State Tax Policy and Growth: Recent Evidence

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Executive Summary:

- Several states since the great recession have implemented tax reform in order to deal with fiscal instability and sluggish economic growth.
- Tax policy has an impact on an individual’s decision to work more or work less and this impact is reflected in changes in individual income tax rates.
- North Carolina and Kansas in particular are noted for aggressive tax policy reforms.
- Income tax cuts should be offset by other revenue sources or changes in spending, and in the Kansas legislation the state Senate amended the reform package to strip out the revenue raising offsets.
- In North Carolina, the data suggests tax cuts accompanied by initial budget tightening led to significant revenue increases from individual income tax receipts in future years at lower overall individual and corporate income tax rates.
- In North Carolina, after the tax cuts were fully implemented both individual income and sales tax collections increased (as a percentage of total revenue to the state) while other taxes decreased. This indicates that lowering individual incomes taxes did not lead to lower revenue to the state.
- In contrast to Kansas, North Carolina legislators have kept annual increases in spending at a rate below population growth and inflation.
- The North Carolina overall rate of economic growth grew at a faster rate after the tax cut policies were enacted.

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I. Introduction

In recent years, coming out of the great recession, many state governments experienced significant budgetary problems. In almost every state, the financial position mirrored somewhat the federal government in terms of large budget shortfalls that led to unsustainable deficits. Unlike the federal government, most state governments cannot borrow or create new money at a seemingly unending pace. Thus, sometimes major tax and spending policy changes became inevitable for state governments. Since many state policy changes were implemented in the past 3-4 years, evidence has been mounting as to both the positive and negative effects of tax policy changes on economic growth at the state level. Ideally, there would be a simple story to tell with 40 or more sample cases where state lawmakers negotiated various policy changes and economists evaluated the results, yet with all public policy analysis examining the various levers that state governments use to manipulate revenue outcomes is highly complex.

Throughout the United States, tax policy varies considerably from states with progressive income tax rates that mimic the Federal statute to states without income tax altogether. States have some Federally imposed limitations, yet for the most part their revenue generating policies are independent of both other states and the tax policy established in Washington. While this creates ample opportunities for varying policy regimes, it also results in the difficult task of isolating the optimal strategies for state fiscal health.

What follows is a review of the recent research on state tax policy changes in the past 3-4 years. In particular, we focus on policy changes that were targeted to either change the incentives for doing business in a state, and thus generate economic growth, or to deal with continued budgetary problems at the state level. Often, these objectives go hand in hand, as states mainly change tax policy for growth reasons with the objective of then creating a more stable fiscal outlook. This distinction is far from
trivial though, as the research demonstrates, how states approach both tax and spending changes is what drives economic outcomes. Additionally, we review the case of two states that seemingly followed similar tax policy changes with largely different outcomes: Kansas and North Carolina.

II. State Tax Policy Change

Policymakers throughout the country have implemented tax policy change since the great recession in the hopes of shoring up troubled budgets and to re-invigorate, in some cases, a sluggish state economy. Extensive research has attempted to isolate the impact of these changes especially in terms of measuring the outcome on economic growth. Prior to reviewing the relevant economic research, below is a list how some states have amended their tax policy in recent years:

**Arkansas**: In 2014, reduced each of its six tax brackets by 0.1 percent effective. In 2015, the state cut rates 1 percent for people earning between $21,000 and $75,000 and plans to remove people earning less than $21,000 a year from owing tax records starting in 2019.

**District of Columbia**: In 2015, enacted tax cuts and broadened the tax base to include gyms and health clubs. The sales tax was cut in 2013 from 6 percent to 5.75 percent.

**Indiana**: In 2013, decreased its flat tax rate in 2013 from 3.4 percent to 3.23 percent. The cut began to be phased in starting in 2015 and ends in 2017.

**Kansas**: In 2012, (effective as of January 2013): reduced income tax rates and eliminated income tax for small businesses filing as individuals (pass-through businesses); 2013: phased in a cut in personal income tax rates (to eventually eliminate income tax).

