



A FairTax® Whitepaper

Research Summary The Impact of the FairTax on the Economy

Virtually all economists agree that the following will promote economic growth:

- Replacing the income tax with a consumption tax
- Replacing a graduated rate system with a flat marginal tax rate system
- Lower marginal rates and a broader tax base

The Fair Tax Act (a progressive national retail sales tax) does all three.

Here is a summary of three independent research studies of the FairTax plan analyzing the likely impact on the U.S. economy of replacing the current federal income tax system with a broad-based consumption tax, such as the national retail sales tax plan called for by HR 25 and S 122, the FairTax.

Each study utilizes a distinct modeling approach. While the results vary, all three studies show that GDP growth under the FairTax is significantly higher than it would otherwise be if the current federal tax system remained in place.

(1) THE ECONOMIC EFFECTS OF THE FAIRTAX: RESULTS FROM THE BEACON HILL INSTITUTE CGE MODEL¹

The first study employs a dynamic computable general equilibrium (CGE) model to estimate the impact of the FairTax plan on the economy. Although complex, CGE models make it possible to analyze large changes in existing taxes or the introduction of new taxes for their effects on a wide array of economic indicators. The chart below shows how much higher the growth in certain economic variables would be under the FairTax than if the current federal income tax system were to remain in place, for Years 1, 5, and 10, after the implementation of the FairTax.

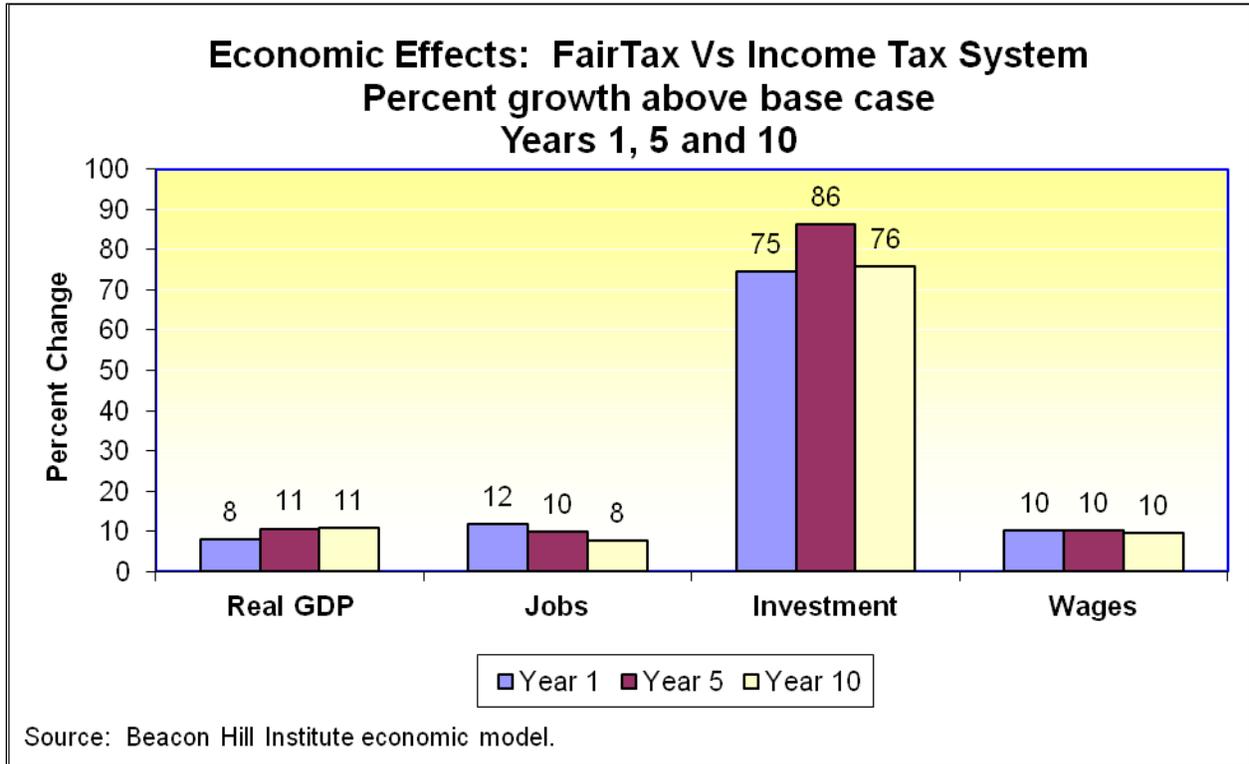
Real GDP would be 8% higher in the first year than under the income tax system, 11% higher in Year 5 and 11% percent higher in Year 10.

