



Economic and Budgetary Consequences of Pro-Growth Tax Modernization

DOUGLAS HOLTZ-EAKIN, GORDON GRAY | FEBRUARY 28, 2014

EXECUTIVE SUMMARY

An overhaul to modernize and simplify the U.S. tax code is long overdue. In this paper, we review the economic case for dramatic changes to the tax system, the economic benefits of broad-based reform, and the characteristics of high-quality proposals. We review the broad characteristics of the recent proposal by the Ways and Means Committee announced by Chairman Dave Camp. Our most significant findings include:

- The U.S. tax code is in need of dramatic improvements that include a modern international tax system, a lower corporation income tax rate, correspondingly lower rates on business income tax via so-called pass-thru entities, and broad elimination of tax preferences to preserve efficient allocation of investment and budget neutrality.
- The Ways and Means proposal is consistent with the types of reforms that generate beneficial economic effects: reducing the corporate tax rate to 25 percent, repealing the corporate AMT and making the R&D tax credit permanent, and exempting 95 percent of foreign source dividends. The proposal would produce two prevailing individual income tax rate brackets of 10 and 25 percent (with a special 35 percent rate would apply to certain eligible income for high-income individuals) and exclude 40 percent of dividends and capital gains from taxation.
- The economic impacts are potentially dramatic, raising future GDP by roughly 5 percent. During the transition to this higher level, GDP growth would likely exceed 0.1 percentage points higher, with an upper bound of 0.5, and job growth would correspondingly be as much as 500,000 jobs greater (although employment effects would diminish over time). According to the Congressional Budget Office, a 0.1 percentage point annual increase in GDP growth would improve the 10-year deficit by \$311 billion. Accordingly, the upper bound assumption, a 5-fold improvement, would provide \$1.5 trillion in 10-year deficit savings.

1. INTRODUCTION

Fundamental modernization and simplification of the tax system has been an elusive dream for Congresses and administrations over the past 30 years. Indeed, over the 100 year history of the U.S. income tax system, only a handful of meaningful simplification efforts have seen success. More recently, Ways and Means Committee chairman Dave Camp released a comprehensive modernization effort that incorporates rate reduction, base broadening, and simplification, to both the corporate and individual tax systems.

The research literature indicates that these components are essential to any pro-growth overhaul; a

transformation that is long overdue. The current code is outmoded and in need of reform. This necessity has been widely acknowledged by leaders in the House, Senate, and administration. The United States has an internationally uncompetitive tax code, both in terms of the applicable rate, but also the structure. Any tax reform should be comprehensive, and not be restricted to the corporate sector. A narrow reform would fail to capture a significant share of business activity taxed through the individual tax system, and would worsen existing tax-based distortions. A pro-growth reform would address these current flaws in the code and ultimately provide a needed boost to economic growth.

In what follows, we survey the state of the U.S. tax code and its implications for growth and the income distribution. We then turn to surveying the research on the growth, employment, and budgetary effects of overall modernization. To anticipate the results we find that the Ways and Means proposal would likely cause the economy to grow more rapidly, and could do so by as much as 5 percent over the long term, adding up to half a million new jobs to the economy on annual basis.

2. THE NEED FOR BUSINESS TAX REFORM

The single most important characteristic of the U.S. corporate tax is that the rate is too high. The combined federal-state U.S. corporate tax rate of 39.1 percent is the highest among all major developed economies.^[2] The high U.S. rate is seemingly not a matter of deliberate choice. Instead, it stems from a failure to acknowledge and keep abreast of broader global trends.

The U.S. corporate tax rate is essentially unchanged since 1986, when a significant rate reduction was enacted. Prior to 1986, the U.S. levied corporate taxes in excess of the Organization for Economic Cooperation and Development (OECD) average. By 1988, when the 1986 reform was fully implemented, the combined U.S. statutory rate had fallen below the OECD average.

Since 1988, however, the U.S. has again become a corporate tax outlier. According to OECD data from 1988-2011, every OECD nation, except the U.S., reduced its combined statutory corporate tax rate. On average, these nations saw a decline of 18 percentage points in combined statutory rates. The only OECD nation that saw a net increase in the combined statutory rate was the United States – the result of a 1-percentage point increase in 1993.

