

Fair Tax Analysis

By
William Larsen
2-20-2006

Basics:

The FairTax proposal would replace all current federal revenue taxes with one federal sales tax. The FairTax is a single-rate, federal sales tax collected only once, at the final point of purchase of new goods and services for personal consumption. Used items are not taxed. Business-to-business purchases for the production of goods and services are not taxed.

Single people and married couples are treated equally. Each adult would be given a \$9,310 rebate with a \$3,180 rebate for each dependent. For a family of four, this means the first \$24,980 would be exempt from any taxation. Any income above this that is spent would be taxed at 23%. Table 1 compares the current tax structure versus the FairTax proposal. My analysis uses just the standard deduction, personal exemptions and child tax credit. It also assumes all income is from wages and is treated as an employee wages with a Medicare tax rate of 1.45%. All income is spent, none saved. The savings rate in the US can be no greater than the rate of change in productivity and population growth.

Savings:

During a person's life time, saving 14% of income can produce a cash flow equivalent to 100% of ones wages adjusted by inflation. This would be equivalent to one out of seven workers saving 100% of income. If one out of seven adults is retired, then we have one adult cashing in their accumulated savings at the same rate as the seven workers save. But it gets a bit more complicated. The amount of one's cash flow originating from the sale of assets is small early in retirement increasing to nearly 100% in the last year. The average over a 20 year retirement is about 49% from the sale of assets and 51% from income.

Therefore, as a group retirees are cashing in an equivalent of 49% of their needs per year. If their needs are equal to 100% of the average wage, then five people making the average wage, saving 10% of income would be available to buy the retirees assets. This leaves two people who are not saving or it is new investment.

Therefore, savings will reduce the amount spent during working years, but should continue the same level of spending during retirement. Therefore, the portion of lost sales tax during working, is later taxed during retirement not as income, but by the conversion of assets into cash to buy goods and services. Therefore, in any given year, I think it would be a good chance that equivalent net income will be spent and subsequently taxed.

Table 1 compares the current tax with the Fair Tax for a family of four. It assumes the standar deduction, personal exemptions and child tax credits.

