

# Policy Texas Public Policy Foundation

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# Perspective



## Progressive or Regressive, Is That Really the Question?

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### Introduction

Contrary to common perception, according to studies by the Texas Comptroller's office, Texas' major business tax *more* heavily impacts those with low incomes and *less* heavily impacts those with higher incomes *than does the sales tax*. This is a surprise only because the sales tax is so often said to be "regressive" and to hurt the poor. However, all taxes hurt the lowest level income earners the worst. Business taxes are no exception and, in fact, might even be worse than other alternatives.

A big difference between consumption taxes, like the sales tax, and other taxes is visibility. The sales tax is a very visible tax whose effects are immediately evident. Too often the effects of other taxes, like the much talked about business tax, are only seen after a substantial delay, sometimes years. So advocates of increased levels of government spending can advocate business taxes in the name of "fairness" and the pernicious effects on the economy, especially for the poor, are much more difficult to trace.

Consumption taxes are like ants at the backyard picnic—noticeable and painful. Many other taxes, especially business taxes, are more like termites—unnoticed until our economic house is in ruins.

While some would like to see the debate over whether taxes are regressive or progressive take center stage in tax policy, it is arguable that other issues

### Progressive or Regressive?

- ◆ The franchise tax, on average, is measured as more regressive than the sales tax by the Comptroller's Office.
- ◆ Measures of regressivity and progressivity of taxes cannot take dynamic effects into account.
- ◆ The federal luxury tax, intended as a tax on the rich, was actually a tax on low and middle income jobs in luxury industries.
- ◆ Attempts to achieve "fairness" by taxing high incomes and businesses backfire by reducing investment and job availability.
- ◆ Due to the complexity of our economy and human behavior, pronouncing a tax "progressive" or "regressive" is meaningless. ALL taxes ALWAYS more negatively affect those with low incomes.

far more important are at stake. If a tax system is supposedly progressive but destroys an economy, the poor will have far more to be concerned about than the supposed fairness of the tax system.

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## Tax Rhetoric and Definitions

The terms used to describe how taxes impact individuals at different levels of income are “regressive” and “progressive.” A “progressive” tax is one in which the percentage of income paid in tax increases as income increases. A “regressive” tax is when the percentage of income paid in tax decreases as income increases. There is also the “proportional” tax in which the percentage of income paid in tax does not change as income changes.

The federal income tax is designed as a progressive tax. There are currently six tax brackets ranging from a 10 percent tax rate on the lowest incomes to a 35 percent tax rate on top income levels. State income taxes follow a similar pattern. The social security tax is often called a regressive tax, but is a proportional tax on incomes up to \$94,200. However, the percentage of total income paid to the tax falls as income rises above \$94,200, making it weakly regressive. The Medicare tax, with no income limit, is a purely proportional tax.

While this paper will continue to use the terminology “progressive” versus “regressive,” it should be understood that these terms have a connotation that, from an economic or policy point of view, is meaningless. These terms were coined many years ago and were clearly used for their connotative effects. “Progressive” connotes modernity and movement to the future. “Regressive” connotes backwardness.

A hint regarding the use of these words comes from the *Manifesto of the Communist Party* by Karl Marx and Friedrich Engels wherein they call for, “A heavy progressive or graduated income tax.”<sup>1</sup> Clearly, a “progressive” tax could just have easily been termed a

“graduated” tax or possibly an “escalating” tax. A term other than “regressive” could have been used as well.

The test of a tax, though, is not the words used to describe or name it but the actual economic effects that result from it.

## Indirect Tax Effects—Tax Incidence

The effects of even the simplest of taxes, the excise (dollars per unit) tax, are not as straightforward as one might think. For example, almost 40 cents of the price of every gallon of gasoline sold in Texas is state and federal tax.<sup>1</sup> Is this 40 cents paid by the consumer or by the producer? If “both” is the answer that came to mind, that is the only correct answer. While producers remit the tax, it is actually all people who pay it, albeit in a variety of ways. What’s more, it is not easy to say just how individuals at various income levels are actually affected.

Economists have long known, and it can be demonstrated with simple economic tools, that an excise tax cannot entirely be passed on to consumers, whether the tax is remitted by consumers or producers. But it is important to remember that producers—businesses—are people, too. And these people employ people and buy other things from other people.

