Considerations in Dynamic Scoring and Macroeconomic Modeling

The Link Between Tax Cuts, Inequality, and Growth

By Anna Chu  March 2015
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Introduction and summary

Under the simple rules of math, two plus two equals four. But House Republican congressional leaders’ new fuzzy rules for evaluating the budgetary impact of legislation blur the lines of simple math. Under their new rules, two plus two may soon equal five.

As an opening salvo for the 114th Congress, in a “largely party-line vote of 234-172,” Republicans in the House adopted a rules package that included a provision asking the Congressional Budget Office, or CBO, and the Joint Committee on Taxation, or JCT, to use so-called dynamic scoring in their evaluation of a proposed legislation’s budgetary impact. Under the rule, CBO and JCT would have to arrive at one estimate of the economic impact of a proposed bill—a difficult and uncertain endeavor—and factor that into a final score of the bill’s budgetary impact. This differs from current practice, where CBO and JCT provide, when requested, a range of estimates based on different assumptions and models of how the economy would respond to policy changes. Compared with dynamic scoring, this range of estimated impacts provides lawmakers with more information about the possible impacts of a proposed policy.

By requiring CBO and JCT to whittle down the range of macroeconomic estimates into one number for a final score, the rule would make CBO and JCT pick and choose which assumptions and models count in the macroeconomic analysis. If one of the assumptions is that a boost in the economy may lead to more people working and paying more taxes, then that additional tax revenue received by the government would offset the official cost of a bill. Thus, on paper, the proposal would have a lower official cost because of possibly uncertain and unrealistic assumptions that the proposal would generate economic growth. This move would make it easier for policymakers to enact more tax cuts based on the conservative trickle-down mythology that tax cuts for the rich grow the economy. It is especially telling that the rule introduced by House Republican leaders would “for all practical purposes ... apply almost exclusively to tax legislation.” It seems that since conservatives cannot get tax cuts through the front door, they are trying to get them through the side door instead.
CBO and JCT should not be forced to undertake dynamic scoring. But since the House passed the new rules package, responsible lawmakers should work with CBO; CBO’s new director, Keith Hall; and JCT to ensure that the so-called dynamic scoring process is not hijacked as a vehicle to sell the conservative trickle-down mythology. Specifically, CBO and JCT should consider the following two issues:

- **The latest economic research.** A growing body of empirical research undermines the conservative economic mantra that tax cuts for the rich grow the economy.[^5] CBO and JCT should ensure that their macroeconomic models reflect this growing empirical evidence. At the same time, more and more research suggests that rising inequality is holding back the nation’s economic growth.[^6] Given this, CBO and JCT should develop a macroeconomic model that considers how a proposed bill would impact inequality—and therefore economic growth. While this may be an evolving and time-consuming process, reasonable steps can be made toward this goal, including a CBO and JCT study on inequality’s impact on economic growth.

- **The distributional impact of tax policies.** Given the evidence that for many households, market incomes are stagnant or declining,[^7] and given the emerging evidence that rising income inequality is holding back economic growth,[^8] CBO and JCT should conduct an analysis of the distributional impact of tax policies. If a proposed tax policy were to increase income inequality, CBO and JCT should determine how that increased inequality hurts economic growth and factor that into their dynamic score. Additionally, CBO and JCT should consider how tax cuts given to certain income brackets could impact consumption and demand.

[^5]: [Empirical research undermines the conservative economic mantra](https://wwwCENTERforAmericanPROGRESS.org/considerations-in-dynamic-scoring-and-macroeconomic-modeling)
[^6]: [Rising inequality is holding back the nation’s economic growth](https://wwwCENTERforAmericanPROGRESS.org/considerations-in-dynamic-scoring-and-macroeconomic-modeling)
[^7]: [Evidence of stagnant or declining market incomes](https://wwwCENTERforAmericanPROGRESS.org/considerations-in-dynamic-scoring-and-macroeconomic-modeling)
[^8]: [Emerging evidence of rising income inequality impacting economic growth](https://wwwCENTERforAmericanPROGRESS.org/considerations-in-dynamic-scoring-and-macroeconomic-modeling)
Background on dynamic scoring

CBO and JCT are both traditionally objective, nonpartisan institutions, but dynamic scoring threatens to enshrine conservative trickle-down philosophy in them, easing the passage of bills to cut taxes for the rich. In order to understand the impacts of these proposed changes, it is important to understand how CBO and JCT currently score and analyze spending and tax measures, how dynamic scoring changes those procedures, and why it is problematic to do so.

