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SUBJECT: Analysis of Alternative Consumption Tax Structures for Georgia
Prepared for the Senate Fair Tax Study Committee

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This analysis has been prepared at the request of the Georgia Senate Research Office, in support of the Senate Fair Tax Study Committee's consideration of consumption-based taxation as an alternative to current state income taxes. This is not an analysis of a particular bill or proposed "Fair Tax" structure, but rather one of a range of options that differ in two key structural elements:

- The definition of the consumption tax base; and
- The structure of any "prebate" that might be included to preserve a degree of progressivity in tax burdens.

Key assumptions of this analysis are as follows:

- Any new consumption tax would replace
  - all current state corporate and personal income taxes, and
  - the current state sales and use tax.
- Existing local sales and use taxes would be unaffected.
- Motor fuels taxes, including the 1 percent sales tax on motor fuels that goes to the general fund, would be unaffected.
- All other state and local taxes and fees, including but not limited to the various excise taxes, property taxes, and the recently implemented motor vehicle title fee would be unaffected.
- The overall revenue effect will be neutral on a static basis.

The analysis proceeds in two steps, first by estimating the consumption tax rates necessary for revenue neutrality under alternative assumptions about the tax base and any prebate to be paid, and second by estimating the effects of each alternative on representative households of different compositions at the poverty level of income.

TAX BASE ALTERNATIVES

Two alternatives are considered here, though they represent the bounds of a range from the existing, relatively narrow sales and use tax base to a very broad intended to include all final goods consumption by Georgia households.

The broad base alternative is based on the recently proposed South Carolina Fair Tax Act (SC House Bill 3116), which proposes to tax all new goods and services purchases in the state "once and only once," with the exception of goods and services purchased by the federal government. In particular,

- Used goods and intangible property *are not* taxed.
- Goods and services purchased for resale, or as inputs to, or in the production of, new goods and services *are not* taxed.
- Education and training expenses (tuition, books, and class-related fees) *are not* taxed.
- New goods and services that are produced in the state but are "exported" and sold outside of the state *are no*t taxed.
- New goods and services "imported" from out of state *are* taxed.
- Sales of new homes (net of land value) *are* taxed.
- Goods and services purchased by state and local government *are* taxed, except for purchases by "government enterprises," which are government entities that provide or resell goods and services to other government entities for payment.
- Services in the form of labor purchased by i) governments (excluding government enterprises and the federal government) or ii) households employing domestic servants *are* taxed, with the tax payable by such taxable employer on the total compensation paid.

The one difference between the broad base alternative analyzed here and the South Carolina model is the exclusion of motor vehicles. As noted above, we have assumed that the motor vehicle title fee structure implemented earlier this year would be left in place.

The narrow base alternative is based on the proposed Georgia House Bill 688 (2013-2014 Regular Session), which proposes to repeal all state income taxes and offset the revenue loss by raising the state sales and use tax rate, with no change to the current tax base.

PREBATE ALTERNATIVES

A so-called prebate is a payment made by the state to each and every eligible household in the state to offset the tax liability for some base level of spending. As most often proposed, prebate amounts are based on federal poverty level income guidelines, published annually by the Department of Health and Human Services (HHS), which income levels vary according to the number of persons in the household. The effect of prebate payments is to make the net tax liability of a household at that base level of income and spending effectively zero, and to preserve some degree of progressivity in state tax burdens. A broad-based consumption tax without a prebate is generally considered to be a regressive tax because, on average, otherwise comparable households at higher income levels spend a smaller portion of their total income on taxable consumption than do lower income ones.

The proposed Georgia HB 688 does not provide for a prebate of any amount, so the analysis includes this as one alternative, applied to the case of the narrow, existing tax base.

The two alternatives that provide for prebates are also included, as follows:

- For the narrow base alternative, a prebate paid at the new consumption tax rate on a fixed portion of poverty level income (PLI) for the given household size. The fixed portion is based on the share of spending by poverty level households, on average, for goods and services included in the narrow base definition. Currently taxable consumption by poverty level households is estimated to be approximately 36 percent, based on Consumer Expenditure Survey (CES) data from the Bureau of Labor Statistics.

- For the broad base alternative, a prebate paid at the new consumption tax rate applied to PLI for the given household size.