Table 1
Comparison of current Federal Income Tax and FairTax Proposal

Wages	Current Federal Income Tax		FairTax Proposal		
	Total FICA & FIT	Marginal tax rate	Rebate	Fair Tax Paid	Fair Tax Marginal Tax Rate
\$ 10,000	\$ 785	7.9%	\$24,980	\$ -	0%
\$ 15,000	\$ 1,178	7.9%	\$24,980	\$ -	0%
\$ 20,000	\$ 1,570	7.9%	\$24,980	\$ -	0%
\$ 25,000	\$ 1,963	7.9%	\$24,980	\$ 5	0%
\$ 30,000	\$ 2,355	7.9%	\$24,980	\$ 1,155	4%
\$ 35,000	\$ 2,748	7.9%	\$24,980	\$ 2,305	7%
\$ 40,000	\$ 3,140	7.9%	\$24,980	\$ 3,455	9%
\$ 45,000	\$ 4,133	9.2%	\$24,980	\$ 4,605	10%
\$ 50,000	\$ 5,275	10.6%	\$24,980	\$ 5,755	12%
\$ 55,000	\$ 6,418	11.7%	\$24,980	\$ 6,905	13%
\$ 60,000	\$ 7,560	12.6%	\$24,980	\$ 8,055	13%
\$ 65,000	\$ 8,703	13.4%	\$24,980	\$ 9,205	14%
\$ 70,000	\$ 9,845	14.1%	\$24,980	\$ 10,355	15%
\$ 75,000	\$ 10,988	14.7%	\$24,980	\$ 11,505	15%
\$ 80,000	\$ 12,130	15.2%	\$24,980	\$ 12,655	16%
\$ 85,000	\$ 13,553	15.9%	\$24,980	\$ 13,805	16%
\$ 90,000	\$ 15,195	16.9%	\$24,980	\$ 14,955	17%
\$ 95,000	\$ 16,543	17.4%	\$24,980	\$ 16,105	17%
\$100,000	\$ 17,866	17.9%	\$24,980	\$ 17,255	17%
\$105,000	\$ 19,188	18.3%	\$24,980	\$ 18,405	18%
\$110,000	\$ 20,511	18.6%	\$24,980	\$ 19,555	18%
\$115,000	\$ 21,833	19.0%	\$24,980	\$ 20,705	18%
\$120,000	\$ 23,156	19.3%	\$24,980	\$ 21,855	18%
\$125,000	\$ 26,478	21.2%	\$24,980	\$ 23,005	18%
\$150,000	\$ 33,308	22.2%	\$24,980	\$ 28,755	19%
\$175,000	\$ 40,671	23.2%	\$24,980	\$ 34,505	20%
\$200,000	\$ 48,033	24.0%	\$24,980	\$ 40,255	20%
\$225,000	\$ 56,366	25.1%	\$24,980	\$ 46,005	20%
\$250,000	\$ 64,978	26.0%	\$24,980	\$ 51,755	21%
\$275,000	\$ 73,591	26.8%	\$24,980	\$ 57,505	21%
\$300,000	\$ 82,203	27.4%	\$24,980	\$ 63,255	21%
\$325,000	\$ 90,816	27.9%	\$24,980	\$ 69,005	21%
\$350,000	\$ 99,443	28.4%	\$24,980	\$ 74,755	21%
\$375,000	\$108,556	28.9%	\$24,980	\$ 80,505	21%
\$400,000	\$117,668	29.4%	\$24,980	\$ 86,255	22%
\$425,000	\$126,781	29.8%	\$24,980	\$ 92,005	22%
\$450,000	\$135,893	30.2%	\$24,980	\$ 97,755	22%
\$475,000	\$145,006	30.5%	\$24,980	\$ 103,505	22%
\$500,000	\$154,118	30.8%	\$24,980	\$ 109,255	22%
\$525,000	\$163,231	31.1%	\$24,980	\$ 115,005	22%
\$550,000	\$172,343	31.3%	\$24,980	\$ 120,755	22%
\$575,000	\$181,456	31.6%	\$24,980	\$ 126,505	22%
\$600,000	\$190,568	31.8%	\$24,980	\$ 132,255	22%
\$625,000	\$199,681	31.9%	\$24,980	\$ 138,005	22%
\$650,000	\$208,793	32.1%	\$24,980	\$ 143,755	22%

Table 1
Comparison of current Federal Income Tax and FairTax Proposal

Wages	Current Federal Income Tax		FairTax Proposal		
	Total FICA & FIT	Marginal tax rate	Rebate	Fair Tax Paid	Fair Tax Marginal Tax Rate
\$675,000	\$217,906	32.3%	\$24,980	\$ 149,505	22%
\$700,000	\$227,018	32.4%	\$24,980	\$ 155,255	22%
\$725,000	\$236,131	32.6%	\$24,980	\$ 161,005	22%
\$750,000	\$245,243	32.7%	\$24,980	\$ 166,755	22%
\$775,000	\$254,356	32.8%	\$24,980	\$ 172,505	22%
\$800,000	\$263,468	32.9%	\$24,980	\$ 178,255	22%
\$825,000	\$272,581	33.0%	\$24,980	\$ 184,005	22%
\$850,000	\$281,693	33.1%	\$24,980	\$ 189,755	22%
\$875,000	\$290,806	33.2%	\$24,980	\$ 195,505	22%
\$900,000	\$299,918	33.3%	\$24,980	\$ 201,255	22%

It is clear with the current tax structure the higher the wage, the higher the marginal tax. Under the FairTax proposal the maximum tax approaches 23%. Theoretically the current tax structure would max out at 33.3%. Using data from IRS Table 3 for 2001, I find the marginal tax rate for those with very high incomes to be 29 to 31%. It is doubtful the very high-income returns are strictly from wages. This means the theoretical tax of 33% I calculated is more likely closer to 30 to 32% of income. This means my analysis overestimates tax revenues by less than 5%. For a back of the envelope check, let us proceed.