Current approach

CBO and JCT currently do not consider a proposed bill’s effect on economic growth in producing an estimate of its budgetary impact.9 CBO and JCT do, however, consider the microeconomic, direct behavioral effects of a specific policy. For example, CBO and JCT’s analysis of an increase in gasoline taxes estimates how much less gas Americans would buy because of the higher effective cost.10 Thus, current scoring practices are not static—they simply leave out more speculative indirect effects, such as the indirect effects proposals might have on labor supply and how those effects might affect federal revenues.

Under the current approach, congressional members who are considering specific proposals may request a separate analysis from CBO and JCT of the macroeconomic effects of the proposal. To arrive at these broader, indirect impacts, CBO and JCT will use a range of economic models and assumptions and report on the results from each. JCT specifically stated that the goals for its models include the “ability to reflect the range of results based on varying modeling assumptions and results from economic research.”11
An example of JCT’s macroeconomic analysis is its estimates of the macroeconomic impact of former House Ways and Means Chairman Dave Camp’s (R-MI) tax reform proposal. This proposal used two different models and varying assumptions in its analysis and produced eight estimates, ranging from a projected 0.1 percent increase in gross domestic product, or GDP, all the way to 1.6 percent. The revenue estimates ranged from $50 billion to $700 billion in additional revenue over 10 years. By contrast, under JCT’s conventional score of the budgetary impact of the bill that did not factor in the range of economic impacts, Rep. Camp’s tax proposal would be almost budget neutral over a 10-year window but would add to the deficit in multiple years. Of course, the estimate that the proposal might bring in $700 billion in new revenue makes it much more palatable to policymakers and the public than the conventional score of the proposal. Not surprisingly, Rep. Camp promoted the $700 billion estimate.

**Dynamic scoring**

Dynamic scoring would require CBO and JCT to include an estimate of the macroeconomic effects of a bill in their official score. This may include estimating how a change in the tax law might affect the labor supply and how an expanded or contracted labor supply may, in turn, affect the amount of taxes collected. The process of estimating the macroeconomic impact of legislation becomes highly problematic, however, when CBO and JCT are forced to pick one out of a range of estimates in order to arrive at a final score. As Rep. Camp’s proposal illustrates, the estimates of the macroeconomic effects of tax policies are highly sensitive to the assumptions made and the models used. Rep. Camp’s proposal showcases how difficult it is to capture the economic impacts of potential legislation. Obtaining the mean or median of the estimates is also problematic because they are still subject to the wide variances in the assumptions made and models used, while providing less useful information for policymakers.
Trickle-down gimmicks

Despite the difficulties in arriving at a single estimate of the macroeconomic impact of a proposed bill, House Republicans passed a rule to force dynamic scoring upon CBO and JCT. This is especially problematic in light of the fact that the House rule imposing dynamic scoring would for all practical purposes apply “almost exclusively to tax legislation.”

How dynamic scoring could be manipulated to serve the conservative tax agenda

Understanding how the conservative trickle-down tax ideology could be enshrined in the legislative process through dynamic scoring requires a brief explanation of some of the concepts surrounding tax reform, starting with revenue neutrality. House Ways and Means Committee Chairman Paul Ryan (R-WI) has favored “revenue-neutral” corporate tax reform. Generally, a revenue-neutral tax reform would neither increase nor decrease total tax revenues, even if some provisions raise revenue and some lose revenue. This could theoretically be accomplished by eliminating some tax loopholes while simultaneously reducing overall tax rates.

However, the process of finding tax loopholes to cut is a difficult endeavor. Every tax loophole is enjoyed by a different constituency that would often fight tooth and nail to protect it. But if CBO or JCT were to adopt a dynamic score with very optimistic assumptions about the impact of tax cuts on the economy, then the reform proposal would appear cheaper and thus would not need to cut as many loopholes in order to maintain revenue neutrality on paper.

What this means in real life is that Rep. Ryan, who previously proposed cutting personal tax rates for the very rich down to 25 percent, may not actually have to pay for much of any proposed tax cuts. Instead, dynamic scoring could lead to Rep. Ryan’s proposals appearing cheaper than they really are, and thus, he would not have to cut as many loopholes to pay for his tax cuts for the rich. What helps Rep. Ryan pass his proposals, though, is harmful to the economy. These unpaid-
for tax cuts for the rich will not just add to the federal deficit, but more and more research indicates that they may also increase inequality. As discussed in the next section, the evidence suggests that such irresponsible tax cuts could actually slow down economic growth.

