making the state less competitive than it could be.[11] These costs can damage a businesses' ability to hire new workers, fund investment opportunities, or remain in business—reducing the state's potential economic output and job creation. From these consequences, individuals ultimately pay the costs of the margin tax through higher prices, lower wages, and fewer jobs available. In addition, potentially lower economic output and incomes caused by the margin tax generate less tax revenue.

Figure 1 presents anecdotal evidence of these costs on margin tax revenue compared with projected amounts.

**Figure 1: Margin Tax Revenue has Been Below Projections
by a Cumulative $3.7 Billion Since Its Inception in 2008**
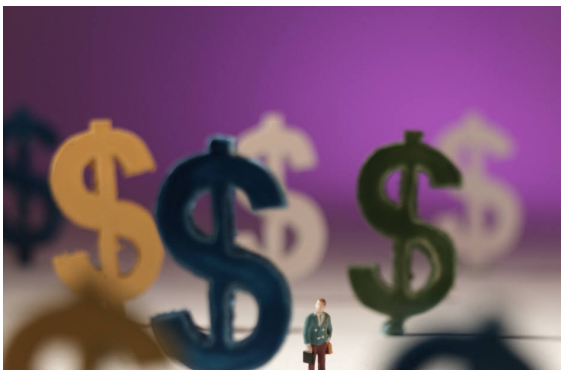
*Notes: Margin tax revenue data are from Texas Comptroller of Public Accounts for the 1990-2013 period.
Vertical dashed line represents when the margin tax was enacted.*

Before implementation of the margin tax, the franchise tax revenue's share of total state tax revenue was about 7 percent from 1990 to 2007. Since the margin tax went into effect, its revenue share has been roughly 10 percent of the total, a 43 percent increase in its share of state revenue collected from a broader base. However, as noted in the figure above, margin tax revenues have been well below the Texas Comptroller's projections in most years.[12]

Capital Taxation Reduces Economic Prosperity

The economic literature is ripe with empirical research on various forms of taxation. In general, an optimal tax is one that generates revenue at the least cost to individuals and the economy. Consumption-based taxes tend to be at the top of the list as least obstructive, whereas there is overwhelming evidence that capital-based taxes, such as the margin tax, tend to be the most costly.
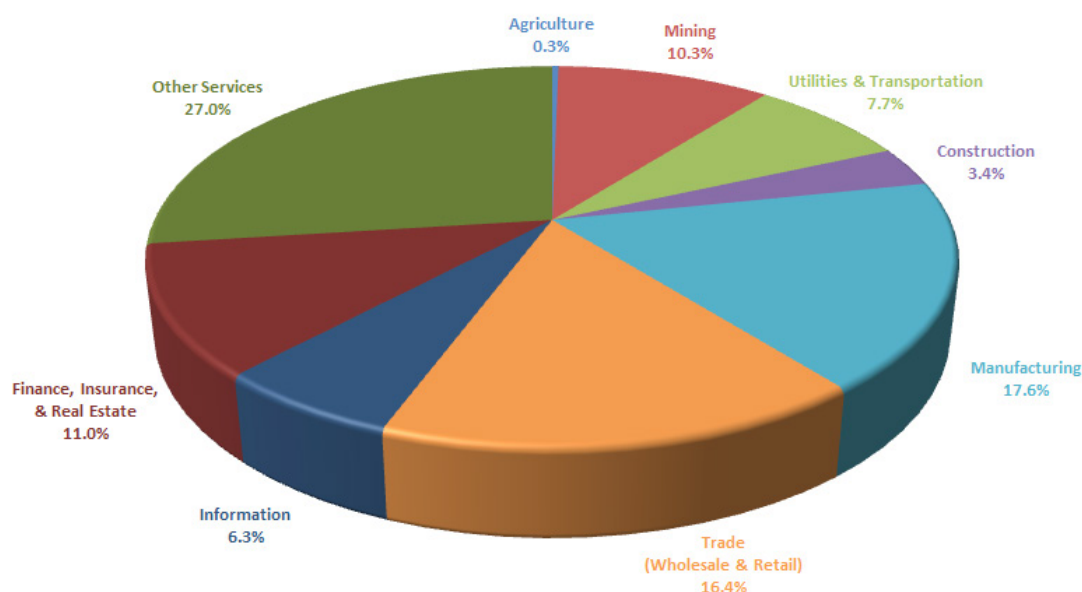
The seminal work by Diamond and Mirrlees shows that a tax on capital distorts capital markets, thereby increasing the cost of doing business and reducing investment in the process.[13] Building on this work, Mankiw, Weinzierl, and Yagan outline lessons from abundant research on taxation; one is that there should be no taxation on capital.[14] This research and others provide a strong foundation for not taxing capital, or at least taxing it in the least obstructive way possible. A far cry from how the margin tax burdens capital formation.

Economist Lawrence Summers, formerly the U.S. Treasury Secretary in the Clinton Administration and Director of the White House National Economic Council in the Obama Administration, notes in his research that capital taxation can be understood to be "the combined effect of corporate taxes, individual income taxes on dividends and interest income, and property taxes."[15] While not typically known for prescribing fiscally conservative policies, he finds substantial economic benefits of shifting away from a tax on capital to one on consumption. A result from his research indicates that national economic output could rise over time by as much as 18 percent from such a tax shift, leading to more job creation and prosperity.

This growth from ending capital taxes tends to incentivize firms and individuals to save—the primary factor driving long-term economic growth—from a lower average cost of holding capital during an individual's lifetime.[16] Increases in savings support lower interest rates thereby lowering the cost of capital and incentivizing entrepreneurs to increase the level of capital in the economy. Capital accumulation is a key component in increasing productivity, production, and real wages.[17]

The structure of the margin tax creates substantial differences in tax liability across multiple industries. **Figure 2** shows that the trade and manufacturing industries pay more than one-third of the margin tax revenue collected.