Job growth would be 12% higher in Year 1, 10% higher in Year 5 and 8% higher in Year 10. Apply these results to the current level of employment, 133 million, means in just one year, the FairTax would have created 13.3 million more jobs than if the current income tax system remained in place.

¹ See David G. Tuerck, et.al., "The Economic Effects of the FairTax: Results from the Beacon Hill Institute CGE Model," The Beacon Hill Institute at Suffolk University, February 2007.

Investment would be 75% higher in Year 1, 86% higher in Year 5 and 76% higher in Year 10 reflecting the growth due to no taxes on savings and investment income.

Wages would be 10% higher in Years 1, 5 and 10.



The findings for 2007 through 2031 are summarized in Table 1 below. The table shows the percentage difference in each indicator resulting from implementation of the FairTax for selected years 2007 to 2031. For example, real GDP would be 7.9 percent higher in 2007 under the FairTax than under the “benchmark” current law and 10.3 percent higher by 2031.

Table 1
Summary of Effects of the FairTax Relative to Current Law:
2007 – 2031 (% change)

Year	2007	2008	2009	2010	2011	2016	2021	2026	2031
Period Indicator	1	2	3	4	5	10	15	20	25
Real GDP	7.9	9.3	9.9	10.3	10.7	10.9	10.7	10.5	10.3
Domestic investment	74.5	88.4	88.0	87.1	86.3	75.9	69.0	65.7	65.2
Capital stock	0.0	2.8	5.3	7.5	9.3	14.1	16.0	16.9	17.3
Employment	11.9	12.0	11.2	10.5	9.9	7.6	6.1	5.3	4.7
Real wages	10.3	10.6	10.4	10.3	10.2	9.5	9.1	9.0	9.2
Consumption	-0.6	-0.8	0.2	1.1	1.8	4.3	5.5	5.9	6.0

(2) A MACROECONOMIC ANALYSIS OF THE FAIRTAX PROPOSAL²

The second study uses a dynamic, supply-side economic model to estimate the impact of the FairTax plan on GDP, savings, employment, capital formation, domestic investment, and interest rates, and disposable personal income. The study includes a comparison of the 10-year economic forecast assuming no change in the current federal tax system compared to the 10-year economic forecast assuming the FairTax is enacted.

- The economy as measured by GDP is 2.4% higher in the first year and 11.3% higher by the 10th year than it would otherwise be.
- Consumption increases by 2.4% more in the first year than it would be if the current system were to remain in place.
- The increase in consumption is fueled by the 1.7% increase in disposable (after-tax) personal income that accompanies the rise in incomes from capital and labor once the FairTax is enacted.
- By the 10th year, consumption increases by 11.7% over what it would be if the current tax system remained in place; and disposable income is up by 11.8%.

Following the implementation of the FairTax plan, the higher take-home wage provides an immediate incentive for people to work more. During the first year, this leads to total employment growth of 3.5 percent in excess of the baseline scenario, which continues to grow through year 10 such that total employment is 9.0 percent above what it would have been under the baseline scenario. The impact on total labor income is even more pronounced, increasing due to both an increase in after-tax wages and the increase in the number of people working. Total labor income rises 27.4 percent in the first year. By year 10, labor income is over 41 percent higher than what it would have been under the baseline scenario.

Summary of Results by Year

Cumulative growth over current system	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 10</u>
Gross Domestic Product	2.4%	5.2%	7.0%	8.2%	9.0%	11.3%
Employment	3.5%	5.7%	7.0%	7.7%	8.2%	9.0%
Domestic investment	33.0%	35.4%	36.9%	38.0%	38.8%	41.2%
Income from employment (wages)	27.4%	31.8%	34.5%	36.4%	37.7%	41.2%
Consumption	2.4%	4.1%	5.8%	7.1%	8.1%	11.7%
Disposable personal income (adj. for changes in the price level)	1.7%	4.5%	6.4%	7.7%	8.7%	11.8%

² See Arduin, Laffer & Moore Econometrics, A Macroeconomic Analysis of the FairTax Proposal, June, 2006, p.

