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Simulating the Economic Effects of Romney's Tax Plan

By

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Introduction

The debate over Mitt Romney's tax plan has largely revolved around the short term concerns of who gets what and how much, rather than the more long term concerns of economic growth, job creation, deficit reduction, and tax reform.¹ This is unfortunate, especially in a time of record unemployment and debt levels. These serious issues have been put aside to focus particularly on the results of a single study by the Tax Policy Center (TPC),² which finds Romney's tax plan would require raising taxes on low- and middle-income earners to pay for tax cuts for high-income earners. However, to get there, TPC assumes that tax rates do not matter for economic growth, i.e., Romney's plan to cut income tax rates by 20 percent across the board will have no effect on labor supply or saving and investment decisions. Only among Washington score keepers does such an assumption make sense, but it certainly has no credibility among academic economists.³

Economists recognize that there is more to a tax cut than the immediate increase in wealth of the recipient. There is a change in incentives because there is a change in the law. If investment taxes are lowered, investment increases, because investors expect to keep more of their after-tax returns, and more people become investors. If taxes on wages are lowered, more people work and more people work harder. The benefits from these things spill over beyond the immediate actors. Businesses invest in equipment and new hires, leading to more productive workers, higher wages, and ultimately satisfied customers. If this is "trickle

¹ William McBride, *Romney, Obama, & Simpson-Bowles: How Do the Tax Reform Plans Stack Up?*, TAX FOUNDATION FISCAL FACT NO. 327 (Sept. 6, 2012), <http://taxfoundation.org/article/romney-obama-simpson-bowles-how-do-tax-reform-plans-stack>.

² Samuel Brown, William Gale, & Adam Looney, *On the Distributional Effects of Base-broadening Income Tax Reform*, Urban-Brookings Tax Policy Center (Aug. 1, 2012).

³ Harvey Rosen, *Growth, Distribution, and Tax Reform: Thoughts on the Romney Proposal* (Working Paper No. 228, Princeton University, Sept. 2012), <http://www.princeton.edu/ceps/workingpapers/228rosen.pdf>.

down” economics, as the president contends,⁴ this is also economics according to every major textbook and treatise since Adam Smith.⁵

Certainly, economists disagree about the degree to which taxes affect behavior, but they will all admit that zero effect is not realistic. So, in an effort to produce a more realistic assessment of Romney’s tax plan, we have simulated the effects using a model built on a standard neo-classical growth model found in virtually all textbook treatments.

The results are considerably different from TPC’s. We find that fully 60 percent of the static revenue loss from Romney’s plan is recovered when the dynamic effects of economic growth are taken into account. We find that while the cuts in the individual income tax rates do not “pay for themselves,” they do grow the economy 1.8 percent over the long run. The biggest boost to the economy comes from the 10 point cut in the corporate rate, which grows GDP by 2.3 percent, the capital stock by 6.3 percent, and the wage rate by 1.9 percent. The corporate rate cut is so economically beneficial that it does pay for itself, when all federal revenue effects are considered. So does the elimination of taxes on capital gains and dividends for middle-income earners and the estate tax.

These benefits are widely shared. Every income group experiences at least a 7 percent increase in after-tax income.

The Model

Key elements of the Romney tax plan were analyzed using a tax calculator and economic model, which is described in more detail in the Appendix. The model is keyed to 2008 levels of income and GDP to utilize an actual set of tax and economic data for the baseline and to produce a picture of the likely effects once we are past the statistical distortions of the recent recession. This model produces a simulation of what the policy change would do to the economy, incomes, and tax revenues after all economic adjustments are given time to work, which is roughly 5 to 10 years. It does not show the annual progression, year by year, from the starting point to the final outcome, but most of the effects occur within 5 years.

The following portions of the Romney tax plan were modeled, which are the specified tax rate cuts but not the unspecified base-broadeners (closing of various tax preferences, such as credits and deductions):

- 1) A 20 percent reduction in individual marginal income tax rates in all brackets.
- 2) Elimination of tax on capital gains and dividends for lower and middle income tax taxpayers. (The tax on these items was zeroed out in the bottom four brackets, which roughly match the income

⁴ Rick Pearson & Monique Garcia, *Obama: GOP economic plan ‘trickle-down fairy dust’*, CHICAGO TRIBUNE, Aug. 12, 2012, <http://www.chicagotribune.com/news/local/breaking/chi-five-fundraisers-on-tap-for-obama-in-chicago-today-20120812.0.6859587.story>.