As in the proposed South Carolina act, the PLI base for calculation of prebates includes an adjustment referred to in SC as the "marriage penalty elimination amount." The PLI base is adjusted for married couple households by adding an amount equal to the difference between the PLI for a one person household and the amount added for each additional person. Prebates under either alternative are assumed to be payable to all legal resident households in the state on a monthly basis, for each month of residency. As the analysis that follows is based on fiscal year 2012 revenues, calendar 2011 U.S. Census Department estimates of Georgia households and 2011 HHS poverty level income guidelines are used in calculating the base for prebate payments.

The following table summarizes:

"Prebate" Base Estimate	FY 2012
2011 Poverty Level Income:[1]	
1st Person	$10,890
Each Additional Person	$3,820
Marriage Adjustment[2]	$7,070
2011 GA Average Household Size[3]	2.74
2011 GA Households[3]	3,494,542
2011 Married GA Households	1,667,698
Avg PLI Base before Marriage Adj.[4]	$17,537
Avg PLI Base with Marriage Adj.	$20,911
Gross (Broad) Prebate Base ($ mil)[5]	*$73,074*
Narrow Base Adjustment[6]	36%
Narrow Prebate Base ($ mil)	*$26,307*

1. HHS; 2. 1st person amt. less additional person amt.; 3. Census; 4. Poverty level income for a 2.74 person household; 5. Average base times the number of households; 6. Estimated percent of poverty level household consumption that is taxable under the narrow base definition.

PERIOD OF ANALYSIS AND DETERMINATION OF THE TAX RATE

For each tax base and prebate alternative, the tax rate is chosen to generate net revenues, after any prebate payments, just equal to the revenues from the current state income and state sales and use taxes.

The analysis is based on actual income and sales tax revenues for fiscal year 2012, as reported by the Department of Revenue, adjusted on a static basis for the removal of motor vehicle sales from the sales tax base effective this year. Reported revenues and the motor vehicle adjustment are as follows:

Revenue to Replace ($ millions)	FY 2012
State Sales & Use Tax[1]	$5,330
Motor vehicle sales taxes[2]	(421)
Motor fuels 1% sales tax[2]	(191)
Adj. State Sales & Use Tax	4,718
Personal Income Tax[1]	8,143
Corporate Income Tax[1]	590
Total Revenue to Replace	*$13,451*

1. Georgia Department of Revenue, Annual Statistical Report. 2. Fiscal Research Center estimate based on DOR data.

ALTERNATIVE 1. NARROW (EXISTING) BASE, NO PREBATE

Calculations for the first alternative are straightforward, with the tax base estimated from the adjusted FY2012 state sales and use tax revenue (above) and the current state tax rate of 4 percent. The consumption tax rate required for overall revenue neutrality is then simply the amount of revenue to be replaced divided by the implied tax base.

Alt. 1 Tax Base and Rate ($ millions)	FY 2012
Adj. State Sales & Use Tax Rev.	$4,718
Implied Base @ 4% Tax Rate	$117,962
Revenue Neutral Tax Rate[1]	*11.40%*

1. Revenue to replace / implied base.

ALTERNATIVE 2. NARROW (EXISTING) BASE WITH PREBATE

The tax base for the second alternative is the same as estimated for the first, but the rate calculation is more complicated because it determines both the gross tax revenues and the prebate payments, and is again set to the level required for revenue neutrality.

Alt. 2 Tax/Prebate Base and Rate ($ millions)	FY 2012
Tax Base (from Alt. 1)	$117,962
Narrow Prebate Base	$26,307
Revenue Neutral Tax Rate	*14.68%*
Gross Tax Revenues	$17,312
Less: Prebate Payments	(3,861)
Net Tax Revenues	$13,451

The average household would receive a monthly prebate payment of about $92 ($1,105 annually), on a FY2012 pro forma basis.

ALTERNATIVE 3. BROAD BASE WITH PREBATE

That tax base for the third alternative—the broad base—cannot be estimated from FY2012 revenues as was done for the narrow base. Instead, it is estimated from Bureau of Economic Analysis (BEA) data on Georgia (and national) economic activity. Essentially, the broad base includes all personal consumption expenditures (PCE) except for education, imputed rent on owner-occupied housing,[1] and motor vehicle purchases. In addition, new fixed investment in owner-occupied homes, and total state and local government expenditures are also included.