**Maine**: In 2012, decreased its top income tax rate from 7.95 to 7.5 percent effective in 2013. The rate was scheduled to drop to 5 percent but has held at 5.5 percent. Also, expanded what is subject to its sales tax, including food.

**Michigan**: In 2015, enacted tax cuts that eventually will end personal income taxes starting in 2023. The flat tax rate was cut from 4.35 percent to 4.25 percent in 2012 and the gas tax was raised in 2017.

**Missouri**: In 2014 began to lower its flat income tax from 6 percent to 5.5 percent starting in 2017. Certain economic triggers weren’t met, so the tax cuts haven’t started. Missourians voted against expanding sales taxes on services and repairs in November.

**Mississippi**: In 2016, enacted a plan to phase out its 3 percent tax bracket over three years.

**New York**: In 2016, passed a law to drop the tax rate for those making between $40,000 and $300,000 from 6.45 percent to 5.5 percent.
**North Carolina**: Effective as of January 2014, corporate income tax and personal income tax (phased in rate reduction), flat personal income tax rate and also expanded the sales tax base.

**North Dakota**: In 2015, cut its bottom personal income tax rate from 1.22 percent to 1.10 percent and its top rate from 3.22 percent to 2.9 percent.

**Ohio**: In 2013, introduced income tax cuts and since then the top rate has dropped from 5.925 percent to 4.997 percent. Sales taxes increased the same year from 5.5 percent to 5.75 percent.

**Oklahoma**: In 2012, lowered its top rate from 5.5 percent to 5.25 percent. In 2014, the state enacted a law that would lower its income tax from 5.25 percent to 5 percent, and later to 4.85 percent, if certain economic triggers were met. The current rate is 5 percent and the governor is seeking to expand taxes to make up for a budget deficit.

**Wisconsin**: In 2013, cut its top income tax rate from 7.75 percent to 7.65 percent and the bottom rate from 4.6 percent to 4 percent.

Much of the recent research focuses on these states listed above. In each case, tax relief of some form was enacted.

Three of the more significant and prolific organizations, in terms of research, examining the impact of state tax policy are Americans for Tax Reform, The Center on Budget and Policy Priorities, and the Tax Policy Center. Additionally, other organizations such as the American Legislative Exchange Council (ALEC) and the Tax Foundation publish research on the impact of state tax policy as well as other rankings on economic health at the state level. What complicates this research is the increasing complexity, in most cases, of the state tax structure, and the varying categories of taxes states use to generate revenue. Economists focus on income, property, and consumption taxes, but there are myriad ways these taxes are structured (Millsap & Gonzalez, 2016). Also, any research on state tax policy must consider what are often competing goals. The five most important criteria to balance when comparing the costs and benefits of an state tax plan are: economic efficiency, equity, transparency, collectability, and revenue production (Millsap & Gonzalez, 2016).

The partisan debate often ensues around prioritizing these aforementioned goals. Tax policy, in terms of both intention and outcomes, results in competing goals, and legislatures consist of policymakers that have a strong bias toward one goal versus another. Think Tanks and other
organizations such as those mentioned above, also get caught up in trying to analyze the impact of tax
policy based on the perception of the most important goal. Yet, these goals will always be in tension.
There will always be tradeoffs faced by policymakers in terms of maximizing tax revenue versus equity,
or ease of collection versus economic efficiency. Understanding these tradeoffs are an important part of
analyzing the effectiveness of any changes in policy.

Sifting through the varying goals of tax policy and reconciling those with outcomes poses a
challenge for researchers and can result in contradictory conclusions of a given policy change. The
economic theory, and subsequent reality, of tax changes is also an essential part of understanding how
to discern the impact of such changes. With tax changes, individuals are faced with both a substitution
effect and an income effect of the change. The substitution effect faced by the state workforce is the
choice to work more (or less) due to the lower (or higher) income tax imposed on the worker.
Individuals will trade leisure for more work if the cost to working more (i.e. the marginal tax) is lower.
Also, an income effect impacts the individual worker by changing the demand for goods due to a change
in income (i.e. a lower tax rate results in a higher real income). The question that is often difficult to
answer is to what extent the substitution effect and the income effect change the decision to work more
versus the desire to consume more (and have time to consume more) when a state lowers the overall
tax burden for the individual. Some argue that these effects are small, and thus tax cuts do not have the
intended impact on growth (McArdle, 2017), while others explain that it is complicated due to the intent
of public spending but tax cuts tend to be at least partly self-financing (i.e. the substitution effect has a
more significant impact) (Mankiw & Weinzierl, 2006).