⁵ See Thomas Sowell on the history of “trickle down” rhetoric, and how there never was a theory behind it, only a caricature: <http://www.tsowell.com/images/Hoover%20Proof.pdf>.

thresholds suggested in the Romney tax proposal. This somewhat overstates the tax relief for the fourth income tax bracket for single filers, but is very close to the thresholds in the Romney plan for married couples and heads of households. Due to time constraints, we did not model the proposal to eliminate tax on interest income in the same brackets.)

- 3) Elimination of the alternative minimum tax (AMT).
- 4) Reduction of the corporate income tax rate from 35 percent to 25 percent.
- 5) Elimination of the federal estate tax. (We kept the gift tax, as does the Romney plan, and retained the step-up in basis at death; ending step-up would reduce the effective tax cut on capital formation, dampen growth, and actually lose revenue compared to retaining step-up.)

The simulation was run separately for each provision and for all provisions combined. The results are shown in Table 1. Because of interactions, the separate effects do not necessarily add up to the total effect of all provisions.

Economic Consequences of the Tax Plan

The Romney plan would raise actual and potential GDP by about 7.4 percent over a five to ten year adjustment period. The private business sector would grow about 7.8 percent. About two-thirds of the growth in GDP would go to labor income, across the board, in the form of more hours worked and higher wages per hour. Total labor compensation in the private business sector would rise by 7.8 percent in line with GDP. About a third of the gain, pre-tax, would accrue to savers and investors. The plan would boost the capital stock by about 18.6 percent (over \$5 trillion in additional investment), which is what drives the increase in productivity, wages, and hiring.

The reduction in the corporate tax rate yields the largest improvement in GDP and wages, followed by the 20 percent reduction in individual tax rates and the elimination of the capital gains and dividend taxes on middle income taxpayers. However, relative to the static revenue loss, the biggest bang for the buck comes from the capital gains and dividend relief, followed by the corporate rate reduction and the elimination of the estate tax.

Table I: Effects of the Romney Tax Plan on the Economy and Budget

	All Tax Provisions**	Corporate Income Tax Cut	Individual Income Tax Cut	End AMT	Capital Gains and Dividends Tax Cut	End Estate Tax
GDP	7.4%	2.3%	1.8%	0.1%	1.6%	0.9%
Private business GDP	7.8%	2.3%	2.0%	0.1%	1.6%	0.9%
Capital stock	18.6%	6.3%	3.2%	0.3%	4.4%	2.5%
Wage rate	4.7%	1.9%	0.5%	0.1%	1.3%	0.8%
Hours worked	3.0%	0.4%	1.5%	0.1%	0.3%	0.2%
Federal revenue	-\$137.4	\$19.1	-\$113.7	-\$18.1	\$15.3	\$1.9
Federal expenditure	\$34.1	\$12.2	\$5.9	\$0.5	\$8.5	\$4.8
Federal deficit	-\$171.4	\$6.9	-\$119.6	-\$18.6	\$6.8	-\$2.9
Static revenue	-\$338.3	-\$51.6	-\$168.0	-\$22.4	-\$33.6	-\$25.4
Dynamic revenue	-\$137.4	\$19.1	-\$113.7	-\$18.1	\$15.3	\$1.9
% Revenue Reflow	59.6%	136.9%	32.3%	19.4%	145.6%	107.4%
\$GDP	\$1,066.7	\$325.6	\$266.7	\$19.7	\$228.4	\$128.2
\$GDP/\$tax reduction.*	\$7.77	N.A.	\$2.35	\$1.09	N.A.	N.A.

Note: All dollar figures are in billions. The simulation was run separately for each provision, and because of interactions the separate effects do not necessarily add up to the total effect of all provisions.

* Positive numbers indicate that the government would lose revenue with this tax cut, but that economic output (GDP) and people's pretax incomes would rise by the indicated amount for each dollar of revenue lost. N.A. indicates that the tax cut would actually raise revenue due to the economic benefit it provides, and that GDP and people's pre-tax incomes would rise with no cost (and some benefit) to the federal budget.

****Erratum:** Some figures in this column have been slightly amended since this paper was first published to correct for the inadvertent inclusion of the old PEP and Pease provisions in the 2008 baseline. The Tax Foundation regrets the error.