The failure of trickle-down tax cuts to generate economic growth

The theory underlying the conservative tax agenda is that tax cuts for the rich will trickle down to everyone else and help grow the economy. Under the trickle-down view, lower top tax rates would allow the rich to keep more of their money, giving them more money to invest back into the economy and an additional incentive to work harder. However, another theory argues that when lower top tax rates give the rich more money, they can work less to maintain the same standard of living. If these two incentives cancel each other out, then cutting taxes for the rich would have no meaningful impact on the economy.

Indeed, a growing body of credible economic research shows that tax cuts for the rich have little relationship with economic growth. Analysis of top U.S. tax rates since 1945 conducted by the nonpartisan Congressional Research Service, or CRS, found little evidence of a relationship between the reduction of top tax rates and increased savings, investment, or productive growth. CRS examined whether there was any relationship between top marginal tax rates or top capital gains tax rates with saving and investment, productivity growth, and real per-capita GDP growth. Regression analysis did not find a statistically significant relationship, suggesting that top tax rates do not have any significant connection to investments, productivity growth, or the real GDP growth rate.

Meanwhile, a recent review of economic research on tax changes and economic growth by the Tax Policy Center showed that unpaid-for tax cuts have little positive impact on economic growth. For example, an analysis of the impact of the 2001 and 2003 tax cuts passed by former President George W. Bush yielded “no first-order evidence in the aggregate data that these tax cuts generated growth.” Instead, by adding to the deficit, the unpaid-for tax cuts reduced public savings more than they increased private savings and actually raised the cost of capital. The negative effects of higher deficits and reduced public savings outweighed any positive effects of the tax cuts. But what the tax cuts did do was help the rich by “creat[ing] windfall gains for the owners of old capital.” In other words, tax cuts did not trickle down to help the broader public; instead, they just helped those who already had capital.
The recent example of Kansas’ extreme tax cut agenda deals another blow to the conservative myth. Kansas Gov. Sam Brownback (R), a big supporter of trickle-down economics, pushed for massive, unpaid-for tax cuts that he claimed would act “like a shot of an adrenaline into the heart of the Kansas economy.” In 2012, Kansas cut the top personal income tax rates from 6.45 percent for income over $60,000 and 6.25 percent for income between $30,000 and $60,000 for married couples to 4.9 percent on income over $30,000. The state also cut the tax rate on income under $30,000 from 3.5 percent to 3 percent. In 2013, Kansas cut the top rate further, from 4.9 percent to 3.9 percent by 2018.

Gov. Brownback’s trickle-down dream experiment quickly turned into a nightmare. Instead of boosting the economy, Kansas’ economy lagged behind the neighboring region and the country in job growth. An analysis by the Kansas Center for Economic Growth shows that Kansas’ job growth was below 3 percent in the fourth quarter of 2014, while it was above 3.5 percent for the six-state Midwest region and more than 4 percent for the nation. And far from paying for itself in new revenue, in fiscal year 2014, revenues in Kansas were down $700 million. The outlook is so bad for Kansas that Standard & Poor’s downgraded Kansas’ bond rating from “AA+” to “AA,” citing its “structurally unbalanced budget.”

Not only is the evidentiary case that tax cuts for the rich boost economic growth scant at best, but a Center on Budget and Policy Priorities comparison of the impacts of a 1993 tax hike and the 2001 tax cut showed that job creation and economic growth were actually stronger in the years after the 1993 tax increases than in the years following the 2001 tax cuts. A Center for American Progress examination showed that a low top marginal tax rate is actually associated with weak economic growth. Although correlation does not mean causation, these examples undermine the conservative tax mantra.

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**FIGURE 1**

Top marginal tax rates and economic growth

Average annual growth rate of real GDP, by top marginal tax rate, 1950 to 2013

<table>
<thead>
<tr>
<th>Top marginal tax rate</th>
<th>Average annual real GDP growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>28–35%</td>
<td>2.1%</td>
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<tr>
<td>38–50%</td>
<td>3.3%</td>
</tr>
<tr>
<td>69–70%</td>
<td>3.6%</td>
</tr>
<tr>
<td>71–92%</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