Figure 2: The $4.8 Billion in Margin Tax Revenue Paid in 2013 Cost Some Industries More Than Others
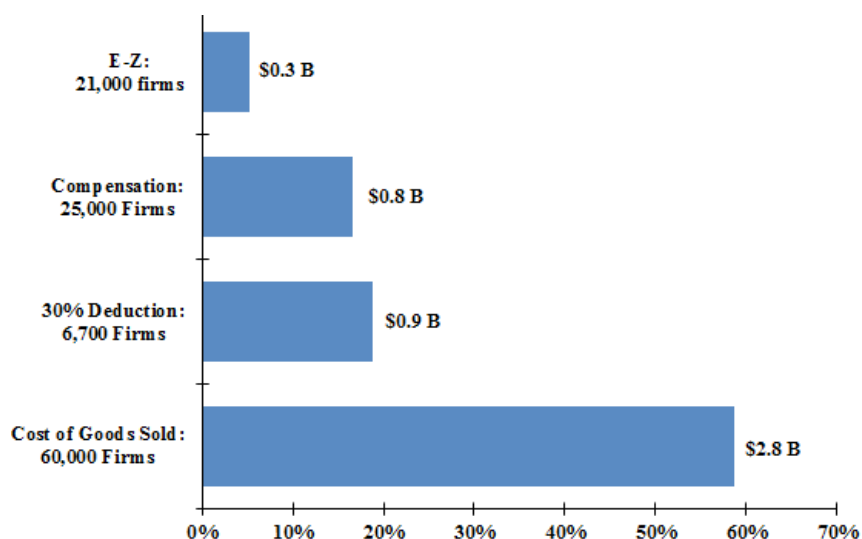
Source: Texas Comptroller of Public Accounts

As noted above, businesses determine the best filing method for their taxable liability based on which calculation allows them to pay the least taxes. **Figure 3** presents data showing that almost 60 percent of the $4.8 billion in margin tax revenue collected in 2013 was from 60,000 businesses that chose the cost of goods sold (COGS) method. Many businesses find this is the optimal calculation choice to reduce their tax liability after working with their tax accountant—paying a large compliance cost in the process.

**Figure 3: About 60% of Firms Choose the Cost-of-Goods-Sold Method
to Determine Their Margin Tax Liability**

(Amounts in Billions and Shares of 2013 Total Margin Tax Revenue Collected by Method)
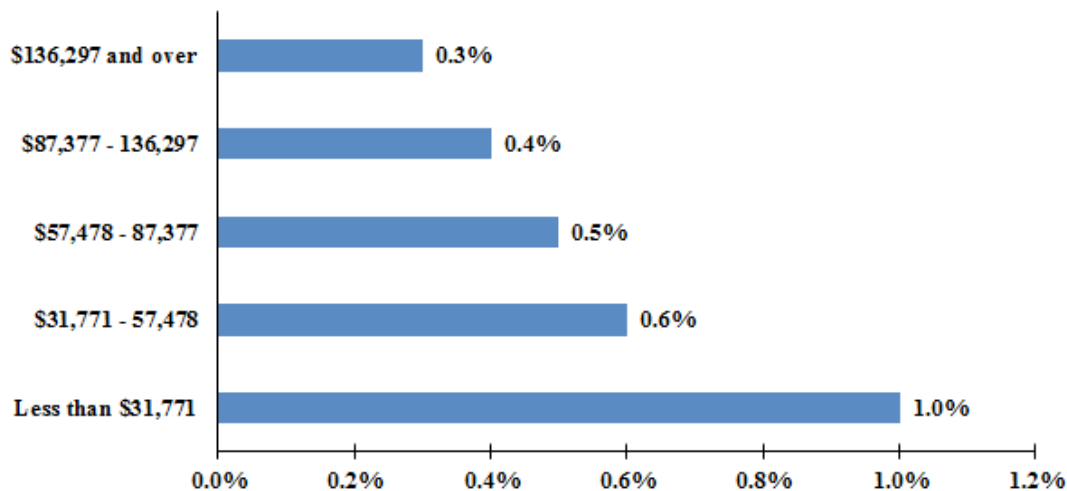

Source: Texas Comptroller of Public Accounts

Regarding the tax revenue collected by the two margin tax rates, the lower 0.5 percent rate paid by wholesalers and retailers generated only $0.8 billion of the $4.8 billion in 2013 whereas the higher 1 percent rate paid by all other businesses generated the rest.[18] The fact that businesses that are not wholesalers and retailers pay the majority of the margin tax potentially reduces opportunities for Texans to have access to jobs and more income in the process.[19]

Though the margin tax is sold to the public as a tax on businesses, the truth is that the vast majority of the tax burden falls on ordinary Texans, as is the case with all business taxes. **Figure 4** provides evidence from the Texas Comptroller that the burden of the margin tax as a percent of total household income tends to fall on the backs of those with the lowest income.[20]

**Figure 4: The Margin Tax Disproportionately Burdens Lower Income Texans
as a Percent of Their Total Household Income**

Source: Texas Comptroller of Public Accounts

According to the Comptroller, while the tax burden tends to affect lower income households the most, the top two income quintiles pay almost half the overall margin tax revenue to the state.[21] This burden can also be broken down between homeowners, renters, and an amount exported. According to the Comptroller, 49 percent of this burden is on homeowners with 20 percent on the backs of renters. The margin tax not only reduces businesses ability to hire workers, but it also burdens Texans who can least afford it and homeowners who could use those funds to allocate as they see fit.