While statutory tax rates are critical to firm investment decisions, other measures of corporate taxation also warrant consideration.^[3] A firm's *effective* tax rate includes other facets of the corporate tax code, such as credits and deductions, which figure in the determination of a firm's tax burden. While less stark than top statutory rates, an international comparison of effective corporate rates still paints the U.S. in an unfavorable light. According to a study by PricewaterhouseCoopers, "companies headquartered in the United States faced an average effective tax rate of 27.7 percent compared to a rate of 19.5 percent for their foreign-headquartered counterparts. By country, U.S.-headquartered companies faced a higher worldwide effective tax rate than their counterparts headquartered in 53 of the 58 foreign countries."^[4]

Not only has the U.S. increasingly fallen outside the norms of international taxation in terms of rates, but also in terms of how foreign-source income is taxed. The proportion of income earned abroad has increased significantly in recent years, owing primarily to increasing market opportunities overseas, particularly in emerging economies. Cross-border foreign direct investment across all countries has increased from less than 6 percent of world GDP in 1980 to 33 percent in 2009; American companies accounted for 40 percent of world cross-border investment in 1980, and currently accounts for less than 23 percent.^[5]

Considering that approximately 95 percent of the world's potential customers and 75 percent of the world's purchasing power falls outside the U. S., the means by which foreign-source income is taxed must figure prominently in any potential corporate tax system. Unfortunately, in this regard the U.S. maintains a system of taxation that is increasingly anachronistic among major economies.

The U.S. corporation income tax applies to the worldwide earnings of U.S. headquartered firms. U.S. companies pay U.S. income taxes on income earned both domestically and abroad, although the U.S. allows a foreign tax credit up to the U.S. tax liability for taxes paid to foreign governments. Active income earned in foreign countries is generally only subject to U.S. income tax once it is repatriated, giving an incentive for companies to reinvest earnings anywhere but the U.S., owing to its high corporate tax rate. This system distorts the international behavior of U.S. firms and essentially traps foreign earnings that might otherwise be repatriated back to the U.S. Moreover, certain additional changes have been considered recently that would increase the tax liability on foreign earnings. One recent study detailed the pernicious effects that ending the ability of U.S. to defer high U.S. corporate taxes on foreign income would have on domestic employment.^[6]

Whereas the U.S. has maintained an international tax system that disadvantages U.S. firms abroad, many U.S. trading partners have shifted to a territorial system, a system that exempts entirely, or to a large degree, foreign source income. Of the 34 economies in the OECD for example, 26 have adopted such systems, including recent adoption by Japan and the United Kingdom.^[7]

Maintaining the U.S. worldwide system in light of the majority-territorial systems in the OECD compounds the incentive for firms to keep earnings offshore in the face of high domestic rates. The combination of high rates and an increasingly outmoded worldwide tax system disadvantages U.S. firms abroad, where market opportunities are growing.

3. WHO PAYS THE CORPORATE TAX?

Corporations are essentially a legal nexus of capital through shareholders, labor through employees, and consumers through their participation in the economy in which the corporation does business. Corporate taxation will ultimately impose a burden on one or all of those channels. This is a simplified narrative, but it illustrates the nature of corporate taxation in a global economy: everyone but the corporation itself bears the burden, though not equally.

The modern globalized economy is characterized by ever more mobile capital. Increasingly, investment can flow to areas of lower taxation with greater ease. Labor is not nearly so mobile. A worker who lives in the low-tax jurisdiction will generally benefit as more capital flows to firms while workers in high-tax jurisdictions will forgo higher capital and associated productivity and resultant wage gains. There is therefore the potential for labor to bear a high share of the corporate tax burden, and a number of studies have found this burden to be quite high.^[8]

Important contributions in the theoretical literature bear this out. Arnold Harberger, who first determined that capital bore the burden of corporate taxes in a closed economy, has since determined that labor bears most of the burden of corporate taxation in an open economy—over 80 percent.^[9] More recent studies have confirmed this view. One noteworthy study from the Congressional Budget Office found that labor bears 70 percent of the corporate tax burden in an open economy.^[10]