(3) SIMULATING THE DYNAMIC MACROECONOMIC AND MICROECONOMIC EFFECTS OF THE FAIRTAX³

In the third study, Drs. Kotlikoff and Jokisch used a life-cycle, general equilibrium model to study the dynamic macroeconomic and microeconomic effects of replacing all federal taxes with the FairTax. The model considered three income classes within each generation, each with its own earnings ability.⁴ The model generated results with closed and open economies. The results of this study are shown in Tables 4 and 5.

The problem with current law: the necessary future tax increase -- What happens if the current system remains in place is shown in the top panel of Table 4 the base case scenario (i.e., no change in the current system). That scenario generates more than a doubling of the payroll tax rate due to the aging of the population as well as a modest but significant long-run capital shortage. Neither America's aging nor its associated increase in payroll taxes prevents the economy from growing in absolute terms. National income in 2100 is 3.84 times its 2004 value. This reflects growth over time in the supplies of both labor and capital, which expand by factors of 4.19 and 3.17, respectively, over the course of the century. This rising supply of effective labor means rising labor income and, therefore, more wherewithal for workers to save for retirement. The additional saving is, of course, invested, explaining the model's predicted growth in the stock of capital.

However, while the supplies of both labor and capital rise over time, growth in the supply of labor outpaces growth in the supply of capital, thanks, in large part, to the very substantial rise in overall taxation of labor income. Consequently, capital per unit of human capital falls over time, leading to an 8.0-percent decline over the course of the century in the pre-tax wage per unit of human capital. Thus, in the base case, i.e., the current income tax system remaining in place, we see a long-run capital shortage, albeit a moderate one. In combination with the model's predicted rise in the payroll tax, the decline in the pre-tax wage causes a 21.0-percent decline in long-run after-tax take-home pay. It also results in a major reduction in welfare, which can be avoided via a switch to the FairTax.

The FairTax transition path. – Table 4's second panel reports the results of implementing the FairTax. It shows the transition path arising from eliminating the personal income tax, the personal capital income tax, the corporate income tax, and the payroll tax and replacing them with a consumption tax (*a la* the FairTax) plus a rebate. Switching to the FairTax improves capital stock, which is dramatically higher in the long run under the FairTax than under the current tax system. Indeed, the capital stock in 2100 is 96.2 percent higher.⁵ While the expansion of the capital stock proceeds relatively slowly, it is noticeable even by 2010. In that year, the capital stock is 12.8 percent higher. By 2030, the capital stock is 43.7 percent higher than would otherwise have been the case.

³ See Sabine Jokisch and Laurence J. Kotlikoff, "Macroeconomic and Microeconomic Effects of the FairTax," *National Tax Journal*, June, 2007.

⁴ For a detailed discussion of the model, see above.

⁵ The index for capital stock in 2100 is 6.22 under the FairTax compared to an index of 3.17 if the current income tax system remained in place. The percent increase of 96.2% equals $[(6.22-3.17) / 3.17]$.

The increased capital formation also leads to a rise in the real wage per unit of human capital. Rather than declining by 8.0 percent by the end of the century, the real wage now rises by 17.0 percent. This is an 25.0-percent difference in real worker remuneration.

Again, the pace of the change is slow, but by 2030 real wages under the FairTax are 11.5 percent higher than they would otherwise have been. In transforming the economy’s prospect from one of a capital shortage to one of capital deepening, the FairTax also reduces real interest rates, with the 2100 real interest rate ending up 160 basis points lower than under the current system.

Table 4
Simulation Results for the U.S. (closed economy)

Year	Index of National Income	Index of Capital Stock	Index of Labor Supply	Index of Pre-Tax Wage	Capital Price	Interest Rate	Social Security Cost Index	Average Wage Tax Index	Effective FairTax Rate	FairTax Rebate/NI
Year to year index values										
BASE CASE SCENARIO (continuation of the current system)										
2004	1.00	1.00	1.00	1.00	1.000	0.075	1.00	1.00	.00	.000
2010	1.12	1.09	1.14	0.99	1.007	0.075	1.08	0.98	.00	.000
2020	1.36	1.27	1.40	0.97	1.008	0.074	1.32	0.94	.00	.000
2030	1.59	1.44	1.67	0.96	0.975	0.078	1.68	1.04	.00	.000
2050	2.10	1.74	2.29	0.92	0.987	0.088	1.79	1.13	.00	.000
2075	2.92	2.37	3.20	0.91	0.992	0.088	1.91	1.07	.00	.000
2100	3.84	3.17	4.19	0.92	0.981	0.087	2.04	1.06	.00	.000
FAIRTAX SCENARIO										
2004	1.02	1.00	1.05	0.98	1.261	0.075	0	.00	0.23	0.047
2010	1.17	1.23	1.17	1.01	1.216	0.079	.00	.00	0.24	0.049
2020	1.45	1.65	1.39	1.05	1.158	0.075	.00	.00	0.25	0.053
2030	1.74	2.07	1.63	1.07	1.098	0.075	.00	.00	0.28	0.061
2050	2.38	2.97	2.17	1.10	1.072	0.076	.00	.00	0.28	0.062
2075	3.35	4.45	2.99	1.13	1.048	0.073	.00	.00	0.29	0.065
2100	4.46	6.22	3.88	1.15	1.023	0.071	.00	.00	0.30	0.068