The sensitivity of demand and supply to price changes determines the degree to which a tax will be borne by people on the consumer (demand) side of a market and by people on the producer (supply) side of a market. So when a low-income individual purchases a gallon of gasoline, he does not pay the entire 40 cents in taxes. He certainly pays part of it, but some proportion of it is paid by people on the producer side through lower returns on investment, lower profits, and lower wages. The effects of the tax on both the demand and supply side are then translated through the entire economy.

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<sup>1</sup>The total tax is even greater when all taxes throughout the production process are considered.

Thus, economists refer to *tax incidence*<sup>2</sup>—the identification of who is truly impacted by a tax. Since all taxes are collected in the context of markets, all taxes have impacts rather more complex than the typical regressivity/progressivity analyses indicate. Taxes are actually shared by both sides of a market and by others in related markets. No tax incidence analysis, no matter how sophisticated, can fully account for all these effects, especially in the long term.

As a tax on the purchase price of certain goods and services, a sales tax is considered regressive because people with low incomes generally spend a higher proportion of their income on goods and services than do higher income individuals. Those with higher incomes are able to save a higher proportion of their incomes which is not taxed since it is not spent for consumption. Reality, though, is not so simple.

Of course consumers (people) are affected by a sales (consumption) tax, but so are sellers (people, too). Since the seller's net, or profit, is negatively impacted by a sales tax, so will employment by the seller. The negative effects of a consumption tax affect others besides the buyer and the seller. Depending on market conditions, the buyer may, in fact, be the *least* negatively affected by a given consumption tax.

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An income tax is no different. In fact, a progressive income tax is relatively insidious because although it is supposedly designed to be progressive, it is not clear that the full effects will be progressive at all. In some cases, high-income individuals will simply make the decision to stop earning additional income. What this really means is that they decide not to invest their funds into productive, return-generating endeavors. That means lost business and lost earning opportunities for lower-income individuals.

Thus, what really determines whether a tax is progressive or regressive is not its simple arithmetical impact according to a table of what various income strata *apparently* pay on a tax. The real incidence of a tax—who really pays a tax—is much more difficult to determine because actual economic effects on individuals in an economy have to be gauged in order to know who really bears the burden of the tax.

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When economic principles are employed in looking at tax incidence, what emerges is an understanding that we *all* pay some measure of *every* tax. Unfortunately, despite some very sophisticated mathematical modeling techniques, economists have only the vaguest notion of how to measure true tax incidence. The reason for this is simple. There is not an economic model in existence that can fully account for what is lost when government pulls resources from an economy, especially over the long run.

## A Real-World Tax Lesson

Perhaps the best example of a tax that was intended to be progressive—but whose actual *incidence* was regressive—is the so-called luxury tax passed by the U.S. Congress during the George H.W. Bush administration. It was really a series of excise taxes on items predominantly purchased by high-income individuals. These included private aircraft, fur coats, expensive jewelry, and yachts.

The result of the luxury tax, despite rhetoric from Congress that it would make the rich pay “their fair share,” was to cause a lot of people with modest incomes to lose their jobs. The rich reacted to the high taxes rather predictably. They did without or they bought used or they bought elsewhere. As a result, the domestic luxury industries suffered their own depres-

sion. It was eventually calculated that the luxury tax cost the federal government more in unemployment benefits than it ever brought in as revenues.<sup>3</sup>

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So a tax that was intended to specifically impact those with high incomes actually most hurt those with modest incomes. In all likelihood, the models of economists who believe in them would show the luxury tax to have the bulk of its impact on those with relatively high incomes and the profound effects in actual practice would have been missed. In addition, had the luxury tax remained in effect, its negative effects would have been compounded in the long run and these are the effects economic models have the greatest difficulty predicting.

## Measuring Tax Incidence

Attempts to measure tax incidence are very sophisticated and quite complex. Economists use data from many different sources both public and private. However, attempting to measure the actual incidence of a tax is, at best, a very inexact science. Any incidence analysis is only going to be a snapshot of the tax burden at a point in time, and a very blurry one at that. Different models are often contradictory, especially when tax policy changes are considered.

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A tax like the Texas franchise tax is a direct tax on business. In some markets, such a tax can be fairly readily passed on to consumers, especially if the market is not highly competitive. In other very competitive markets, the tax will be paid less by consumers than by producers. The degree to which a tax might or

might not be passed on has to be determined by an analyst and built into a mathematical model to measure incidence. Often, at best only an educated guess informs the researcher.

Even if the degree to which a tax can be passed on is accurately gauged, the fact is that the producer or owner of a business will only pay a fraction of that part of the franchise tax that cannot be passed on. Some of the producer portion is borne by employees of the firm and the researcher has to determine the right mix here as well. Then, there are those who sell other inputs to the firm who are affected.

