



**Taxing Sales Under the
FairTax: What Rate Works?**

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Presented by

Laurence J. Kotlikoff

Boston University

David G. Tuerck

Paul Bachman

Alfonso Sanchez-Penalver

Beacon Hill Institute at Suffolk University



FairTax Act of 2007

- Replaces federal personal income, corporate income, payroll, estate & gift taxes with national retail sales tax plus a highly progressive tax rebate.
- The rate is set at 23% (tax-inclusive basis).



Our Analysis

- Assumptions
 - No “dynamic” effects
 - No compliance effects
 - Estimate for 2007
 - Bush tax cuts are permanent
- Determines
 - What rate works
 - Effects on states
 - Spending cut (if any) needed under 23% rate



Previous Rate Findings

- Bruce Bartlett, *National Review Online*, August 9, 2004.*
 - Cites a report by the Joint Committee on Taxation that put the tax-exclusive rate at 57%.
- William G. Gale, “The National Retail Sales Tax: What Would the Rate Have to Be?” *Tax Notes*, May 16, 2005.**
 - Estimates the tax-exclusive average rate to be 44%.
- President’s Advisory Panel on Tax Reform, *Final Report*, November 2005.***
 - Estimates the tax-exclusive rate to be at least 34%.

* http://www.nationalreview.com/nrof_bartlett/bartlett200408090847.asp

** <http://www.brookings.edu/views/articles/gale/20050516.pdf>

*** <http://www.taxreformpanel.gov/final-report/>



Gale's Criticisms

- Inconsistency re consumer and producer prices.
- Unrealistic to expect state and local purchases to “end up in the tax base.” One reason is that the FairTax “does not reduce the *overall burden* on taxpayers.”
- A tax-inclusive 23% rate would bring about a revenue loss of \$268 billion in 2005 and of almost \$600 billion by 2010.



FairTax Rates and Prices

- Let $t_i = 23\%$.
- Then $t_e = t_i / (1 - t_i) = .23 / (1 - .23) = 30\%$.
- The effect on market prices depends on Fed.
- The FairTax imposes a wedge between producer and market prices.
- Degree of accommodation irrelevant to the determination of the rate.



The K/BHI FairTax Rate: Gross Base

(1) $GB = C + GS + G.$

- C personal consumption expenditures in 2007 = \$9.235 trillion.
- GS state and local spending on goods and services and net investment (less wages and salaries for education) = \$1.093 trillion.
- G taxable federal government spending on goods and services (including reduction of IRS expenditure) = \$916 billion.

(2) $GB = \$9.235 \text{ trillion} + \$1.093 \text{ trillion} + \0.916 trillion
 $= \$11.244 \text{ trillion}.$



Net (Adjusted) Base

(3)
$$NB = GB - B + GN - AC.$$

- B prebate base = \$2.112 trillion.
- GN adjustment for reduced federal interest payments & eliminating income tax on Soc Sec benefits = \$276 billion.
- AC adjustment for administrative credit to retailers and state governments = \$53 billion.

(4)
$$NB = 11.244 \text{ trillion} - \$2.112 \text{ trillion} + \$276 \text{ billion} - \$0.053 \text{ trillion}$$
$$= \$9.355 \text{ trillion}.$$



The K/BHI FairTax Rate

$R1$ revenue from taxes that would be eliminated under the FairTax = \$2.228 trillion.

$$(5) \quad t_i = \frac{R1}{NB}.$$

$$(6) \quad t_i = 2.228 / 9.355 = 23.82\%.$$

$$(7) \quad t_e = .2382 / (1 - .2382) = 31.27\%.$$



Comparison of K/BHI with Current Law

- Revenue requirement: personal & corporate, payroll, estate & gift, self-employment, and ATM taxes = \$2.288 trillion.
- Base
 - Gross Current Taxable Income (personal and corporate)
 - Personal Income Tax Deductions and Exemptions
 - + Estate and Gift Tax Base
 - = \$9.572 trillion – \$2.673 trillion + \$.134 trillion = \$7.033 trillion.
- Tax-Inclusive Rate = $2.288/7.033 = 32.53\%$.
- Tax-Exclusive Rate = $2.288/(7.033 - 2.288) = 48.22\%$.



Comparison of K/BHI and Gale

- The difference between K/BHI and Gale reduces to differences in (1) the base and revenues to be replaced and (2) the more recent data used by K/BHI.

- Differences in base:

“-” Gale’s base is overstated by the indicated amount, and that amount should be subtracted from his base.

“+” Gale’s base is understated by the indicated amount, and that amount should be added to his base.