A. Review of the Research

Recent research on the use of tax cuts, in the states mentioned above, examines the impact on
economic growth when targeting changes in the state income tax. Much of this research focuses on the
high profile case of Kansas and the significant revenue problems (accompanied by lack of growth) that
are said to have been the result of lower income tax rates. A two state comparison between Kansas and North Carolina is discussed below, yet first some broader research on the impact of policy changes across several states is considered. In a recent study on phase-in tax cuts for 11 states, the authors found that these cuts can result in revenue problems, which then led to a forced cut in public services (Figueroa, Leachman, & Mazerov, 2017). Yet, in these 11 states, five states had produced multi-year expenditure estimates covering the full duration of the phase-in.

The question not often asked is what is/are the primary intended outcomes of a tax policy change? Most of the public statements by policymakers are outcomes seeking to shore up budget shortfalls or spur economic growth. What is often missing from realizing these outcomes, is the myopic failure to consider the costs of any policy change. In reality tax policy is just one piece, and possibly a small piece, of the overall impact on a state budget in terms fiscal health. Many factors contribute to the economic health of a state, and when examining the costs and benefits of tax policy it is misguided to neglect these other factors.

Conflicting research demonstrates the difficulty in isolating the effects of tax changes and the desired outcomes. In certain cases, an increase in tax rates is recommended pointing to the short-term consequences of increased rates versus spending cuts (Bivens, 2017). On the other hand, research also indicates that states which enacted tax cut policies experienced significant growth and out-performed states with the highest overall tax burden (Williams & Young, 2017). The key in analyzing these contradictory accounts is attempting to understand both the intended outcomes and the vast differences in state tax regimes. Personal income tax (PIT) change along with commercial income tax (CIT) change often garners the most significant attention. Yet, states have a broad range of taxation options for generating revenue and it remains very difficult to isolate the effect of certain policy changes while holding other changes constant. Since some states have no income tax on individuals, when
Comparing these states with those that cut PIT, researchers must control for the direct and indirect effects of other policies.

Another example of this challenge is found in research that analyzes the overall climate for doing business in a state. Policymakers point to business climate as a key metric for economic growth, and CIT rates are only one piece of whether start-ups, expansion of existing firms, or new firms help grow a state’s economy. The Tax Foundation has created an extensive index for assessing the business tax climate in all 50 states. The focus of this index is not only examining the rates of CIT, but also to understand the overall structure of state tax systems. For example, states without a PIT would expect to have a higher tax rate on businesses or possibly a higher property tax to make up the necessary revenue. Yet, a state that has a higher income tax rate (either individual or corporate) would expect to necessitate (or allow for) a lower property tax (other things equal). Regardless of the equity considerations in terms of types of taxes (income, property, or sales), states should maintain a tax system that balances the overall streams of revenue generation. Florida, for example, ranks very high (meaning the best climate for working and doing business) because the state legislature is able to maintain a zero tax on individual income and very modest rates on businesses and personal property. Connecticut, on the other hand, while praised by some researchers as a model for states facing budget deficits, ranks very low (43 out of 50) due to high PIT and the second highest property tax in the nation (Walczak, Drenkard, & Henchman, 2017).