Gains in After-Tax Income are Across-the-board

Regardless of the initial distribution of a tax change, the economic reactions to a tax reduction distribute the economic gains (or losses in the event of a tax increase) across the board. Tax reductions on capital formation help labor by increasing productivity, wages, and employment. Tax increases on capital reduce productivity, wages, and employment. The differences between the static and dynamic consequences of the Romney tax package are displayed below. They are shown before any base broadening to trim the size of the upper income tax reductions to pay for the residual cost of the tax cuts.

The static changes in after-tax income are due solely to the average initial tax cut per tax return in each income class. The dynamic increases in after-tax income are the sum of the tax cut plus the projected increase in income due to the improvement in the economy (which will also affect the tax due to the government). Low-income taxpayers (those earning less than \$50,000) are shown to receive a roughly \$200 to \$3,500 increase in after-tax income as a result of the tax program, on a dynamic basis, even though these filers paid little tax initially and received small initial tax cuts on a static basis. For them, nearly all the gains in income are due to a stronger economy and higher wages and hours worked.

Table 2: Distribution of Income Effects*

Adjusted Gross Income Class (2008 dollars)	Average per Return (2008 dollars)		Percent Changes	
	Static After-Tax Income	Dynamic After-Tax Income	Static After-Tax Income	Dynamic After-Tax Income
< 0	131	-6,845	-0.15%	7.74%
0 - 5,000	0	190	0.02%	6.94%
5,000 - 10,000	7	551	0.09%	6.84%
10,000 - 20,000	54	1,110	0.35%	7.11%
20,000 - 30,000	174	1,897	0.71%	7.70%
30,000 - 40,000	349	2,730	1.05%	8.20%
40,000 - 50,000	531	3,526	1.26%	8.34%
50,000 - 75,000	855	4,969	1.49%	8.64%
75,000 - 100,000	1,277	7,045	1.58%	8.73%
100,000 - 150,000	2,471	10,310	2.25%	9.37%
150,000 - 200,000	6,267	16,644	4.25%	11.30%
200,000 - 250,000	10,583	23,586	5.70%	12.70%
250,000 - 500,000	18,734	37,784	6.94%	14.00%
500,000 - 1,000,000	33,119	71,765	6.29%	13.64%
> 1,000,000	121,859	318,331	4.76%	12.42%
TOTAL FOR ALL	1,375	4,923	2.77%	9.91%

***Erratum:** Some figures in this table have been slightly amended since this paper was first published to correct for the inadvertent inclusion of the old PEP and Pease provisions in the 2008 baseline. The Tax Foundation regrets the error.

Budget Consequences of the Tax Plan

The Romney tax plan would recover nearly 60 percent of the static projected revenue cost due to economic growth, higher wages and employment, and higher tax collections on the higher incomes. To keep the reform revenue neutral, the government would only need base-broadeners equal to about 40 percent of the static cost.⁶

People need to be aware that each dollar of federal spending costs them several dollars in lost wages and income from saving due to the economic damage from the taxes imposed. In the case of the Romney tax plan, each \$1 of lost government revenue would raise

incomes by nearly \$8. Would the public be willing to trade a \$1 reduction in government spending for an additional \$8 in personal income? Some elements of the Romney plan yield even higher benefits to the public, raising incomes and employment with no cost, and some benefit, to the federal budget, and actually help to pay for the other tax reductions.

Nearly all the tax reductions in the Romney plan would have some positive economic results, which would raise incomes and thereby recover some of the lost tax revenue. Most tax reductions do not completely “pay for themselves” with higher revenue, but they do add to economic growth and incomes, creating a significant net benefit to the public. For example, the across-the-board income tax rate reductions and elimination of the AMT recover only about 32 percent and 19 percent of their static revenue losses, but add \$2.35 and \$1.09 respectively to people’s pre-tax incomes for each dollar of revenue loss to the government (raising after-tax incomes by the economic gains plus the tax cut).

⁶ This assumes that the base-broadeners are designed so as not to offset the growth incentives of the tax reductions, leaving the additional GDP in place.

Nonetheless, some tax reductions are unusually effective in raising incomes and recovering revenues. Capital formation is highly sensitive to after-tax earnings. Some tax changes that aim directly at capital formation can trigger enough additional plant building, equipment purchasing, and hiring to come close to, or even more than offset, the initial revenue reduction. These include reductions in the estate tax and steps that offset some of the double taxation of corporate income, including lower corporate tax rates and lower taxes on capital gains (which hit retained after-tax corporate earnings) and dividends (which are paid out of after-tax corporate earnings). Our results indicate that these tax cuts do pay for themselves, meaning they benefit the federal government and the rest of the economy, including federal income taxpayers, low-income people who owe no federal taxes, and state and local governments.