In addition to theoretical advances, recent empirical evidence has found that labor bears a significant share of the corporate tax burden in an open economy.^[11] Using data for 72 countries over 22 years and hourly manufacturing wage data, Hassett and Mathur found that, for every 1 percent increase in corporate tax rates, wages decrease 1 percent.^[12] Using a separate approach with firm-level data, Arulampalam, Devereux, and Maffini found that \$1 in additional corporate tax reduces wages by 92 cents in the long run.^[13] Using cohorts of data covering 1979 to 2000, Felix found that a 1 percent increase in the marginal corporate tax rate would decrease wages by 0.7 percent.^[14] Another recent study concluded that labor bears 57 percent of the burden of the corporate income tax.^[15]

In addition to these overall wage effects, some studies provide additional insight into corporate tax incidence. For example, Hassett and Mathur found a correlation between high-tax neighbors and high domestic wages. This suggests that nations would engage in tax competition to draw capital by lowering their tax rates relative to their neighbors. Second, Felix found that the wage effects of corporate taxation did not vary with worker skill level—an important finding that should further dispel the notion that labor generally does not bear the corporate tax burden.

While the high incidence of the corporate tax rate on labor is not universally embraced, there is growing acknowledgement of a higher burden from the corporate tax rate borne by labor than previously held. For example, the Tax Policy Center recently updated their methodology on how the corporate income tax is distributed to include the assumption that 20 percent of the tax burden falls on labor.^[16]

4. THE ECONOMIC IMPLICATIONS OF BUSINESS TAX REFORM

Early research on the economic effects of corporate taxes was largely focused on closed economies.^[17] Despite this limitation, this early work revealed many of the pernicious effects of corporate taxes, and laid the foundation for better understanding of the tax. While the U.S. corporate tax code had remained largely unchanged for decades, there has been significant global economic and geopolitical change in the intervening years. In an increasingly interdependent global economy, corporate taxes must be considered in the context of high capital mobility, a world that only amplifies flaws observed in the early literature. In a global economy where investment can more easily shift, the implications for economic growth from corporate tax policy can be significant.

There is a strong body of research identifying the negative effect on investment and capital formation from corporate tax.^[18] Recent work has furthered the understanding that a high corporate tax rate increases the user cost of capital, which slows investment, productivity, and economic growth. Djankar *et. al.* present a robust finding that “the effective corporate tax rate [has] a large adverse impact on aggregate investment, FDI, and entrepreneurial activity.”^[19] Among the more telling examples is a recent study by the OECD that notes “corporate income taxes have the most negative effect on GDP per capita.”^[20]

Another OECD study found that reducing the statutory corporate tax rate from 35 percent to 30 percent increases the ratio of investment to capital by approximately 1.9 percent over the long term.^[21] This is also

consistent with the finding from the JCT, which observed that reducing corporate income taxes have the greatest effect on long-term growth by increasing stock of productive capital, which leads to higher labor productivity.^[22]

In a 2008 OECD study of how corporate taxes affect investment decisions, Arnold and Schwellnus conclude that corporate taxes lower the rate of return for innovative-risky investments, reducing innovation and risk-taking.^[23] To the extent that the corporate income tax discourages risk-taking, this suggests that the corporate income tax is like a “success tax” that firms with higher than average productivity must face, which is consistent with Gentry and Hubbard.^[24]

Among the most clearly stated observation of the growth implications for corporate tax reform is from Gordon and Lee, who found that cutting the corporate tax rate by 10 percentage points can increase the annual growth rate by between 1.1 percent and 1.8 percentage points.^[25]

The Tax Foundation also recently published estimates of the potential growth effects from corporate rate reduction, finding that reducing the “federal corporate tax rate from 35 percent to 25 percent would raise GDP by 2.2 percent, increase the private-business capital stock by 6.2 percent, boost wages and hours of work by 1.9 percent and 0.3 percent, respectively, and increase total federal revenues by 0.8 percent.”^[26]

There is a clear consensus that the high U.S. corporate rate is a detriment to the economy and should be addressed through a reform that results in lower rates. As the research literature indicates, lower rates would have a significant and positive effect on economic growth, and therefore on employment and wage growth.