A vital aspect of tax policy change is examining the impact of tax policy changes in terms of whether tax cuts are financed by deficit spending versus offset by changes in overall spending. Economic intuition indicates that in the short-run, income tax cuts will reduce revenue and thus necessitate a change in spending or a change in how spending is financed. Two key questions arise: 1) Will the revenue shortfall occur temporarily and be offset by a change in growth, and 2) What will determine whether tax cuts will impact growth at all? These are important, and slightly different,
questions as economists weigh the evidence as to when and how tax policy change (notably increases or decreases in income tax) lead to economic growth and fiscal health. Again, recent research at the state level indicates that tax cuts financed by spending cuts, in the short run, are more likely to result in economic growth. For tax policy to have a positive effect on growth, it should create an incentive to save and invest, have small positive income effect, reduce distortions (across sectors, income and consumption types), and increase the budget deficit minimally (Gale & Samwick, 2014). These cuts though, do not automatically lead to growth. As with other fiscal decisions that accompany a tax cut, the diversity and industrial mix of a state’s economy is also a contributing factor. In research from the 1990s, of six states that cut taxes three had faster output growth, and several tax cutting states in the 2000s had similar growth rates as the overall U.S. economy (Gale, Krupkin, & Rueben, 2015).

This research continues to address the outcomes of tax change policies, yet often the broader goals of tax cuts and implementation are ignored (by both policymakers and researchers). Plenty of critics provide evidence that tax cuts at the state level fail to translate into growth (Leachman & Mazerov, 2015), yet equal evidence on ranking each state based on the overall tax regime demonstrates that economic and fiscal health are tightly linked with overall tax policy (Laffer, Moore, & Williams, 2017). In the next section, a closer examination of two states involved in high profile tax cuts during the past few years provides some additional clarity for state tax policy moving forward.

III. North Carolina and Kansas – The Case of Two Tax Cut Regimes

“Ad Astra per Aspera,” reads the official state motto of Kansas that appears both on the state seal and the state flag. The Latin phrase means “to the stars through difficulties.” Indeed, Kansas has faced ongoing challenges with the budget deficit after cutting taxes in 2012 (effective January 2013). Governor Sam Brownback pushed for the tax cuts hoping it would provide “shot of adrenaline into the heart of the Kansas economy” and stagnant growth would cease. However, the tax cuts turned out to precede a sluggish economy with continued fiscal instability within the state government. As a result,
the Kansas legislature reversed the tax cuts in June 2017. On the other hand, the North Carolina economy is thriving after its 2013 tax policy reforms (effective January 2014) and the state continues to cut taxes on a yearly basis. Nevertheless, North Carolina receives little acknowledgement from those critics of tax cut policies, while the Kansas case has been analyzed meticulously. This poses a challenge in drawing parallels between the two states, while trying to identify why tax cuts hurt the Kansas economy and subsequently provided a boost for North Carolina.

Both Kansas and North Carolina were inspired by Arthur Laffer’s theory that tax cuts boost economic growth (Beachum, 2017). In 2012, before the tax cuts, Kansas had a top marginal PIT rate of 6.45 percent, top marginal CIT rate of 7 percent, and an unemployment rate of 6.1 percent (Williams & Wilterdink, 2017). Before enacting tax cuts North Carolina had three tax brackets for PIT at 6 percent, 7 percent, and 7.75 percent, and a CIT rate at 6.90 percent (North Carolina Department of Revenue).

The first difference between the two tax reforms is the broad legislative approach. In Kansas, the reform included a reduction of the top marginal PIT rate to 4.9 percent (-24%), a reduction of the middle bracket rate from 6.25 percent to 4.9 percent (-22%), and a reduction of the low income PIT rate from 3.5 percent to 3.0 percent (-14%), with an income tax exemption for pass-through businesses (Williams & Wilterdink, 2017). In North Carolina, the tax reform introduced a flat tax system by reducing PIT rates to 5.8 percent (-3.3%, -17%, -25% per bracket respectively), and it reduced the CIT rate from 6.90 percent to 6 percent (-19%). Additionally, the North Carolina reform expanded the CIT tax base by letting credits expire, while these changes also expanded the sales tax base (North Carolina Department of Revenue). The North Carolina policy also eliminated more than half of the tax expenditures by broadening the PIT base (“North Carolina Illustrated: A Visual Guide to Tax Reform,” 2015).