Table 3 from the IRS shows that those with incomes exceeding \$200,000 pay a marginal tax of 23%. This is the exact tax rate identified by the FairTax as being revenue neutral.

Looking further at Table 3, I find those making less \$200,000 pay 59% of the tax.

Per the Social Security administration, there were 77.7 million age 18 and under. At \$3,180 rebate per child, this will exclude \$247 Billion from taxation. There were 209 million over age 18. If each gets a \$9,310 rebate, this will exclude another \$1.9 Trillion. Total excluded is \$2.19 Trillion out of \$6.17 Trillion. This leaves \$4 Trillion that could be spent and paying a tax rate of 23%. The maximum revenue that could be generated is \$915 Billion. The Current federal income tax generated \$888 Billion in 2001. This means the 23% tax rate would replace the federal income tax, but no other tax.

To be revenue neutral we would need to raise \$3.2 Trillion from this national sales tax. In addition the Social Security and Medicare programs have legislated “brake” on spending/costs. This “brake” was legislated in 1984 to prohibit Social Security and Medicare from bankrupting the United States

Social Security by law cannot borrow money. It has statutory authority to spend only those funds received from the dedicated social security tax on wages, tax on benefits and funds in the trust fund. Federal Law prohibits transferring general revenues to any trust fund.¹

By law the trust fund cannot be drawn down to zero. The trustees must submit a report promptly to congress detailing benefit cuts or tax increases when in any given year the trust fund is projected to fall below 20% of that given years expenses. Social Security's ability to pay future promised benefits is dependent solely on the ability to raise social security taxes.²

¹ United States Code Title 42, Chapter 7, Subchapter VII, Sec. 911 (a) <http://www4.law.cornell.edu/uscode/42/911.html>

² United States Code Title 42, Chapter 7, Subchapter VII, Sec. 910 (a) <http://www4.law.cornell.edu/uscode/42/910.html>

Combining the current FICA tax with all other taxes will eliminate the automatic “brake” on social security and Medicare costs. This means the current present value \$14 Trillion shortfall in SS-OASI will be automatically paid for using General Revenues. This is a very sizeable burden that is not accounted for. The Medicare program could have an equivalent present value shortfall when the Rx drug plan is included. I see no analysis or explanation as to how these programs will be funded.

Based on my analysis, the FairTax proposal replaces the federal income tax, but no other taxes. It is short by 66% in collecting the federal revenues needed to pay current federal expenditures as well as funding Social Security and Medicare.

Table 2
Total Federal Revenues for 2004

Personal current taxes	\$ 1,049.1
Taxes on corporate income	\$ 258.9
Taxes from the rest of the world	\$ 9.2
Contributions for government social insurance	\$ 822.2
Income receipts on assets - Interest and miscellaneous receipts	\$ 96.6
Income receipts on assets- Dividends	\$ 2.4
Current transfer receipts-From business (net)	\$ 51.5
Current transfer receipts-From persons	\$ 68.6
Current surplus of government enterprises	\$ (3.0)
Total	\$2,355.5

Table 3.--Number of Individual Income Tax Returns, Income, Exemptions and Deductions, Tax, and Average Tax, by Size of Adjusted Gross Income, Tax Year 2001

[All figures are estimates based on samples--money amounts are in thousands of dollars except as indicated]