K/BHI v. Gale Base

- Residential Housing: K/BHI excludes purchases for investment; Gale includes all new purchases of housing.
 - \$118 billion
- Financial Services: K/BHI calculation of home mortgage, non-profit and personal interest payments over the basic interest rate is greater than Gale's.
 - + \$62 billion
- Travel: K/BHI excludes only half of U.S. expenditures on travel abroad. Gale excludes all.
 - + \$54 billion
- Non-Profit Expenditures K/ BHI excludes wages & salaries and includes net capital expenditures. Gale does not adjust.
 - \$10 billion



K/BHI v. Gale Base (cont'd)

- Private Education Expenditures: K/BHI includes half of “Other” NIPA category consisting of various fees paid to business and technical schools and current expenditures by grant-making foundations for education and research. Gale includes all.
+ \$31 billion
- State and Local Govt.: K/BHI excludes education spending on wages & salaries and includes capital spending for education as specified in HR25. Gale excludes both.
+ \$358 billion
- State and Local Sales Taxes: K/BHI estimates and includes only the portion that applies to final sales, per HR25. Gale excludes all sales taxes.
+ \$175 billion



K/BHI v. Gale Base (cont'd)

- Taxed Federal Government Transfers and Interest. Gale excludes taxable Social-Security expenditures and net interest on debt held by the public. K/BHI does not.
+ \$276 billion
- Administrative Credit: K/BHI excludes. Gale does not.
– \$53 billion
- State and Local Government Portion of Tax Base: K/BHI includes; Gale excludes.
+ 1.093 trillion
- Gale's base is understated by \$1.868 trillion.



K/BHI v. Gale Revenue

- “-” Gale’s estimate of required revenue (numerator) is overstated by the indicated amount, and that amount should be subtracted from his estimate.
“+” Gale’s estimate of required revenue (numerator) is understated by the indicated amount, and that amount should be added to his numerator.
- 2001 and 2003 Tax Cuts: K/BHI assumes they are made permanent. Gale does not.
– \$56 billion
- Earned Income and Child Tax Credit: K/BHI removes from revenues. Gale does not.
– \$52 billion
- IRS Savings: K/BHI assume the IRS would be abolished allowing a 70% savings. Gale does not.
– \$8 billion
- CBO 2007 Revenue Estimates: K/BHI uses August 2006, while Gale uses April 2005.
+ \$92 billion
- Gale’s revenues are overstated by \$24 billion.



K/BHI Rate v. Gale Rate

- Correct Rates

$$t_{i,K/BHI} = 23.82\%.$$

$$t_{e,K/BHI} = 31.27\%.$$

- Incorrect Rates Based on Gale's Errors

$$t_{i,Gale} = \frac{R1_{07} + GR_{07}}{NB_{07} - GB_{07}} = \frac{2.228 + .024}{9.355 - 1.868} = 30.08\%.$$

$$t_{e,Gale} = \frac{30.08\%}{1 - 30.08\%} = 43.02\%.$$



K/BHI Rate v. Gale Rate (cont'd)

- Correction of Gale's errors reduces his inclusive and exclusive rates by 6 and 12 percentage points, respectively.
- Remaining differences between the estimates are due to differences in data used (2005 vs. 2003).



No Need to Compensate State and Local Gov't

- State and local governments must pay the FairTax on their purchases.
- This means their real revenues decline.
- But saying this is saying the real burden on their taxpayers falls.
- To maintain their real revenues and the real tax burden on their taxpayers, state and local government need only
 - A) Assess their sales taxes on top of the FairTax.
 - B) Raise their income tax rates to collect the same real revenue.



23% Rate: Required Cut in Non-Social Security Spending

- Total Sources of Revenue under 23% rate = \$3.209 trillion.
- Total “Required” Revenue = \$3.285 trillion.
- Difference = \$76 billion or 0.55% of 2007 GDP.
- Non-Social Security Spending – \$2.782 trillion.
- \$76 billion/\$2.782 trillion = 2.73% (3.47% under current law).
- Relative to 2000 Spending Rates, the federal government has raised spending by \$205 billion – far greater than \$76 billion.



Compliance

- According to Brent Moulton, Director of NIPA, “1.3%-2.0% of PCE represents adjustments of economic activities not reported to IRS.”
- Not reported PCE includes unreported PCE and misreported PCE.
- Concern about evasion relates primarily to unreported PCE.
- But assume that 2% of PCE escapes the FairTax, the revised rates are

- $t_{i,K/BHI} = 24.30\%$

- $t_{i,K/BHI} = 32.09\%$



Enforcing the FairTax

- 100,000 IRS employees can be re-employed both over- and under-cover to enforce this single tax
- FairTax enlists buyers to help with enforcement
- New technology can be used – wireless tax-paying and receipt machine



Additional Revenue Sources

- FairTax would expand economy and PCE tax base by, in our estimate, at least 10 percent.
- Likely transition effects
 - Transitory Inventory Credit costs approximately \$184 billion in FairTax Revenue.
 - Revaluation of medium and long-term Federal debt generates \$770 billion capital gain.



Conclusion

On balance, we believe the real revenue-neutral FairTax rate is 23.0% or lower.



For Further Information:

Beacon Hill Institute for
Public Policy Research
Suffolk University
8 Ashburton Place
Boston, MA 02108

<http://www.beaconhill.org>

617-573-8750

617-994-4279

E-mail: dtuerck@beaconhill.org

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