Prior Findings on the Economic Effects of Tax Reform

Reports published by the National Federation of Independent Business (NFIB) Research Foundation,[22] the Beacon Hill Institute (BHI),[23] and Merrifield and DeAngelis[24] estimate the economic effects of either phasing out or eliminating Texas' margin tax.

The NFIB study estimates the Texas economy by employing the PI+ model, which they note is "a dynamic, multi-regional model based on the Regional Economic Models, Inc. (REMI) structural economic forecasting and policy analysis model which integrates input-output, computable general equilibrium, econometric, and economic geography effects."[25] The BHI estimates the potential effects using the STAMP model, which is a "five-year dynamic computable general equilibrium tax model."[26] Merrifield and DeAngelis use a dynamic model that examines the fiscal and economic effects of margin tax repeal by considering a scenario whereby the tax was never enacted in 2006 and then simulates how much more income and job growth there could have been.[27]

> An obvious pattern emerges after studying these reports; Texas' margin tax seems to shackle prosperity by eliminating income and jobs that would otherwise be created.

Regarding a phase out of the margin tax, the NFIB and BHI studies find that doing so could lead to an increase in private sector nonfarm employment of about 16,000 within five years compared with the baselines scenario. The NFIB study considers only employment effects; the BHI study also projects a potential $2 billion in new investment and $4 billion in new real disposable income after five years.

Taking this a step further to study the effects of immediate elimination, BHI forecasts the economic effects and find the cumulative gains are greater with 41,500 new private sector jobs added, $3.4 billion in new investment, and $10 billion in new real disposable income after five years relative to the baseline growth. Additionally, given a different model, Merrifield and DeAngelis find even larger gains of $5 to $8 billion in new real personal income and 61,500 new private sector jobs added after five years relative to the 2006 trajectory with the margin tax.

Research shows that immediately eliminating the margin tax would benefit all income groups. The National Center for Policy Analysis (NCPA) finds that the margin tax burdens all Texans, including the poor.[28] Specifically, the research finds that eliminating the margin tax could lead to Texas households under $35,000 per year gaining $2.2 billion in real disposable income—22 percent of total benefits—and those under $100,000 per year potentially gaining $6.9 billion in income. On the other hand, households above $100,000 per year could gain about 30 percent of the total benefits.

An obvious pattern emerges after studying these reports; Texas' margin tax seems to shackle prosperity by eliminating income and jobs that would otherwise be created. Without substantially reforming or eliminating the margin tax, the state's economy may continue to perform well below its full potential.

Econometric Model

To add to the economic literature studying the economic effects on the Texas economy from margin tax elimination, we developed a recursive vector autoregressive (VAR) model estimating the relationships among key Texas variables.

This dynamic model is a simultaneous, multiple equation linear model that allows each variable to be explained by its past values along with past values of other variables in the system, otherwise known as a feedback loop. Christopher Sims first developed a form of this model in 1980.[29] It has become a standard approach in the economic literature to identify the responses of economic variables to different shocks, such as the public policy changes that we examine here. While others have conducted research on this topic, to our knowledge this is the first use of a VAR model.

We select this model based on the following:

- A VAR model allows the relationships of economic variables in Texas to be estimated simultaneously instead of estimating the relationship of all variables one equation at a time. This is important when considering a dynamic economy that is constantly changing from multiple factors allowing a feedback loop among variables that is nearly impossible in many other models leading to potentially misleading results.

- A VAR model doesn't estimate unknown "multipliers" in an economy. Research estimating or assuming how policy changes or economic activity works its way through the economy may not hold true in the real world as human behavior changes. If this is the case, then the economic multipliers may provide little information about the economic effects of a variable to shocks. While no model is perfect or capable of precisely capturing all economic activity because of unseen events and changes in economic relationships, a VAR model provides a dynamic analysis that doesn't estimate or assume multipliers but rather considers past relationships among variables that may change over time.

Therefore, a VAR model provides consistent results that consider key characteristics of the Texas economy.

We build our model by ordering the variables according to the state's economic channels. For our purpose of considering the economic effects of eliminating the margin tax, we simplify the state's economy into three components: inflation-adjusted (real) personal income, total private sector nonfarm employment, and real margin tax revenue.

We base this model on a standard explanation that higher real personal income derives from economic activity, such as capital accumulation, leads to more savings and consumption that generates private investment providing opportunities for more economic growth and job creation. As Texans have a job and more income this translates into more revenue to businesses leading to higher business tax liability. Fewer dollars available to these businesses after paying taxes slows the growth rate of personal income and job creation over time leading to less business taxes. This feedback loop continues over time until another disruption (i.e. shock) occurs, which is a reason we consider a VAR model appropriate for estimating the major factors of the Texas economy: income and jobs. While allowing for this circular flow among these variables, our model also allows us to isolate the responses of each variable to shocks of the other variables.

Specifically, our approach estimates a three-variable VAR model. We consider three stationary variables in a vector defined aswhich these variables are the percent changes of the following quarterly Texas economic variables: real total personal income (Δpi_t), total private sector nonfarm employment (Δemp_t), and margin tax revenue ($\Delta marg_t$).