Even if the degree to which workers are affected by the franchise tax is correctly determined, it is impossible to accurately gauge how many people a business would have hired absent the tax. In other words, there are negative effects of the tax that can only be gauged by seeing what happens if the tax is removed—an impossibility. These are often referred to as “dynamic” effects—effects that can only be witnessed in the long run. And remember, affected workers buy less, in turn affecting other industries and workers.

Now, imagine making these judgments for many types of taxes and many different industries. Ideally, they need to be made for every single business and they need to take the long run into account. It is impossible to get a truly accurate determination of tax incidence for any one tax. Nevertheless, the Texas Comptroller’s office has been tasked with measuring tax incidence.

The Comptroller produces a tax incidence report every two years.<sup>4</sup> Using estimated future tax revenues, the numbers are plugged into a model or series of models devised by the Legislative Budget Board. Although the analysis is sophisticated and conscientiously done, potential error is immediately evident in the use of prognosticated tax data. Recent changes in modeling have resulted in significant variations in the incidence analysis.<sup>5</sup> The modeling is so complex that it is nearly impossible to identify why these variations occur. In Table 1 below, the proportions of each of six taxes borne by various income groups as modeled in the Comptroller’s incidence report are illustrated. These are the averages of the reported percentages from the last four incidence reports. The left column shows

income *deciles*—groupings of 10 percent of the population arranged by income levels, decile 1 being the lowest income group and decile 10 being the highest.

**Table 1**  
**Average % of Tax Paid: 1999-2005**

Income Decile	Sales/Use Tax	Franchise Tax	Gasoline Tax	Motor Vehicle Sales/Use Tax	School Property Tax	Natural Gas Tax
1	3.2	3.9	4.3	2.8	3.1	0.5
2	3.8	4.5	5.2	3.6	3.6	1.1
3	4.7	5.0	6.3	5.1	4.2	1.7
4	5.6	5.6	7.3	5.6	4.9	2.3
5	6.7	6.2	8.3	7.8	5.7	3.1
6	7.6	6.7	9.0	8.5	6.9	4.0
7	8.7	7.6	10.2	9.8	8.1	4.9
8	10.3	8.7	11.3	11.7	10.3	6.2
9	12.2	10.1	12.8	13.5	13.5	8.5
10	16.7	15.2	15.2	18.1	21.3	17.1

Sources: Texas Comptroller's Tax Exemption and Tax Incidence reports, 1999-2005; author's calculations.

Clearly, the bulk of all our taxes are paid by those with higher incomes. Interestingly enough, though, the state's major business tax more heavily impacts those with low incomes and less heavily impacts those with higher incomes than does the sales tax. Even a snapshot analysis appears to indicate that a move toward more business taxation will hurt low-income Texans more than a move toward more consumption-based taxation.

A move toward a higher motor vehicles sales/use tax and toward higher property taxes would seem to reduce the burden on the poor because greater proportions of these taxes are paid by high-income Texans than the sales tax or the franchise tax while smaller proportions are paid by low-income Texans. This ignores, however, dynamic economic effects that can never be captured by any modeling technique.

Dynamics in economics is the problem with placing great emphasis on any incidence analysis. In Table 2 it is clear that every one of the taxes analyzed by the

Comptroller are regressive. Lower-income Texans pay a higher proportion of their income to each of these taxes than do higher-income Texans. This knowledge, though, is not very helpful in determining tax policy.

**Table 2**  
**Average % of Income Paid to Tax: 1999-2005**

Income Decile	Sales/Use Tax	Franchise Tax	Gasoline Tax	Motor Vehicle Sales/Use Tax	School Property Tax	Natural Gas Tax
1	9.2	1.5	1.8	1.4	9.7	0.2
2	4.1	0.6	0.8	0.7	4.5	0.1
3	3.2	0.4	0.6	0.6	3.4	0.1
4	2.9	0.4	0.6	0.5	2.9	0.1
5	2.7	0.3	0.5	0.5	2.6	0.1
6	2.5	0.3	0.4	0.5	2.6	0.1
7	2.3	0.3	0.4	0.5	2.5	0.1
8	2.1	0.2	0.4	0.4	2.4	0.1
9	2.0	0.2	0.3	0.4	2.4	0.1
10	1.4	0.2	0.2	0.3	2.0	0.1

Sources: Texas Comptroller's Tax Exemption and Tax Incidence reports, 1999-2005; author's calculations.