5. TAX SIMPLIFICATION, THE INDIVIDUAL INCOME TAX, AND ECONOMIC GROWTH

U.S. corporate tax reform is essential, but any effort to attempt to reform “business” taxation that focused solely on the corporate code would fall short of taking advantage of the chances for improved economic policy. The code taxes businesses in two distinct ways: either at the entity level or the individual level. Whether the business is taxed directly or the taxable income is passed through and then taxed at the individual level is determined by the legal form that the business takes. There are four major organizational forms available to non-farm businesses: C-corporations (named for subchapter C of the tax code), non-farm sole-proprietorships, S-corporations (subchapter S of tax code), and partnerships. A business may elect to organize as a particular type of entity for a number of reasons that are beyond the scope of this discussion.^[27] Broadly, these organizational forms can be separated by how related income is taxed. This division separates C-corporations, where income is taxed at the business or entity level (and again when passed along to shareholders as a dividend), and the other major forms of organization broadly referred to as pass-through entities because related business income is said to “pass-through” the organization to be taxed at the individual level through the personal income tax.

As of 2009, there were 31.7 million non-farm businesses filing tax returns: 1.7 million C-corporations, 22.7 million sole-proprietors, 4.1 million S-corporations, and 3.2 million partnerships (including LLCs). The past several decades have seen the relative growth of non-farm sole proprietors, S-corporations and partnerships, and the associated diminution of the C-corporation.

This dates to tax reform legislation in 1986 that raised the corporate rate above the top individual rate. S-corps quickly gained popularity followed later by partnerships. Indeed, as the Joint Committee on Taxation notes, “1986 was the last year in which the number of C-corporation returns exceeded the number of returns from pass-

through legal entities.... while the number of C-corporations has generally declined in the United States since 1986 by a third, the number of pass-through entities has nearly tripled.”^[28]

To the extent that firm organization is motivated for tax purposes, the tax code is introducing an inefficient distortion, a drag on economic growth.^[29] A sound tax reform would mitigate this effect. Any attempt to reform business taxation generally must therefore be neutral to legal form of organization. Pursuing corporate tax reform, to include needed rate reduction, while leaving the individual code untouched would exacerbate any existing distortions. Business tax reform properly understood must then also address the individual tax code, which is otherwise in critical need of reform.

6. THE NEED FOR INDIVIDUAL INCOME TAX OVERHAUL

Reform to the corporate income tax is an essential element of any pro-growth tax reform. However, reforming the corporate income tax at the neglect of the individual income tax code excludes the most significant interaction between federal taxation and the economy generally. Over 145 million tax returns were filed in 2011, on over \$8.3 trillion in income. Of these returns, only about 91 million returns on over \$5.5 trillion in income was taxable, yielding \$1.046 trillion in individual income revenue for the tax-year.^[30] The revenue raised totals over 5 times the amount raised from U.S. corporations, underscoring the need to approach tax reform in a wholesale fashion.

The individual tax code is riddled with inefficiency and complexity that confronts taxpayers and the economy as a whole. The Taxpayer Advocate Service (TAS), the watchdog office within the IRS, has cited complexity as the single most serious problem with the tax code.^[31] Essential to that determination was the TAS finding that taxpayers spend about 6.1 billion hours a year complying with the filing requirements of the Internal Revenue Code, or the working equivalent of over 3 million full-time employees.^[32] The TAS estimates that the pecuniary compliance costs amounted to 2010 amounted to \$168 billion. According to the TAS, tax compliance is so onerous for individual taxpayers that 59 percent now pay preparers to do it for them. Among unincorporated business taxpayers the figure rises to about 71 percent.^[33] The tax code has become so onerous that the IRS struggles to administer it. According to the TAS, the IRS’s ability to answer taxpayer telephone calls and the IRS’s ability to respond to taxpayer correspondence offer key metrics for taxpayer service. According to the TAS, the IRS received 115 million calls in fiscal years 2011 and 2012. In 2012 the IRS was only able to answer 68 percent of calls received as compared to 87 percent in 2004. The IRS failed to respond to 48 percent of taxpayer letters received in 2012 as compared to 12 percent in 2004. This worsening response rate comes despite the increasing use of preparers and software by individual taxpayers.