One must count revenue from all sources to determine the revenue effect of a particular tax change. For instance, a lower corporate tax rate does not usually raise corporate tax revenue. Rather, it encourages the creation and use of a larger amount of plants, equipment, commercial buildings, and rental housing in the United States. This added physical capital boosts productivity, wages, and employment, which results in added personal income and additional tax revenue from the higher incomes and payroll. Federal excise taxes and tariffs also rise with the added growth in income and consumption. State and local governments benefit from higher sales and income tax receipts which help their budgets as well.

By contrast, the lowering of the capital gains tax rate in 1978, 1981, and 1997 may not only have raised incomes and general revenues, it may also have raised revenues from the capital gains tax itself. The then-existing rates were above the revenue maximizing capital gains tax rate, which appears to be a bit under 10 percent (looking only at capital gains revenues).⁷ The reduced rate raised the value of capital (boosting the amount of gains to be reported) and encouraged people to take gains earlier than otherwise. Such a rate cut is one of the few cases where the tax's own revenue may rise with a rate cut. In the Romney plan, the rate cut to zero for the middle brackets would reduce capital gains collections but raise other revenues due to increased economic activity and income. Counting all types of income and tax revenue, the globally revenue maximizing capital gains rate is probably zero.

Previous Pro-growth Policies Proved that “Yes We Can”

At the present time, the economy is about 12 percent below its long term growth trend. There is no doubt that the economy has the “room” to expand an additional 7 or 8 percent over the next decade as the result of pro-growth tax reductions. History gives several examples of similar growth following similar tax changes.

The Romney tax plan is very nearly as powerful as the Kennedy tax cuts that were phased in between 1962 and 1965. The Romney plan is as strong in lowering the service price of capital, mainly due to its 10 percentage point cut in the corporate tax rate. The Kennedy cuts included a four point reduction in the corporate tax rate, a 7 percent investment tax credit, and faster depreciation write-offs. The Romney plan's

⁷ Paul Evans, *The Relationship between Realized Capital Gains and Their Marginal Rate of Taxation, 1976-2004*, IRET Dynamic Tax Analysis Series: Capital Gains (Oct. 9, 2009), <http://iret.org/pub/CapitalGains-2.pdf>.

20 percent across-the-board individual cuts are of the same pattern as the roughly 20 percent across-the-board Kennedy individual income tax rate cuts. The Kennedy tax cuts were not paid for with tax offsets (base broadeners) but were accompanied by some spending reductions. The economy surged following the Kennedy cuts, “broadening” the tax base through economic growth and employment gains, which is the best kind of base broadener there is. The federal deficit was significantly lower in 1965 (\$1.4 billion) than in 1961 (\$3.3 billion) before the tax cuts began to take effect.

By contrast, the Johnson 10 percent Vietnam War surtax on individual and corporate income between 1968 and 1970 helped to trigger the 1969-1970 recession. The deficit fell but at a steep price in lost jobs and falling incomes.

The Romney plan is about two-thirds as powerful with respect to capital formation as the 1981 Economic Recovery Tax Act under President Reagan (although a portion of that Act was repealed in 1982 and 1984 before it became fully effective). The 1981 Reagan tax cuts were phased in slowly, but by 1983 they had begun to generate a very strong economic recovery, broadening the tax base through economic growth and rapid job creation.

By contrast, the 1986 Tax Reform Act was designed to be “revenue neutral,” with many “base broadeners” that raised taxes on capital income. These “base broadeners” offset the benefits of the reduction in the corporate tax rate. Taxes on capital income rose to pay for the lower tax rates on labor income and to provide tax credits to address social issues. The result was a slower rate of economic growth in the last third of the decade and a collapse in tax revenues from capital gains.

The 2003 tax cut under George W. Bush produced the largest cut in the service price of capital since the 1981 tax cut. It turned a lackluster recovery into a strong expansion. Although it raised the deficit from \$158 billion in 2002 to \$412 billion in 2004, the subsequent economic expansion reduced the deficit to \$161 billion in 2007.

Revenue Neutral or Budget Neutral? Which Helps the People the Most?