Size of adjusted gross income	Number of returns	Adjusted gross income or deficit	Personal exemptions and total deductions	Taxable income [3]	Total income tax [4]	Percentage of returns showing no total income tax [4]	Average tax (whole dollars) [4]	Tax as percentage of AGI [4]	marginal tax of all income
	(3)	(6)	(9)	(12)	(5)	(18)	(21)	(24)	
Total	130,255,237	\$ 6,170,603,942	\$ 2,093,990,841	\$ 4,268,506,425	\$ 887,973,968	27.2	9,370	15.2	14%
No adjusted gross income [12]	1,438,187	-70,431,606	7,109,989	--	92,152	99.6	17,469	[5]	
\$1 under \$1,000 [2]	1,837,978	1,055,221	8,351,543	13,321	1,276	93.5	11	12	0%
\$1,000 under \$3,000 [2]	5,370,910	10,773,315	27,951,839	566,382	74,603	87.4	111	5.9	1%
\$3,000 under \$5,000 [2]	5,383,155	21,469,839	40,080,189	697,584	83,183	85.5	106	2.5	0%
\$5,000 under \$7,000	4,954,876	29,752,585	42,742,160	2,395,647	251,677	69.0	164	2.8	1%
\$7,000 under \$9,000	4,975,444	39,738,309	48,603,257	4,430,092	445,506	60.2	225	2.8	1%
\$9,000 under \$11,000	4,903,020	49,014,583	52,224,587	7,951,737	845,943	46.6	323	3.2	2%
\$11,000 under \$13,000	4,666,912	56,048,919	51,532,471	12,118,611	1,400,684	46.4	560	4.7	2%
\$13,000 under \$15,000	4,757,038	66,611,416	53,492,523	17,764,670	2,057,126	42.8	756	5.4	3%
\$15,000 under \$17,000	4,655,768	74,393,134	53,971,666	23,392,154	2,699,816	37.6	929	5.8	4%
\$17,000 under \$19,000	4,688,595	84,303,762	56,218,518	30,149,938	3,431,541	36.3	1,149	6.4	4%
\$19,000 under \$22,000	6,379,736	130,782,945	77,817,748	55,009,880	6,223,990	33.4	1,464	7.1	5%
\$22,000 under \$25,000	5,724,238	134,364,721	71,723,065	63,955,539	7,335,315	26.8	1,751	7.4	5%
\$25,000 under \$30,000	8,563,035	235,155,806	109,869,726	126,824,811	15,551,507	17.6	2,205	8.0	7%
\$30,000 under \$40,000	13,843,639	480,541,398	193,830,419	288,448,814	38,460,994	7.2	2,994	8.6	8%
\$40,000 under \$50,000	10,612,617	475,360,387	171,668,365	305,197,261	44,464,949	2.9	4,314	9.6	9%
\$50,000 under \$75,000	17,559,778	1,074,476,035	343,601,152	731,935,622	114,051,713	1.0	6,558	10.7	11%
\$75,000 under \$100,000	8,903,894	764,115,039	217,971,228	546,501,718	98,746,758	0.3	11,124	13.0	13%
\$100,000 under \$200,000	8,469,199	1,114,318,617	271,710,613	843,411,444	185,263,807	0.1	21,896	16.6	17%
\$200,000 under \$500,000	2,018,372	578,592,628	96,875,261	482,712,954	134,590,608	0.1	66,764	23.3	23%
\$500,000 under \$1,000,000	355,617	240,863,950	29,953,997	211,318,031	67,781,194	0.2	190,893	28.1	28%
\$1,000,000 under \$1,500,000	85,479	103,192,473	11,936,828	91,492,389	30,259,886	0.2	354,659	29.3	29%
\$1,500,000 under \$2,000,000	36,491	62,634,095	7,028,843	55,760,182	18,477,684	0.2	507,211	29.5	30%
\$2,000,000 under \$5,000,000	52,157	154,967,884	16,780,880	138,523,230	45,841,881	0.2	880,863	29.6	30%
\$5,000,000 under \$10,000,000	12,266	83,519,500	9,200,677	74,551,405	24,207,787	0.3	1,978,569	29.0	29%
\$10,000,000 or more	6,836	174,988,989	21,743,397	153,369,759	45,332,386	0.2	6,642,108	27.4	26%

<http://www.irs.gov/pub/irs-soi/01in03at.xls>