Fichtner and Feldman recently completed a thorough assessment of the costs that the U.S. tax code extracts from the economy as taxpayers through complexity and inefficiency above and beyond that estimated by the TAS. According to the authors, in addition to time and money expended in compliance, foregone economic growth, and lobbying expenditures amount to hidden costs estimated to range from \$215 billion to \$987 billion.^[34]

7. THE WAYS AND MEANS PROPOSAL

The need for a comprehensive overhaul, modernization, and simplification is manifest. The recent Ways and Means proposal is one way to overhaul the antiquated and complex tax code. These changes are broad-based and address the current failing of the federal tax code. The proposal corrects the U.S.’s current disadvantage with its international trading partners by reducing the corporate rate and reforming the tax treatment of foreign-

sourced income. The Ways and Means bill would reduce the corporate tax rate to 25 percent, bringing the U.S. statutory rate closer to international norms. This would be a gradual decline, which is important for tax planning purposes. Additionally, the reform bill would repeal the corporate AMT and make the R&D tax credit permanent, both of which would introduce needed stability in tax planning for major employers.

The overhaul addresses the antiquated U.S. system of taxing foreign-sourced income by moving towards a participation exemption system. The bill would exempt 95 percent of foreign source dividends from U.S. multinationals in which the U.S. has at least a 10 percent ownership stake. This would also move the U.S. towards international norms relative to its trading partners' foreign income taxation practices. Critically, this reform would also be paired with tough base-erosion rules (so-called "option C") that would preclude tax planning strategies that artificially ascribe earnings off-shore to avoid the appropriate level of U.S. taxation.

Much like the corporate side, the individual component of the proposal would include necessary rate reduction. The proposal would collapse the existing rate structure into essentially two prevailing rates brackets of 10 and 25 percent. A special 35 percent rate would apply to certain eligible income above \$400,000 for single and \$450,000 for married couples, which would retain the progressivity of current law. Important rate changes would also be made to the capital gains and dividend income, of which 40 percent would be excluded from taxation under the reform proposal. Compared to current law and paired with the corporate tax reform proposal, this new treatment of investment income would reduce the current practice of double-taxation of capital income.

A common thread running throughout the proposal is simplicity. The reform proposal moves us closer to ending the current patchwork of temporary and narrow tax breaks that needlessly complicate the code. In addition to rate simplification, the reform bill would streamline individual tax expenditures down to key income support, charitable, housing, and retirement policies offers a cleaner code and should enhance the 86 percent tax compliance rate currently observed by the IRS.

A key parameter of the Ways and Means overhaul is revenue neutrality. Taken in isolation, many of the pro-growth elements of the proposal, such as corporate and individual rate reduction, would result in a loss of federal revenue through the tax code. Within the strictures of a revenue neutral reform, these revenue losses must be offset by commensurate increases in revenue through the elimination or reform of tax expenditures. These measures would expand the base of income subject to lower rates. Base broadening often raises the effective taxation of certain activities otherwise given preference in the tax code. The tax treatment of depreciable assets is among the most contentious areas of concern with respect to base-broadening. However, paired with other pro-growth reforms, as in the case of the proposal, these concerns are outweighed.^[35] Further, base-broadening efforts can remove distortions and preclude inefficient investment and asset allocation that are driven by tax planning, rather than otherwise sound economics. While a pro-growth tax overhaul effort like that introduced by Chairman Camp *will result in higher revenue* than would otherwise be the case, approaching the reform effort from the standpoint of revenue neutrality is both politically astute and technically sound.

8. THE WAYS AND MEANS SIMPLIFICATION AND ECONOMIC GROWTH

Chairman Camp's Ways and Means proposal is a pro-growth reform effort that will improve tax compliance and reduce needless complexity. Importantly, a comprehensive tax overhaul of this type offers the potential to improve economic growth by eliminating distortions. One of the largest distortions income taxes create is by decreasing the effective returns from labor, thus disincentivizing work. As people work less, the economy grows more slowly than it otherwise would. Income taxes have other secondary effects as well, such as decreasing

consumption, reducing investment, and incentivizing movement of compensation into tax-free benefits. Much of the academic literature on the effect of income taxes tends to take a broad approach that focuses on how income taxes affect overall economic growth and output. Other literature focuses the effect taxes have on a specific aspect of the economy. Both perspectives are important to gauge the growth of a tax reform.