Tax reform should be about increasing jobs and raising incomes and living standards, not just about closing the budget gap. This is not just an inside-the-Beltway numbers exercise, and it is not about making the budget process easier or more convenient for Congress and the White House.

If the plan were made budget neutral instead of revenue neutral, the revenue shortfall could be covered by reductions on the spending side of the budget, including “corporate welfare” subsidies or reductions in low value federal projects.

Transition Issues

The higher levels of capital, GDP, and income take time to develop. It takes about 5 years to acquire all of the additional equipment made possible by the tax reductions and about 10 years for the additional

structures to be completed. About two-thirds of the expansion of the capital stock occurs within 5 years. Job growth begins quite quickly, as people are put to work creating the additional machines and buildings. Job growth continues and is sustained as people are then put to work using the additional machinery and industrial and agricultural structures, and working and shopping in the additional commercial buildings.

The revenue recovery from the expansion takes time to develop. The greatest budget hit from the tax reductions occurs in the early years. A temporary injection of revenue or spending restraint should supplement the tax cuts. An obvious candidate would be one-time asset sales and elimination of recent increases in federal outlays for emergency “stimulus” that will not be needed as the economy picks up. Other budget changes that would enhance economic growth, as well as help fund the pro-growth tax reform, could include reductions in the least valuable federal spending programs, including numerous subsidies of uneconomical private industries.

Asset Sales

The federal government possesses an enormous asset portfolio. It estimates that, at the end of fiscal year 2011, it held approximately \$1,400 billion of equipment and structures, \$300 billion of inventories, \$940 billion of land, and \$480 billion of mineral rights.⁸ The Federal Government owns approximately 28 percent of the land in the United States.⁹ Many of these assets are not needed for federal operations, and many are poorly managed. Selling a portion of the government's asset holdings would have the dual advantages of allowing the nation's resources to be used more efficiently and helping finance the temporarily high costs of tax reform in the early years before the positive growth effects kick in. The federal government could realize additional income, as well as reduce its yearly spending, by privatizing some of the enterprises it now owns and operates.¹⁰ Asset sales and privatization have been powerful financing tools for many foreign nations.¹¹

Spending Restraint, Short and Long Term

The CATO Institute has identified what it considers to be “corporate welfare” outlays in the federal budget.¹² These total some \$97 billion dollars at projected 2012 budget outlays. They include \$25 billion in the Department of Agriculture, \$4 billion in economic development and trade in the Department of Commerce, \$5 billion in R&D subsidies in the Department of Defense, \$17 billion in the Department of

⁸ White House, Office of Management and Budget, *Budget of the U.S. Government, FY2013, Analytical Perspectives*, p. 491, <http://www.whitehouse.gov/sites/default/files/omb/budget/fy2013/assets/spec.pdf>.

⁹ Ross W. Gorte, Carol Hardy Vincent, Laura A. Hanson, & Marc R. Rosenblum, *Federal Land Ownership: Overview and Data*, Congressional Research Service, Report R42346, Feb. 8, 2012, <http://www.fas.org/sgp/crs/misc/R42346.pdf>.

¹⁰ For a fuller discussion of potential privatization opportunities, see Cato Institute, *Cato Handbook for Policymakers*, ch. 6 (7th ed., 2009), <http://www.cato.org/pubs/handbook/hb111/hb111-6.pdf>.

¹¹ Cato Institute, *Cato Handbook for Policymakers*, ch. 27 (5th ed., 1999), <http://www.cato.org/pubs/handbook/hb105/105-27.pdf>.

¹² Cato Institute, Tad DeHaven, *Corporate Welfare in the Federal Budget*, POLICY ANALYSIS NO. 703 (July 25, 2012), <http://www.cato.org/publications/policy-analysis/corporate-welfare-federal-budget>.

Energy, \$16 billion in HUD, and \$29 billion in other departments and agencies. Eliminating roughly a third of these outlays could offset about a quarter of the long-run dynamic cost of the tax plan, adjusting for the difference in base years.

Capping Tax Expenditures for the Long Term

The TPC study insists on revenue neutrality rather than budget neutrality in its analysis of the Romney tax plan, and does its arithmetic on the assumption of a static economic baseline. It restricts its offsets to the cost of the reduction to base broadeners chosen from the Income Tax Expenditures list in the Federal Budget. If on a dynamic basis the necessary offsets are only 40 percent of the amounts assumed using the TPC static economic analysis, the job becomes much simpler.