The following recursive form of our VAR model shows the endogenous relationship among the economic variables that we will estimate:

$$\Delta pi_t = a_1 + b_{11}\Delta pi_{t-1} + b_{12}\Delta emp_{t-1} + b_{13}\Delta marg_{t-1} + c_{11}\Delta pi_{t-2} + c_{12}\Delta emp_{t-2} + c_{13}\Delta marg_{t-2} + e_{1t}$$

$$\Delta emp_t = a_2 + b_{21}\Delta pi_{t-1} + b_{22}\Delta emp_{t-1} + b_{23}\Delta marg_{t-1} + c_{21}\Delta pi_{t-2} + c_{22}\Delta emp_{t-2} + c_{23}\Delta marg_{t-2} + e_{2t}$$

$$\Delta marg_t = a_3 + b_{31}\Delta pi_{t-1} + b_{32}\Delta emp_{t-1} + b_{33}\Delta marg_{t-1} + c_{31}\Delta pi_{t-2} + c_{32}\Delta emp_{t-2} + c_{33}\Delta marg_{t-2} + e_{3t}$$

We express the reduced form of the VAR model as:
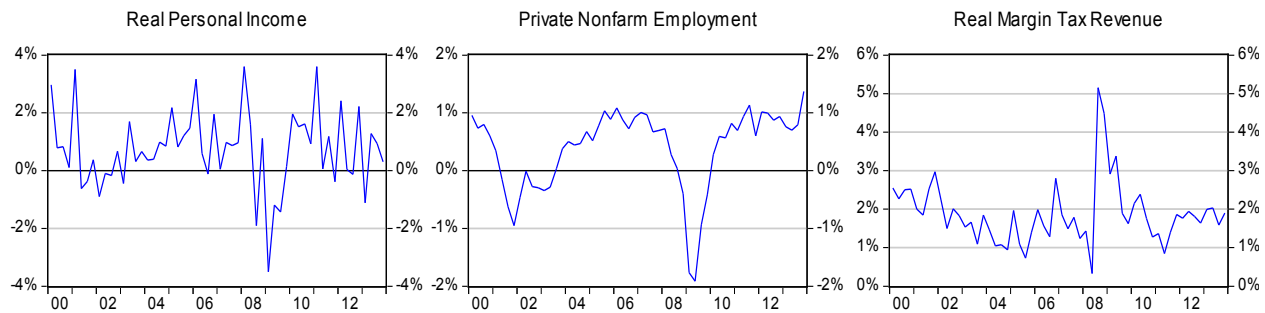
$$(1) \quad A(L)z_t = a + e_t,$$

where the matrix lag operator is A(L), α is a vector of deterministic terms, and e_t is a vector of residuals from the estimated reduced form with zero mean and a variance-covariance matrix Σ. The specific details of the model will be discussed in the Results section.

Data

Figure 5 presents the data we employ in our model from 1990Q1 to 2013Q4.

Figure 5: Quarterly Percent Changes in Texas Data for the 2000-2013 Period

Notes: Percent changes are calculated with quarterly data that are real (inflation adjusted in 2013 dollars) and seasonally adjusted from the Bureau of Economic Analysis, Bureau of Labor Statistics, Texas Comptroller of Public Accounts, and author's calculations.

Considering the VAR model is sensitive to the stationarity of the variables (i.e. whether the data series has a trend) and the order of integration among the variables, we check whether the data series for each variable has a trend using the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) unit root tests. After the results at the five percent level indicate each series has a trend, we transform the variables by taking the first difference of the log variables that provides test results suggesting the variables do not have a trend in their percent change form. These results support the transformation of the variables in the VAR model.

Since the percent changes in margin tax revenue tend to be volatile during several periods in the sample, the series may have one or more structural breaks.* To test for structural breaks in the marginal tax revenue data series, we conduct Bai-Perron multiple breakpoint tests with different specifications.[30] These tests show there are several breakpoints during the sample period, however, those that are most relevant for this research are in 2008—the year in which the margin tax was implemented. We use this date to break the full sample and estimate the results since 2008 to examine the economic effects of eliminating the margin tax.

If the data-generating process fluctuates around a trend with breaks, then the unit root tests may have low power. Moreover, if there is a misspecification of a stationary series with a break in a VAR, an additional problem of excessive persistence of shocks to these economic variables may occur, which could generate biased results.

Methodology

Including the three variables in percent change form and three lags, we estimate the econometric model for the entire sample 1990Q1-2013Q4. Table A1 in the Appendix presents the results for the period in question of 2008Q1-2013Q4.* We consider this period because of the potential breakpoint in the margin tax revenue data we find from Bai-Perron tests, which also coincides nicely with when the margin tax went into effect. We also confirm that the variables do not appear to be cointegrated by testing the variables for a long-term convergence using the Johansen cointegration test (see Figure A2).[31]

To examine the responses of Texas real personal income and private sector employment, we forecast the cumulative impulse responses, which are orthogonalized innovations obtained from a Choleski decomposition, of these variables to one standard deviation shocks. As noted by Stock and Watson, "Impulse responses trace out the response of current and future values of each of the variables to a one unit increase in the current value of one of the VAR errors, assuming that this error returns to zero in subsequent periods and that all other errors are equal to zero. The implied thought experiment of changing one error while holding the others constant makes most sense when the errors are uncorrelated across equations."[32] Tests with two lags in the model indicate errors are uncorrelated across equations, satisfying these criteria.

Results—Eliminating the Margin Tax Would Benefit Texans

After estimating the model, we forecast the impulse responses to the three one-standard-deviation shocks. While we focus our discussion on the relevant impulse responses regarding the effect of the margin tax on the Texas economy, the other responses have the expected signs according to economic theory.** **Figures 6 and 7** show the responses of real personal income and private sector nonfarm employment to a margin tax revenue shock using model estimates during the 2008-2013 period.