Tax policy, inequality, and growth

Tax cuts for the rich are linked to rising inequality

The widely accepted conservative thinking that tax cuts for the rich trickle down and generate economic growth is being challenged by growing evidence that tax cuts for the rich simply make the rich richer and increase inequality. Thomas Piketty, Emmanuel Saez, and Stefanie Stantcheva released an analysis of data from 18 countries in the Organisation for Economic Co-operation and Development, or OECD, finding no correlation between changes in their top tax rates and economic growth. Instead, there was a strong correlation between lower top tax rates and higher levels of income inequality among the countries studied, including the United States.34

The economic analysis of top tax rates by CRS similarly indicated that cutting top tax rates is associated with “increasing concentration of income at the top of the income distribution.”35 CRS examined the relationship between top tax rates and the share of total incomes going to the top 0.1 percent and top 0.01 percent since 1945. It found a strong, statistically significant, and negative relationship between the top tax rates and the share of income going to the top, “suggest[ing] that as the top tax rates are reduced, the share of income accruing to the top of the income distribution increases—that is, income disparities increase.”36 In conclusion, CRS found that “top tax rates appear to have little or no relation to the size of the economic pie,” meaning that cutting taxes for the rich has not been shown to grow the economy. Instead, cutting taxes for the rich is associated with making the rich richer and increasing inequality.37

The experience of the 1993 Omnibus Budget Reconciliation Act, which raised taxes on the top income earners by creating two new upper-end tax brackets, is also instructive.38 At the time, some Republicans in Congress warned that the tax hikes would kill the economic recovery and put the country back into a recession.39 However, not only did the economy boom, but the tax system reduced inequality more following the changes. When looking at the level of inequality before taxes
and after taxes—as measured by the Gini coefficient—we find that the tax system reduced inequality by 7 percent after taxes in 1992. In comparison, in 1994—the first full year after the tax changes—the tax system reduced inequality by 8.7 percent, a 23 percent increase in the tax system’s inequality reduction.

Conversely, the 2001 and 2003 Bush tax cuts lowered rates for everyone but made the system less progressive and reduced the tax code’s effect on inequality. Between 2001 and 2004, the tax code’s reduction in inequality fell from 8.6 percentage points to 7.8 percentage points, a 10 percent reduction. Looking at the reductions starting in 2001 rather than 2000 is more telling because the end of the technology stock bubble greatly reduced market-produced inequality.

Growing body of research shows rising inequality is holding back economic growth

Lawmakers should be concerned about the impact of policy changes on income inequality, especially with the ever-growing body of research that shows that rising inequality may be holding back economic growth.
Recently, the Washington Center for Equitable Growth released a review of the economic research on inequality and economic growth. The recent research suggests that while some amount of economic inequality—but not extreme inequality—may have some short- and medium-term benefits, “higher levels of income inequality are detrimental to long-term economic growth.” Indeed, research conducted by Ugo Panizza of the U.N. Conference on Trade and Development found that across U.S. states, higher inequality is associated with lower growth rates, while a strong middle class is associated with higher growth rates. Meanwhile, research conducted by economists at the World Bank and the City University of New York that examined state-level data in the United States found that “high levels of inequality reduce the income growth of the poor and, if anything, help the growth of the rich.”

International research also suggests a negative relationship between inequality and growth. The International Monetary Fund, or IMF, released research that showed that countries with more inequality experience more unstable growth. Additionally, the IMF found that some of the policies taken to address inequality may spur faster growth. This held true in both developed and developing countries. The OECD also recently found that countries where income inequality was falling experienced faster growth than countries where inequality was rising. This growing body of research supports middle-out economics—that prosperity and economic growth comes from the middle class out, not from the top down.

Academic researchers are not the only ones saying that inequality may be harming economic growth. Indeed, Wall Street is jumping on the bandwagon. In August 2014, credit rating agency Standard & Poor’s sounded the alarm “that the current level of income inequality in the U.S. is dampening GDP growth.” The high level of inequality in the country led Standard & Poor’s to reduce its 10-year U.S. growth forecast from 2.8 percent to 2.5 percent. Then, in September, Morgan Stanley, hardly a banner carrier for progressive policies, recognized that a weakened middle class means that it no longer has the consumption power needed to boost the economy. Instead, weak wage growth is resulting in weaker domestic demand, which is hurting the economy. Morgan Stanley warned investors that “stronger growth in wages and salaries is essential to the macro outlook.”
Recommendations: Considerations for CBO and JCT

The macroeconomic analysis conducted by CBO and JCT provides the most useful information if it can reflect a range of possible outcomes based on various assumptions and models and if it reflects state-of-the-art, credible economic research. As discussed in this report and as highlighted by other organizations such as the Center on Budget and Policy Priorities, the Committee for a Responsible Federal Budget, and the Washington Center for Equitable Growth, forcing CBO and JCT to pick a single macroeconomic outcome for the purposes of a dynamic score is highly problematic. But as these institutions are forced to conduct dynamic scoring by some congressional leaders, other, more responsible leaders should ensure that CBO and JCT’s macroeconomic analysis reflects the most current economic research and is not used as a vehicle to promote the trickle-down tax mantra.