In addition to the above three studies regarding the economic impact of the FairTax, there are a number of studies that examine the effect of consumption taxes in general.

Alan Auerbach of the University of California at Berkeley found that long-run GDP per capita would be 9.7 percent higher under a national sales tax.⁶

Michael Boskin, former chairman of the Council of Economic Advisers has stated that the long-term gain to GDP from a consumption-based tax reform would be about 10 percent.⁷

⁶ Auerbach, Alan, “Tax Reform, Capital Allocation, Efficiency, and Growth,” in *Economic Effects of Fundamental Tax Reform*, Henry J. Aaron and William G. Gale, eds., Washington, D.C.: Brookings Institution Press, 1996, p. 58.

⁷ Boskin, Michael, “A Framework for the Tax Reform Debate,” testimony before the House Ways and Means Committee, June 6, 1995.



Dale Jorgenson, Ph.D., former chairman of the Economics Department at Harvard University, estimated a near-term 9 to 13 percent increase in the Gross Domestic Product (GDP).⁸

Gary and Aldona Robbins, Fiscal Associates, show that replacing the current tax system with a flat rate system that taxes capital and labor income equally – such as the FairTax – would increase the GDP by 36.3 percent and increase private output by 48.4 percent over the long run.⁹

Finally, a 1997 Joint Committee on Taxation report summarized results from nine different economic models, all finding that a change to a single rate consumption tax would increase investment and boost economic growth.¹⁰

What is the FairTax Plan?

The FairTax Plan is a comprehensive proposal that replaces all federal income and payroll based taxes with an integrated approach including a progressive national retail sales tax, a prebate to ensure no American pays federal taxes on spending up to the poverty level, dollar-for-dollar federal revenue replacement, and, through companion legislation, the repeal of the 16th Amendment. This nonpartisan legislation (HR 25/S122) abolishes all federal personal and corporate income taxes, gift, estate, capital gains, alternative minimum, Social Security, Medicare, and self-employment taxes and replaces them with one simple, visible, federal retail sales tax – administered primarily by existing state sales tax authorities. The IRS is disbanded and defunded. The FairTax taxes us only on what we choose to spend on new goods or services, not on what we earn. The FairTax is a fair, efficient, transparent, and intelligent solution to the frustration and inequity of our current tax system.

What is Americans For Fair Taxation (FairTax.org)?

FairTax.org is a nonprofit, nonpartisan, grassroots organization solely dedicated to replacing the current tax system. The organization has hundreds of thousands of members and volunteers nationwide. Its plan supports sound economic research, education of citizens and community leaders, and grassroots mobilization efforts. For more information visit the Web page: www.FairTax.org or call 1-800-FAIRTAX.

Summaries prepared by Karen Walby, Ph.D., Director of Research, Americans For Fair Taxation, www.fairtax.org. Updated April 2013.

⁸ Jorgenson, Dale W., “The Economic Impact of the National Retail Sales Tax,” November, 1996.

⁹ Robbins, Gary and Aldona, “Looking Back to Move Forward: What Tax Policy Costs Americans and the Economy,” Institute for Policy Innovation, Policy Report No. 127, September 1, 1994.

¹⁰ Joint Committee on Taxation, “Tax Modeling Project and 1997 Tax Symposium Papers,” JCS-21-97, November 20, 1997. Symposium participants: Alan J. Auerbach, Charles L. Ballard, Michael J. Boskin, Roger E. Brinner, Eric Engen, William Gale, Jane G. Gravelle, Dale W. Jorgenson, Laurence J. Kotlikoff, Joel L. Prakken, David Reifschneider, Robert D. Reischauer, Aldona Robbins, Gary Robbins, Diane Lim Rogers, Harvey S. Rosen, Joel Slemrod, Kent Smetters, Jan Walliser, Peter J. Wilcoxon, John G. Wilkins.