Our results suggest that the margin tax substantially depresses real personal income and private sector nonfarm job growth. In the first year after margin tax repeal, we find that real personal income could increase by $10.8 billion, or 0.93 percent, leading to new private sector job creation of 60,800, or 0.72 percent, above the 2014 baseline growth.
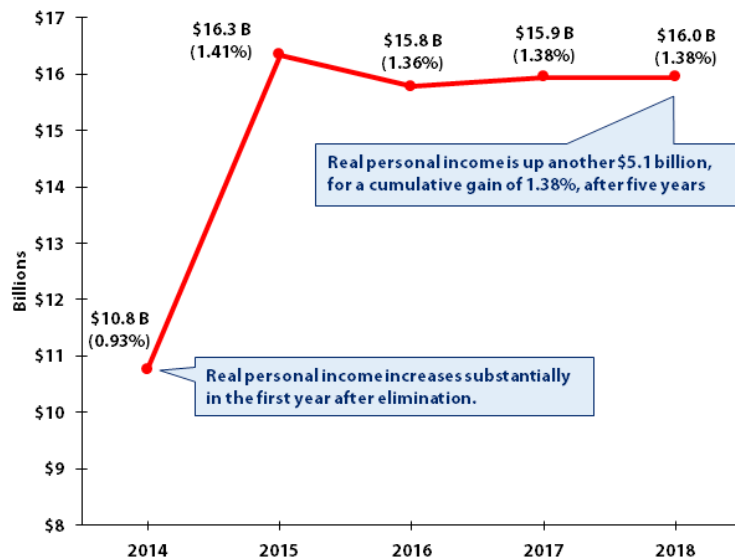
These short-run gains from eliminating the margin tax seem legitimate as roughly $5 billion more would be in the hands of employers that could go toward new investments, new hires, and higher wages. These economic gains from transferring dollars to the productive private sector would contribute to more economic activity driving up real personal income leading to more job gains and economic activity. In other words, eliminating the margin tax would free resources that would substantially boost the economy after the first year. Though not explicitly included in our model, the substantial costs associated with complying with this tax leaves more dollars available for productive activity, further stimulating economic activity that may not be captured in previous models.

Since the responses in the figures are cumulative totals above the current trajectory with the margin tax in place, real personal income and private sector job growth increase by $5.5 billion and 65,400, respectively, after the second year then gradually level off thereafter. Five years after elimination, the estimated cumulative new real personal income is $16 billion contributing to 129,200 new private sector jobs.

Although the likelihood ratio test statistic and Schwarz information criterion select a lag length of one, we select a lag length of two based on the Akaike information criterion that satisfies the test for not having serial autocorrelation among the residuals.

***Impulse responses for all variables are available upon request by authors.*
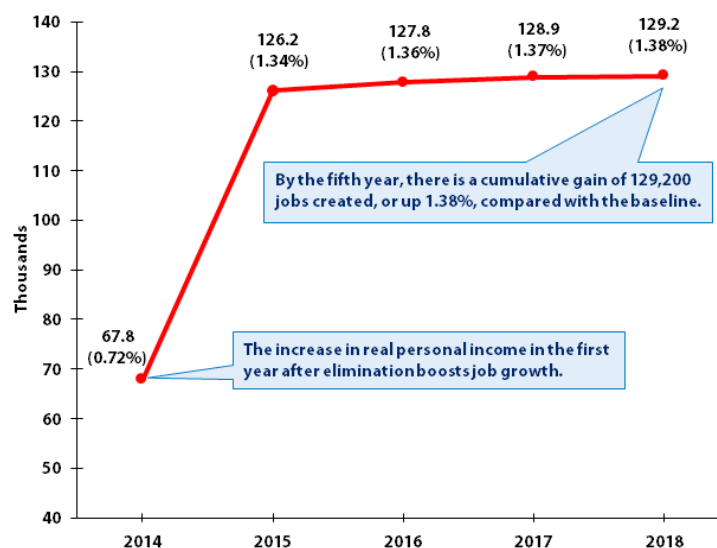
**Figure 6: Eliminating the Margin Tax Benefits Texans by Unleashing
Potentially $16 Billion in New Income After Five Years**

*Note: Cumulative estimated responses of inflation-adjusted (real) personal income during the first five years
of a margin tax revenue shock from equation (1) for the 2008Q1-2013Q4 post-margin tax period.
The figures in parentheses are the cumulative percentage above the baseline in the associated year.*

These substantial gains would benefit Texans by putting more money in their pocket and increase the number of well-paying jobs. For example, the increase in personal income translates into $158,600 per new employee after the first year ($10.8 billion divided by 67,800 new jobs) and $123,400 per new employee after five years. By adding more income in the economy, this would generate more sales tax revenue, motor fuels tax revenue, and other revenues at the state level that would help fill losses in margin tax revenue.

**Figure 7: Higher Incomes Support Almost 130,000 New Private Sector Jobs
Created in Texas Five Years After Eliminating the Margin Tax**

*Note: Cumulative estimated responses of private nonfarm employment during the first five years
of a margin tax revenue shock from equation (1) for the 2008Q1-2013Q4 post-margin tax period.
The figures in parentheses are the cumulative percentage above the baseline in the associated year.*

Though our results are substantially higher than those in prior research, **Table 1** shows that the research available on margin tax repeal provides robust evidence that Texans of all walks of life will benefit from higher incomes and job opportunities.