In particular, CBO and JCT should consider the following two factors.

The latest economic research

Given the mounting research dispelling the conservative myth that tax cuts for the rich grow the economy, CBO and JCT should ensure that they do not use overly optimistic assumptions about the economic impacts of tax cuts for the rich. Instead, in light of growing research linking tax cuts for the rich to rising inequality and rising inequality to slower economic growth, CBO and JCT should develop a macroeconomic model that considers how a proposed bill would impact inequality and growth.

Although developing such models may be a time-intensive endeavor, forgoing this analysis would deprive policymakers of critical considerations as they debate the best mechanisms with which to improve the nation’s economy and deliver prosperity to the American people. Congressional leaders could pursue interim steps in this process, including requesting that CBO and JCT conduct an economic analysis of the relationship between inequality and growth.
The distributional impact of tax cuts

CBO and JCT should also conduct a distributional analysis of proposed tax policies. In light of research showing that tax cuts for the rich are linked to rising inequality, CBO and JCT should examine how proposed tax cuts impact different income brackets and whether the cuts may increase inequality and slow down economic growth. The results of this analysis should be fed back into any macroeconomic modeling for the legislation.

An additional consideration for CBO and JCT is how tax cuts for different income brackets would affect consumption and demand, a concern especially when demand is low. Middle- and lower-income families have a lower savings rate than the rich and a higher propensity to consume, boosting demand in the economy. If we have learned one thing in the past decade, it is that the economy can fall short on demand for an extended period of time.
Conclusion

In 2012, Republican presidential candidate and former Massachusetts Gov. Mitt Romney and his running mate Rep. Paul Ryan came under fire for failing basic math when they proposed significant tax cuts and tax changes that would disproportionately benefit the rich and claimed that they would not need to raise taxes on the middle class to do so. Instead of learning from those mistakes and adjusting their policies, Republicans in Congress are still attempting to adjust the basic rules of math.

CBO and JCT should not be forced to adopt dynamic scoring. In this political reality where Republicans control both the House and the Senate and are demanding that CBO and JCT adopt dynamic scoring, however, CBO and JCT may not have a choice. In this scenario, progressive leaders in Congress should do all they can to ensure that the macroeconomic models used in CBO and JCT’s dynamic scoring of proposals reflects the dearth of proof that tax cuts for the rich grow the economy, as well as the growing body of economic research that shows that inequality is holding back the nation’s economic growth.
About the author

Anna Chu is the Director of the Middle-Out Economics project at the Center for American Progress. She brings experience working on a multitude of economic campaigns as the Policy Director for the ThinkProgress War Room at the Center for American Progress Action Fund.

She also served as the policy director for the Democratic Senatorial Campaign Committee during the successful 2012 cycle in which Democrats added two seats to their Senate majority. As policy director, Chu oversaw and managed all policy issues for the committee and Democratic Senate candidates. Prior to working at the Democratic Senatorial Campaign Committee, Chu was the policy advisor for the House Democratic Caucus, where she managed several congressional task forces. She previously served as a federal law clerk and worked as an associate at Paul Hastings.

Chu graduated from the University of California, Berkeley, and earned a J.D. from the University of Southern California.

2 Ibid.


8 Standard & Poor’s, “How Increasing Income Inequality Is Dampering U.S. Economic Growth, And Possible Ways To Change The Tide.”


15 Lynch, “The benefits and drawbacks of using dynamic scoring in the federal budget.”


19 Stein and Madowitz, “How the Ryan Budget Fails Our Economy By Failing Economics.”


21 Ibid.


23 Ibid.

24 Ibid.


26 Ibid.


28 Ibid.


33 Stein and Madowitz, “How the Ryan Budget Fails Our Economy By Failing Economics.”

34 Ibid.; Piketty and Saez, “Top Incomes and the Great Recession.”


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51 Standard & Poor’s, “How Increasing income Inequality Is Dampening U.S. Economic Growth, And Possible Ways To Change The Tide.”

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62 Faler, “House adopts new math rules to boost tax cuts.”
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