The last time the United States undertook a fundamental tax reform was with the Tax Reform Act of 1986 (TRA). This was a broad-based, revenue neutral effort of the type currently being contemplated by the Congress. If history is any guide, a 1986 style reform offers positive economic growth. This is borne out by retrospective analysis of the TRA. According to a survey of 69 public finance economists conducted by Victor Fuchs, Alan Krueger, and James Poterba, at the median, respondents believed that the 1986 tax reform produced about one percentage point higher growth over a long period.^[36]

Instead of looking at the effect of taxes on economic growth or output, some researchers have chosen to look at the effect taxes have on specific aspects of the economy, such as the effect on the labor supply. Many of these approaches focus on the effect of taxes on hours worked. But this does not tell a complete story, as Feldstein notes, because people can change their behavior in other ways besides hours worked in response to taxes, for example by increasing the amount of untaxed fringe benefits they receive.^[37] Instead of hours worked, Feldstein examines the link between taxes and taxable income by looking at data from income earners before and after TRA, which dramatically lowered tax rates for high-income individuals, lowering the top marginal tax rate from 50 percent to 28 percent. Feldstein finds that the elasticity of taxable income with respect to the marginal tax rate is at least one, and could be higher, especially for high-income individuals. This elasticity estimate suggests that people shift a significant amount of their income into non-taxed fringe benefits when new taxes are levied on labor income. Furthermore, if even the lowest elasticity estimate were true, any tax increase would not raise new revenue but would still hurt the economy.

Carroll, Holtz-Eakin, Rider and Rosen also assess how the tax code affects incentives to supply labor.^[38] Like Feldstein, the authors look at data before and after TRA and find that a 10 percent increase in the tax price of an entrepreneur makes them approximately 12 percent more likely to hire labor. Further evidence for this claim comes from the authors' finding that during a similar era when marginal tax rates did not change, entrepreneurs did not sizably increase their utilization of labor. The authors cite several possible reasons for these effects, including the fact that when entrepreneurs are taxed less their cash flows grow faster, allowing them to plow more money into their business and hire more workers or pay existing workers more. Furthermore, entrepreneurs in the highest tax brackets changed their utilization of labor the most in response to taxes. This suggests that placing an additional burden on high earning entrepreneurs could perversely hurt lower earning workers whose labor would be utilized less.

Prescott examines how marginal tax rates affect the amount of hours worked by the typical worker.^[39] In particular, he attempts to determine if the sizable difference in hours worked between American and Europeans can be explained by differences in marginal tax rates. Prescott finds that this is indeed the truth; most of the difference in hours worked between the US and Europe can be explained by the higher marginal income tax rates found in Europe. In fact, when European and American marginal tax rates were comparable, labor supplies were comparable as well, suggesting that tax rates are the primary explanatory factor. Overall, Prescott finds that labor supply has a high elasticity respect to the marginal tax rate one that suggests raising income tax rates is damaging to the economy.

One avenue by which to look at the effect of taxes on the economy is to examine how taxes affect the growth of GDP over the long term. Engen and Skinner attempt to accomplish this in their study by estimating what the effect major tax reform (defined in the study as a 5 percent cut in the marginal income tax rate and a 2.5 percent

cut in the average income tax rate) would have on long term GDP growth.^[40] The authors look at historical data in the US and find that such a major tax reform would have modest effects on GDP growth, only around a .2 to .3 percentage point increase in the growth rate. The short-term effect on GDP growth rate would be slightly larger than the long term, but not significantly so. While the effects on GDP growth may be small, the authors point out that small changes in growth rates can have significant effects on living standards over the long term, perhaps attaching more significance to their findings. Nevertheless, the authors conclude that major tax reform would not pay for itself through increased economic growth, although there are certain caveats with regards to the efficiency of the tax system.