Table 1: Three Dynamic Models Show Substantial Income Gains and Job Creation After Eliminating Texas' Margin Tax

	Year After Elimination	TPPF (2014-2018)	BHI (2013-2017)	Merrifield & DeAngelis (2006-2013)
Real Personal Income (Pre-Tax)	1	$10.8 B	-	$1-2 B
	5	$16.0 B	-	$5-8 B
Real Disposable Personal Income	1	-	$6.4 B	-
	5	-	$9.8 B	-
Private Sector Non-farm Employment	1	67,800	31,500	22,000
	5	129,200	41,500	61,500

Reasons for our higher estimates include a different base year that starts with higher real personal income and private sector employment. In addition, while our responses cannot reflect all changes in the economy and the shock does not capture all the benefits of a full repeal, they do allow potential gains from avoiding compliance costs through the estimated relationships among variables in the model, which may not be adequately considered in other models.
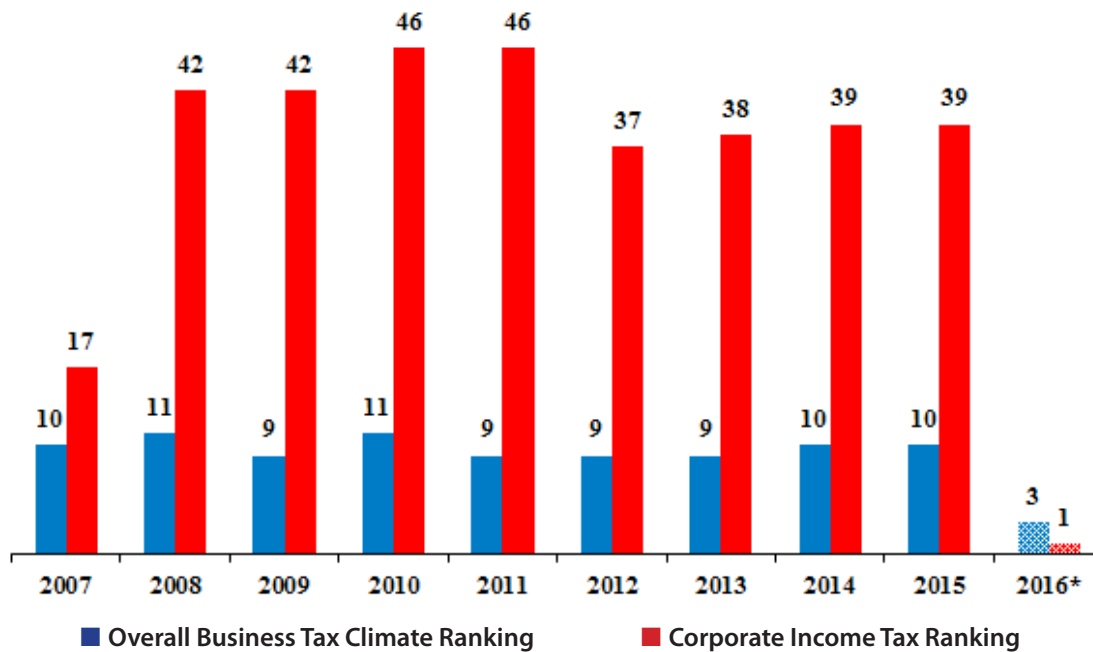
These economic gains may be conservative because they don't explicitly measure the generated benefits of businesses moving to Texas to take advantage of the state's no business tax or personal income tax economic environment. Tax Foundation eludes to these potential gains by evaluating and ranking the competitiveness of each state's tax system in its report, State Business Tax Climate Index (SBTCI). The high-profile ranking surveys each state's tax system and ranks them based on certain state-specific considerations such as the types of taxes levied, tax bases and rates, and more.[33]

In general, the SBTCI finds that "the most competitive tax systems are typically found in states that raise sufficient tax revenue with economically neutral and simple tax systems. The least competitive are typically found in states with complex, multi-rate corporate and individual tax codes; above-average sales tax rates that exempt few business-to-business transactions; high state tax collections; and few institutional restraints on the level of taxation or spending."[34] In other words, competitive states typically have simple, broad-based tax systems whereas uncompetitive states commonly feature complicated, high tax systems.

Texas, with its business-friendly, pro-growth environment, usually fares quite well in the Tax Foundation's business climate rankings. But Figure 8 shows that the state's corporate income tax ranking declined dramatically from 17th nationwide in 2007 to 42nd in 2008 when the margin tax took effect. In the years following 2008, the state's competitive ranking fluctuated reaching a low-point of 46th place in 2010 and 2011 then improving slightly to 39th in the most recent ranking.[35] However, it has yet to regain anything close to its pre-margin tax ranking.

Figure 8: Texas' Corporate Income Tax Ranking Fell Substantially from Margin Tax in 2008 but Could Rank 1st After Elimination

State Ranking (1 = Best, 50 = Worst)

Note: Tax Foundation rankings each year with the * indicating potential rankings after margin tax repeal.

According to the Tax Foundation, the state's corporate tax declining competitiveness is linked to "a complicated hybrid of a gross receipts tax and a tax on business profits."[36] Explaining further, the Tax Foundation by noting that Professor John Mikesell argues the margin tax is terrible for businesses because it combines "all the problems of minimum income taxation in general—excess compliance and administrative cost, penalization of the unsuccessful business, undesirable incentive impacts, doubtful equity basis—with those of taxation according to gross receipts."[37] With the economic costs associated with the margin tax, the Tax Foundation finds in their latest report that eliminating the margin tax would increase the corporate income tax ranking to first in the nation and the overall business tax climate ranking would rise to third in the nation, noticeably improving the Texas model's competitiveness.[38]

Recommendations

Given these costly results found here and those in prior research regarding the margin tax, we recommend the following:

- Eliminate Texas' margin tax.
    - o Though a four-year phase out would reduce revenue by about $1.25 billion per year, there are sufficient available funds during the 2016-17 budget period to cover this.
    - o Revenue losses in future biennia will be lowered or nonexistent from the large economic gains outlined in this report leading to more tax revenue.