Both Kansas and North Carolina used a long-term phase-in method to continue reducing rates throughout the years following the original tax cuts with Kansas reversing those in 2017. Currently, the CIT rate in NC is a flat 3 percent (lowest among the 44 states that levy a CIT) and in KS the rate is 4
percent for companies with income under $50,000 and 7 percent for income greater than $50,000. According to the Center on Budget and Policy Priorities, when fully implemented the tax cuts cost Kansas $460 million (7.3% of the 2017 fiscal year revenue) and North Carolina $1.3 billion (5.9% of the 2017 fiscal year revenue) (Leachman & Mazerov, 2015). Also, five of eleven states that used a phase-in method for cutting taxes, including North Carolina, produced multi-year expenditure estimates covering the full duration on the phase-in (Figueroa, et al., 2017). Kansas is among those states that did not produce such estimates, which caused structural problems for the state budget. Moreover, North Carolina was more prepared for the potential revenue fluctuations because the state had rainy day funds, while Kansas created such funds only in 2016 ("State Rainy Day Funds in 2017," 2017). North Carolina was more strategic in preparing for the impact of the tax reform.

Before passing the tax cut bill in the Kansas Senate, “lawmakers amended the reform package to strip out the revenue raising offsets, such as the extension of a temporary sales tax increase and the removal of the mortgage interest deduction,” which increased the cost of the reform (Williams & Wilterdink, 2017). Laffer attributed failure of the Kansas tax reform to this amendment (Beachum, 2017). Justin Fox, Bloomberg View columnist, lists three reasons why the reform failed: 1) tax rates were not that high to expect an economic boom from cutting them 2) "The pass-through exemption significantly narrows the tax base, which made for a less stable, productive, and competitive (tax) code" 3) Kansas had limited room for spending cuts and thus a budget deficit was inevitable (Fox, 2017).

Furthermore, Fox argues that “Kansas was a state with a below-average tax burden in a part of the country that wasn’t growing very fast” (Fox, 2016). Paradoxically, some economists argue that in many ways State economies mirror the U.S. in terms of the general business cycle. When the national economy’s booming, the North Carolina economy grows as well, and the state economy behaves in similar fashion when the national economy suffers according to Michael Walden of N.C. State University (Frazier, 2016). Walden argues that this is due to North Carolina’s heavy reliance on the manufacturing
sector which performs better during expansions. Interestingly, Fox writes that the failure of the Kansas tax reform is due to its reliance on manufacturing with struggles in the oil market being another factor that adversely affected their economy. According to the Kansas Department of Commerce, their primary manufacturing industries include aviation and aerospace. The National Association of Manufacturers lists the top manufacturing sectors in North Carolina as chemical products, food, beverage, and tobacco products, computer and electronic products, and machinery. These differences in the manufacturing sector could account for why Kansas and North Carolina experienced differing paths of growth post tax reform, yet the growth in manufacturing in East Kansas leads to other explanations (Kotkin & Shires, 2017).

According to the North Carolina Office of State Budget and Management (OSBM), in the 2016-2017 fiscal year, the primary revenue sources for NC’s General Fund are individual income tax at 53 percent and the sales and use tax at 31 percent. The other significant tax revenue sources include the corporate income and franchise taxes (6.4%), excise taxes on alcohol and tobacco products (2.7%), and the insurance premium tax (2.1%). The General Fund also relies on non-tax sources of revenue, including fees, investment income, some types of fund transfers, and judicial settlements, which account for nearly 4 percent of all anticipated General Fund revenues in the current fiscal year. According to the Tax Foundation, before North Carolina reformed its tax code, revenue sources were as follows: individual income tax (or PIT) 46 percent, sales taxes 25 percent, excise taxes 17 percent, CIT 5 percent, and other taxes 7 percent. Thus, after the tax cuts both individual income (PIT) and sales tax collections increased while other taxes decreased (“North Carolina Illustrated: A Visual Guide to Tax Reform,” 2015).