For example, the largest tax expenditure, as of the 2008 budget, was the exclusion of employer provided health insurance and health care, estimated at \$160 billion. The static revenue loss from the tax cut (\$336 billion) is more than twice that amount. The dynamic revenue loss from the tax cut (\$136 billion) is only 85 percent of that amount. If we capped the exclusion for upper income taxpayers to trim a fifth of the cost (\$36 billion), it would pay for more than a quarter of the dynamic long term revenue loss.

One of the major subsidies to states in the tax code is the exclusion of tax on public purpose state and local bonds, amounting to \$27 billion in 2008 and used mainly by upper income taxpayers. Eliminating that would cover nearly 20 percent of the dynamic revenue loss. Other tax expenditures considered by TPC, such as deductibility of state and local property taxes (\$13 billion) and mortgage interest (\$89 billion) on owner-occupied homes, and state and local income and sales taxes (\$28 billion), all of which are currently limited by the AMT, might be capped. Taking a fifth of each, from the upper income, would provide \$26 billion at 2008 levels, another 20 percent of the dynamic cost of the tax cuts.

The deduction of income from domestic production (often called the “manufacturers’ credit”) would probably be repealed as part of business and personal tax rate reductions. That is valued at \$14 billion for 2008. However, that would dampen the expansion of capital formation by reducing returns to investment.

These items would cover about three-quarters of the long run dynamic cost of the Romney plan. As noted above, corporate welfare reductions could cover the remainder. We do not necessarily endorse these specific tax expenditure changes as our first preference and would prefer more spending restraint. We merely offer them as evidence that one does not need to attack the middle income tax expenditures, nor offset the middle income tax cuts, to pay for the Romney tax reductions.

Conclusion

While the debate over tax reform has been consumed with distributional issues, the economy continues to limp along in the worst recovery since the Great Depression. To be sure, this economy faces headwinds that even an ideal tax code will not address, but pro-growth tax reform can provide substantial benefits. Our

results indicate that by lowering tax rates on investment and labor, the Romney tax plan would grow the economy by 7.4 percent, the capital stock by almost 19 percent, wages by almost 5 percent, and hours worked by 3 percent. The benefits would be widely enjoyed, as every income group would experience at least a 7 percent increase in after-tax income. It would benefit the federal budget as well, in that fully 60 percent of the static revenue loss from Romney's plan would be recovered from taxing a larger economy.

Appendix: More on the Model

The study takes a neo-classical view of the economy, in which decisions about work, saving, and capital formation are driven by the after-tax rewards for these activities. The taxes that affect these decisions are the marginal tax rates on additional effort. They alter the choices between capital formation and consumption, and between labor and leisure.

Specifically, we looked at the changes to the marginal tax rates on labor income, weighted by the incomes of the earners. The income weights reflect the productivity of the workers; a worker earning \$20,000 a year working 2,000 hours will add \$10 to GDP by working an extra hour. A worker earning \$200,000 a year would add \$100 to the GDP by working an extra hour. The marginal rate changes were found by using a tax calculator that is based on the impact of the tax changes on a large sample of tax returns from the IRS Statistics of Income Public Use File.

We also calculated the changes in the income-weighted marginal tax rates on dividends, capital gains, and non-corporate business income, as well as the corporate income tax rate, the estate and gift tax, and the depreciation schedules. These were used to determine the effect of the policies on the "service price" of capital. The service price is the rate of return that capital must earn to cover its economic obsolescence, pay taxes, and yield a normal after-tax return to the owners. A higher service price forces a reduction in the capital stock, eliminating capital that cannot earn enough to clear the hurdle rate of return. A lower service price encourages additional capital formation.

The changes in these two tax "wedges" were then entered into an economic model using a Cobb-Douglas production function and a labor supply curve. The model determined the increase or decrease in the supply and employment of labor and the size of the desired capital stock and the resulting changes in GDP and incomes. The effect of the income changes was allowed to feed back into the tax rates, which resulted in further income adjustments, until a new equilibrium was reached. The production function is described in greater detail in Stephen J. Entin, *Economic Consequences of the Tax Policies of the Kennedy and Johnson Administrations*, IRET POLICY BULLETIN NO. 99 (Sept. 6, 2011), Appendix A, available at <http://iret.org/pub/BLTN-99.PDF>.

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