If the Comptroller/LBB methodology was applied to the luxury tax described above, it would show that tax to be progressive. That is because its very nature is such that only high-income individuals would have directly paid it. The Comptroller/LBB methodology would show low-income individuals bearing some of the burden of the tax, but the fact that high income individuals directly pay it would overwhelm whatever job loss effects the methodology would identify.

There is no way for a model to fully account for the fact that the luxury tax actually cost many low-to middle-income Americans essentially 100 percent of their incomes. Models are unlikely to show that such a tax very likely costs the economy more than it can possibly ever collect. There is no way to gauge the value of the lost innovations in the affected industries, the lost educational opportunities of the children of

the workers unemployed by the tax, or the cost of sacrificed efficiencies when industries are artificially priced off the world market.

## What Matters Is the Long Run

A tax, or a tax system, should ultimately be judged on the economic results wrought by its existence. Virtually any tax, even a business tax like the franchise tax, will have regressive tendencies. Some are more severely regressive than others. What this means is that the only way to minimize the negative effects of taxes on low-income individuals is to keep taxes generally as low as possible.

This is even true of the progressive income tax, which might not be progressive at all. Evidence suggests that the progressive income tax has profoundly negative long run economic effects.<sup>6</sup> It penalizes investment, which is mostly done through saving and business activity by high-income individuals. This, in turn leads to less investment, fewer jobs, less economic growth, and a poorer society—and the poor can least afford a poorer society.

Tax systems' long run effects involve more than just what they tax. They also involve *how* they tax. Complex tax systems that lend themselves to rent-seeking (lobbying for special treatment) are ultimately more detrimental than simple, straightforward, and transparent ones.

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So-called progressive taxes, because they have to be so heavily engineered in order to make them appear progressive, are naturally more complex than other taxes. They also naturally encourage those with the resources to do so to engage in rent-seeking. This, in turn, can lead to further problems, not just with the tax system and our economy, but with our system of

government and the perception of whether all citizens are being treated fairly.

## Conclusion

If anything, what tax incidence teaches is that no tax's effects can be fully known or anticipated except that the effects are negative. Therefore, the benefits from the government activity taxes support should be clear and unambiguous—and large. The best policy is to just keep taxes low and government limited. A limited government and the limited, visible taxes to accompany it are the best assurance for unlimited opportunity in the future.

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By focusing on a “fairness” argument, some are essentially arguing for hiding what will ultimately undermine our economy—like termites in a house. At the same time, visible taxes, like ants, are painful. But the great thing is that we can keep our economic house in sound condition and reduce the pain with our current tax system.

Every year, Texas state government already grows an average two percentage points faster than inflation and population growth would dictate. That might not sound like much, but if that excess were used to buy down property taxes instead of expanding government the school maintenance and operating property tax, the bulk of school taxes, could be *eliminated* in approximately 15 years. Instead of arguing over whether we prefer ants or termites, we have the option to call the “exterminator,” eliminate unnecessary government growth, and enjoy a pest-free picnic of prosperity for all Texans. ✨

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## Endnotes

<sup>1</sup>Karl Marx and Friedrich Engels, *Manifesto of the Communist Party*, in *The Marx-Engels Reader*, 2<sup>nd</sup> ed., Tucker, Robert C., ed., W.W. Norton & Co. (New York, 1978) 490.

<sup>2</sup>For a very good introductory, but somewhat technical, introduction to tax incidence analysis, see Don Fullerton and Gilbert Metcalf, *Tax Incidence*, available at <http://www.eco.utexas.edu/~dfullert/papers/fm-hndbk-pe02.pdf>.

<sup>3</sup>National Center for Policy Analysis, “*The Luxury Tax*,” formerly posted on the web at <http://www.ncpa.org/ea/eama92/eama92k.htm>.

<sup>4</sup>Texas Comptroller, *Tax Exemptions & Tax Incidence*. The report is produced every odd-numbered year and is available at <http://www.window.state.tx.us/m24stgov.html>.

<sup>5</sup>The 2001 report has an error in the gasoline tax section making a similar comparison invalid. The 1999 report did not report income percentages.

<sup>6</sup>Richard Vedder, *Taxing Texans, Part 1: The Worst Tax for Texas?* Texas Public Policy Foundation (Austin, 2002) available at <http://www.texaspolicy.com/pdf/2002-02-28-tax-taxingtexas1.pdf>.

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