Below are charts illustrating Kansas’s tax revenues in 2011 and 2016. Based on these data, Kansas too has relied on individual income and sales tax collections and both were affected by the tax reforms. Individual income tax revenues decreased by approximately 8 percent (-20%) and sales tax increased by approximately 10 percent (+24%) while other tax collections mostly stayed the same.
Gross Total Collections and by Source
Collections by Department of Revenue

Comparison of Collection Sources to Gross Collections

2011 Kansas Revenue Report by the Secretary of Revenue

Gross Total Collections and by Source
Collections by Department of Revenue

Comparison of Collection Sources to Gross Collections

2016 Kansas Revenue Report by the Secretary of Revenue
The North Carolina OSBM and data provided by the Kansas Secretary of Revenue in 2011 and 2016 chart total revenue collections in each state. The graphic below demonstrates North Carolina’s revenue history. Revenues to the North Carolina state coffers have been increasing since 2010 before a decrease in 2014 (tax cuts became effective this year). However, revenues began to rise again in late 2014. North Carolina has had relatively stable total revenue collections over the years since 2010.

On the other hand, the Kansas tax revenues have dropped since the tax cuts and have been slower to bounce back. The first chart below shows the PIT since 2011. After a slight increase 2013, PIT revenue dropped significantly in 2014 and has remained much lower that it was prior to the tax cuts. The CIT did not have the same drop off in 2013, yet it did fall in 2016 which further hindered the state budget during the most recently completed fiscal year. These two tax and revenue paths, between North Carolina and Kansas, further illustrates the potential benefits of tax cuts if appropriated judiciously. In North Carolina, the income tax cuts were quickly countered by changes in revenue sources and potential\(^1\) incentive changes that led to an increase in revenue to the state (only after a very short-lived decrease in tax receipts).

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\(^1\)“Potential” incentive changes are reflected in an increase in tax revenue from PIT after the rates were lowered.
Patrick Gleason, a director of state affairs at Americans for Tax Reform, argues that “[o]ne of the biggest mistakes Kansas lawmakers made was their failure to rein in spending at the same time that they cut taxes” but increasing spending and, contrariwise, “North Carolina legislators have kept annual increases in state spending below the rate of population growth and inflation” (Gleason, 2017). The chart below was created using State Data Lab, and it shows the net revenue change that occurred in both Kansas and North Carolina during the tax reforms, and also compares it to the national average of all 50 states. As indicated, the North Carolina reforms led to a stable revenue position, but did not lead to the drop off that Kansas experienced.
The chart below, compares total expense changes in North Carolina, Kansas, and the national average of all 50 states. The state budget categories include education, health and human services, interest payments, unemployment payments, and other. Based on the data, Kansas has been increasing spending since 2012 and North Carolina decreased spending in 2014 (the year the tax cut was enacted) and then stabilized spending thereafter.
Finally, North Carolina’s successful tax changes are also reflected in the state Real GDP growth. The chart below shows that Kansas had a consistent yet slow Real GDP growth which was slightly below the national average. However, North Carolina’s Real GDP grew at a faster rate after the tax cut policy was implemented.

![Real GDP Chart]

Source: State Data Lab

**Conclusion**

For lawmakers in Raleigh, the North Carolina tax reform plan to cut income tax rates was also accompanied with the elimination of certain exemptions, which broadened both the PIT and CIT tax base. As a result, PIT collections have been rising since the implementation of the tax reforms while those collections remain the main source of general revenue for the North Carolina state government. In addition, North Carolina ran a surplus also due to an initial reduction of spending. Unlike North Carolina, Kansas lawmakers implemented tax reforms (seemingly) without planning for changes in revenue. Additional steps were taken to balance the budget in the years following the tax cuts, but these steps failed to create a more stable budgetary outlook. By increasing spending while also
decreasing income tax collection, a main source of revenue in a slow growing state economy, Kansas lawmakers set in motion a fiscal outcome that was likely to fail.

As indicated above, most of the commentary on tax policy at the state level (and often at all levels of government) rarely focuses on the broad goals for tax collection and subsequent spending. It is often assumed that the goal for state legislators is to maximize tax revenue and then allocate spending according to the varying “public good” demands within a particular state. There will always be more demands on a state budget than funds available. Even in times of surplus, a state will typically pay down debt or find a neglected budget category to increase spending. A closer analysis of overall state spending is a crucial component of any tax policy regime.

References