Romer and Romer also attempt to estimate the effect that income taxes have on levels of GDP.^[41] While the authors look at data from the US as well, they take a relatively unique approach to examining the economic data after WWII. By using the narrative dialogue from newspapers and public releases around the time of each piece of tax legislation, Romer and Romer separate tax legislation that was passed in response to economic conditions (endogenous changes) from legislation that was passed for other reasons such as deficit reduction (exogenous changes). Because endogenous changes to taxes were typically meant to counteract unique economic conditions, using them in the study ran the risk of underestimating the effect of taxes on GDP. Therefore, the authors focused mostly on the effects of exogenous changes to tax rates. The results they found suggested that exogenous tax increases had a highly negative effect on growth, with an exogenous increase in tax rates of 1 percent of GDP having a maximum impact of a 3 percent decrease in output. Importantly, when the authors expanded their study to include endogenous changes as well, output fell only 1.1 percent in response to a 1 percent of GDP increase in taxes. This finding suggests that studies that do not exclude endogenous changes significantly underestimate the negative effect of new taxes. When they examined their results further, the authors found that investment fell sharply in response to increased taxes, explaining most of the negative effect taxes had on GDP. The authors also found that tax increases that were designed to decrease the budget deficit had a smaller negative effect on output than other exogenous tax changes.

The body of this research details the significant impact that the income tax system can have on the economy generally, and the channels through which those impacts are made. Clearly high tax rates offer disincentives to supply labor, discourage entrepreneurialism, and harm the economy broadly. Any tax reform effort that minimizes these effects would offer a pro-growth alternative to the current code.

While there is a vast body of economic literature, indeed far beyond that cited here, that addresses how key elements of the tax system interact with the economy such as rates and investment incentives, few offer credible simulations of fundamental tax reform.

An important step in this area was made by highly respected economists David Altig, Alan Auerbach, Laurence Kotlikoff, Kent A. Smetters, and Jan Walliser, who simulated multiple tax reforms. They found that GDP could increase by as much as 11 percent higher from tax reform.^[42]

The highest growth rate was associated with a consumption-based tax system that avoided double-taxing the return to saving and investment, which while contemplated in past reform efforts, is not currently under consideration by the Congress.

The study also simulated a “clean,” revenue-neutral income tax that would eliminate all deductions, loopholes, *etc.*; and lower the rate to a single low rate. According to their study, this reform raised GDP by 5.1 percent over ten years. While this stylistic reform is likely more biased towards growth than the Camp proposal, it does provide an upper bound for growth assumptions associated with any revenue neutral, comprehensive tax reform.

Pulling together these estimates permits one to gauge the likely impacts of implementing the Ways and Means overhaul. For example, a 5.1 percent long term increase — say 10 years in the future — in GDP would roughly translate into a 0.5 percentage point increase in trend growth. This increase would amount to about 500,000 jobs annually in the near term, based on estimates previously utilized by the Administration.^[43] A growth effect that mimicked that observed after the TRA, would see a corresponding increase of 100,000 jobs in the near term. Of course, the size of the employment effects would diminish over time as the economy approaches full employment. Such an improvement in trend growth would also improve the budget outlook. Deficit savings could be used to pay down the debt, contribute to further rate reduction or some combination of the two. According to the Congressional Budget Office, a 0.1 percentage point annual increase in GDP growth would improve the 10-year deficit by \$311 billion.^[44] Accordingly, a 5-fold improvement would provide \$1.5 trillion in year deficit savings.

9. CONCLUSION

Pro-growth tax reform is critical to improving the sluggish U.S. economy. With the ranks of the unemployment, in particular the long-term unemployed, stuck stubbornly high it is incumbent on policy-makers to advance policy efforts that would improve the U.S. economic outlook. Fundamental tax reform that encompasses both the corporate and individual components, and does so in a pro-growth fashion, through lower rates and simplification, of the tax code offers an opportunity to spur economic growth. A significant body of economic literature supports the notion that the changes to the tax code that Chairman Camp and the Ways and Means Committee has proposed would meet the critical tests that identify a pro-growth reform effort. Based on this literature, that proposal would likely cause the economy to grow more rapidly, and could do so by as much as 5 percent over the long term, adding half a million new jobs to the economy on annual basis. While this represents the upper bound scenario, more modest growth effects would still result in hundreds of thousands in increased employment and greater national income.

^[1] Authors are president and director of fiscal policy, respectively, of the American Action Forum. Excellent research assistance provided by Lauren Tucker, Ben Hughes and Brielle Acevedo.