Conclusions

The potential economic gains from eliminating Texas' margin tax presented in this paper are consistent with gains found in other related research. Though the margin tax costs Texans income and jobs, Texas continues to be the nation's job creation leader and the place where people nationwide flock for an opportunity to prosper. Legislators would be wise to eliminate the state's business tax thereby making Texas one of the only states without income and business taxes, increasing its competitive advantage over other states, and benefiting all Texans.

The costs of the margin tax should make any state considering a similar margin tax, or any business tax for that matter, think twice before enacting such a costly tax.

The latest example of a state that attempted to create a margin tax was in Nevada where it was on the November 2014 ballot. It was essentially a two percent margin tax that was based on Texas' margin tax where a rallying cry was "if it works in Texas it must be good for Nevada." Unfortunately, this is what happens when you have a well-functioning economy like Texas and the worst parts of the Texas model try to be replicated by other states. Fortunately, given the negative effects of such a tax, Nevada voters wisely turned down this proposal by a three-to-one margin.

President Ronald Reagan once said, "If not us, who? If not now, when?" The time is now for the 2015 Texas Legislature to unleash the Texas economy by eliminating the state's destructive business tax. Let the day come when the margin tax is in the past so that Texans can have the freedom to not be burdened with cumbersome taxes and instead use that time, effort, and money, to create jobs, invest in capital, and provide more opportunities for Texans to succeed.

This is the path forward for providing the nation with the best model possible. The Texas model of no income tax, low taxes overall, and sensible regulation would be greatly benefited by eliminating the business tax, and would contribute to all Texans, especially the working poor, having more opportunity to fulfill their hopes and dreams. A model such as this is one that other states would be smart to follow. ★

Appendix A

Table A1: Vector Autoregression Estimates

Sample: 2008Q1-2013Q4
Included observations: 24
t-statistics in [ ]

All Variables in Percent Change Form	Real Personal Income	Private Employment	Real Margin Tax Revenue
Real Personal Income (-1)	-0.409241 [-1.52361]	-0.087730 [-1.35394]	0.004956 [0.02958]
Real Personal Income (-2)	-0.49364 [-0.18006]	-0.074200 [-1.12190]	0.266629 [1.55913]
Private Employment (-1)	1.477272 [1.46496]	0.936406 [3.84933]	-0.938433 [-1.49192]
Private Employment (-2)	-0.871774 [-1.03634]	-0.252511 [-1.24433]	0.351432 [0.66976]
Real Margin Tax Revenue (-1)	-0.283972 [-0.74296]	-0.262687 [-2.84895	0.339089 [1.42227]
Real Margin Tax Revenue (-2)	-0.545247 [-1.31512]	-0.199988 [-1.99954]	-0.191508 [-0.74051]
C	0.023833 [1.76060]	0.011686 [3.57842]	0.017643 [2.08942]
R-squared	0.403362	0.866693	0.398779
Adj. R-squared	0.192783	0.819644	0.186583
Sum sq. resids	0.003921	0.000228	0.001526
F-statistic	1.915495	18.42089	1.879298
Loglikelihood	70.57852	104.7059	81.90587
Akaike AIC	-5.298210	-8.142158	-6.242155
Schwarz	-4.954611	-7.798559	-5.898556
Determinant resid covariance (d of adj.)	1.74E-13		
Determinant resid covariance	6.19E-14		
Loglikelihood	262.7990		
Akaike information criterion	-20.14992		
Schwarz criterion	-19.11912		

Appendix B

Table A2: Johansen Test Provides No Indications of Cointegration

Sample: 2008Q1-2013Q4
Included observations: 24
Trend assumption: Linear deterministic trend
Series in Percent Changes: Real personal income, Private employment, Real margin tax revenue
Lags interval (in first differences): 1 to 2

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized No. Of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None	0.498222	28.24955	29.79707	0.0746
At most 1	0.364261	11.69920	15.49471	0.1719
At most 2	0.033911	0.827989	3.841466	0.3629

Trace test indicates no cointegration at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized No. Of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None	0.498222	16.55036	21.13162	0.1943
At most 1	0.364261	10.87121	14.26460	0.1608
At most 2	0.033911	0.827989	3.841466	0.3629

Max-eigenvalue test indicates no cointegration at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-value

NOTES

[1] Scott Drenkard and Joseph Henchman, *2015 State Business Tax Climate Index*, Tax Foundation (Oct. 2014), p. 2.

[2] *March 2014 Primary Election Results Propositions Republican*, KCENTV.com (accessed Jan. 2015).

[3] James Quintero, Robert McDowall and Talmadge Heflin, *The Texas Margin Tax and Its Impact on the State's Economic Competitiveness*, Texas Public Policy Foundation (Sept. 2012), pp. 1-7.

[4] *Texas Statewide Survey*, Texas Public Policy Foundation (Oct. 2014).

[5] *Texas Franchise Tax Revisions—What Changed?*, Texas Comptroller (accessed Jan. 2015).

[6] *Neeley v. West Orange-Cove I.S.D.* (Nov. 2005).

[7] *Franchise Tax Overview,* Texas Comptroller of Public Accounts (accessed Jan. 2015).

[8] Joseph Henchman, *Texas Margin Tax Experiment Failing Due to Collection Shortfalls, Perceived Unfairness for Taxing Unprofitable and Small Businesses, and Confusing Rules,* Tax Foundation (Aug. 2011), pp. 1-3.

[9] *Franchise Tax Overview,* Texas Comptroller of Public Accounts (accessed Jan. 2015).

[10] Andrew Chamberlain and Patrick Fleenor, *Tax Pyramiding: The Economic Consequences of Gross Receipts Taxes,* Tax Foundation (Dec. 2006).

[11] *State Business Tax Climate Index Homepage,* Tax Foundation (accessed Jan. 2015).

[12] *Biennial Revenue Estimates,* Texas Comptroller of Public Accounts (accessed Jan. 2015).

[13] Peter Diamond and James Mirrlees, *Optimal Taxation and Public Production I: Production Efficiency,* The American Economic Review (1971), pp. 8-27.

[14] N. Gregory Mankiw, Matthew Weinzierl, and Danny Yagan, *Optimal Taxation in Theory and Practice,* Journal of Economic Perspectives (2009), pp. 1-34.

[15] Larry Summers, *Capital Taxation and Accumulation in a Life Cycle Growth Model,* The American Economic Review (1981), p. 540.

[16] Ibid, pp. 533-544.

[17] Robert Solow, *A Contribution to the Theory of Economic Growth,* The Quarterly Journal of Economics (1956), pp. 65-94.

[18] *Testimony* by John Heleman, Texas Comptroller of Public Accounts, before the Senate Committee on Finance (Oct. 2014).

[19] Ibid.

[20] *Tax Exemptions and Tax Incidence,* Texas Comptroller of Public Accounts (March 2013).

[21] Ibid.

[22] *Phasing Out the Texas Business Franchise Tax: The Impact on Private Sector Employment,* National Federation of Independent Business (March 2013).

[23] *Be Bold Texas: A Principles Case for Substantial Tax Reform,* Beacon Hill Institute commissioned study by Texas Conservative Coalition Research Institute (Jan. 2013), pp. 1-19.

[24] John Merrifield and Corey DeAngelis, Dynamic Scoring Analysis of Spending Restraint Alongside a Franchise Tax Repeal, (forthcoming 2015) (draft on file with author).

[25] *Phasing Out the Texas Business Franchise Tax: The Impact on Private Sector Employment,* National Federation of Independent Business, (March 2013).

[26] *What is STAMP?,* The Beacon Hill Institute at Suffolk University (accessed Jan. 2015).

[27] John Merrifield and Corey DeAngelis, *Dynamic Scoring Analysis of Spending Restraint Alongside a Franchise Tax Repeal* (forthcoming 2015) (draft on file with author).

[28] Ryan Murphy, *Benefits to the Poor of Texas Franchise Tax Repeal,* National Center for Policy Analysis (June 2014), pp. 1-8.

[29] Christopher Sims, *Macroeconomics and Reality,* Econometrica: Journal of the Econometric Society (1980), pp. 1-48.

[30] Jushan Bai, and Pierre Perron. *Computation and Analysis of Multiple Structural Change Models,* Journal of Applied Econometrics (2003) pp. 1-22.

[31] *Estimation and hypothesis testing of cointegration vectors in Gaussian vector autoregressive models,* Soren Johansen, Econometrica: Journal of the Econometric Society (1991), pp. 1551-1580.

[32] James Stock and Mark Watson, *Vector Autoregressions,* Journal of Economic Perspectives (2001), pp. 101-115.

[33] *State Business Tax Climate Index Homepage,* Tax Foundation (accessed Jan. 2015).

[34] Ibid.

[35] Scott Drenkard and Joseph Henchman, *2015 State Business Tax Climate Index,* Tax Foundation (Oct. 2014), pp. 1-75.

[36] Scott Drenkard, *The Tax Margin: A Failed Experiment,* Tax Foundation (Jan. 2015), p. 3.

[37] Ibid, p. 5.

[38] Ibid, pp. 1-14.

About the Authors

Vance Ginn, Ph.D. is an economist in the Center for Fiscal Policy at the Texas Public Policy Foundation. In 2006, he graduated with honors from Texas Tech University with a B.B.A in economics and accounting and minors in political science and mathematics. After interning for a U.S. Texas Congressman in Washington, D.C., he started his doctoral degree in economics at Texas Tech University and graduated in 2013. Before joining the Foundation in September 2013, Ginn interned at the Foundation as a Charles G. Koch Summer Fellow in 2011 and taught at three universities and one community college in Texas. He has successfully published peer-reviewed articles in academic journals, commentaries in multiple outlets, and posts in free market blogs. His research interests include free markets, fiscal policy, energy topics, monetary issues, and economic modeling.

The Honorable Talmadge Heflin is the director of the Foundation's Center for Fiscal Policy. Prior to joining the Foundation, Heflin served the people of Harris County as a state representative for 11 terms. Well regarded as a legislative leader on budget and tax issues by Democratic and Republican speakers alike, he for several terms was the only House member to serve on both the Ways and Means and Appropriations committees. In the 78th Session, Heflin served as chairman of the House Committee on Appropriations. He navigated a $10 billion state budget shortfall through targeted spending cuts that allowed Texans to avoid a tax increase.

About the Texas Public Policy Foundation

The Texas Public Policy Foundation is a 501(c)3 non-profit, non-partisan research institute. The Foundation's mission is to promote and defend liberty, personal responsibility, and free enterprise in Texas and the nation by educating and affecting policymakers and the Texas public policy debate with academically sound research and outreach.

Funded by thousands of individuals, foundations, and corporations, the Foundation does not accept government funds or contributions to influence the outcomes of its research.

The public is demanding a different direction for their government, and the Texas Public Policy Foundation is providing the ideas that enable policymakers to chart that new course.

Texas Public Policy
FOUNDATION