BEA reports state level gross domestic product (GDP) only on an industry output basis, so PCE for the state is estimated based on national averages of PCE/GDP, or about 69 percent for 2011-2012. Education expenditures for tuition, books, and fees were about 1.6 percent of national GDP over the same period, while imputed rent was about 7.9 percent. Motor vehicle purchases included in national PCE over the period was about 3 percent of GDP. Net of these items, the taxable PCE share is assumed to be about 56.5 percent of Georgia GDP.

Fixed investment in new owner-occupied housing in 2011-2012 is estimated to be about 2.2 percent of GDP nationally.[2] These figures are also not available at subnational levels, so the estimated national GDP share is assumed for Georgia.

BEA state-level reporting does include state and local government shares of GDP on an output basis; for Georgia, this accounted for about 8.5 percent of state GDP in 2011, the latest year available. However, state and local governments are only taxed on their goods and services purchases, and their compensation of employees under the South Carolina model of the broad base. Nationally, goods and services inputs and labor accounted for about 90 percent of state and local government output over the last two years, so taxable Georgia government spending is assumed to be about 7.7 percent.

Combined, the taxable portions of PCE, new residential investment, and government spending are assumed to be 66.4 percent of Georgia GDP. To estimate Georgia GDP on an FY2012 basis, the average of calendar years 2011 and 2012 is used, or approximately $425,504 million. The broad base alternative tax base for FY2012 is thus estimated to be $282,534 million. The resulting revenue neutral tax and prebate rate, and revenue estimates are as follows:

Alt. 3 Tax/Prebate Base and Rate ($ millions)	FY 2012
Tax Base	$282,534
Broad Prebate Base	$73,074
Revenue Neutral Tax Rate	*6.42%*
Gross Tax Revenues	$18,144
Less: Prebate Payments	(4,693)
Net Tax Revenues	$13,451

The average household would receive a monthly prebate payment under this alternative of about $112 ($1,343 annually), on a FY2012 pro forma basis.

NET TAX BURDEN EFFECTS OF BASE AND RATE ALTERNATIVES ON LOW INCOME HOUSEHOLDS

To estimate the effects of the three alternatives above on households at or near the poverty level, CES data are once again used to estimate consumption spending patterns for households at that one level of income. Estimated tax burdens under current law are then compared to those under each alternative. Four household types are included: single, married with no children, married with two children, and single parent (head of household) with two children.

The income levels used for each are the 2011 poverty level income for that household size, rounded up to the nearest thousand dollars. Those levels, again, are $10,890 for the first person in the household plus $3,820 for each additional eligible person. The taxable consumption base under current law and the first two alternatives is assumed to be 36 percent of income, based on CES data as explained above. Under the broad base alternative, taxable consumption is assumed to be above gross income. The CES data show that total consumption spending for low income households exceeds gross income, on average, by a considerable margin as many receive transfer payments from government, receive gifts or other assistance from family, or draw down savings. Results are presented in the table below.

As the table shows, under the first alternative—the current sales tax base with no prebate—the result is a tax increase for all four household types, ranging from $63 to $264. With a prebate and the higher necessary tax rate on the current base, the result is a substantial tax cut for all types as the prebate offsets substantially all the consumption taxes paid. The third alternative falls in between, with single person households at the poverty level essentially breaking even compared to current taxes and the other types realizing cuts of between $112 for the single parent household and $483 for the couple with two children.

LOW INCOME HOUSEHOLDS' NET TAX CHANGE

		Single		Single Parent, Two Children		Married, No Children		Married, Two Children
Gross Income		*$11,000*		*$19,000*		*$22,000*		*$30,000*
Sales & Use Tax:								
Current Taxable Consumption (% of Inc)	(36%)	3,960	(36%)	6,840	(36%)	7,920	(36%)	10,800
Current State Sales & Use Tax @ 4%		$158		$274		$317		$432
Income Tax:								
Personal and Dependent Exemptions		3,000		8,400		6,000		11,400
Standard Deduction		2,300		2,300		3,000		3,000
Current Law Taxable Income		5,700		8,300		13,000		15,600
Current Law Income Tax, Net of LIC		$159		$242		$523		$679
Total Sales & Use and Income Taxes		*$317*		*$516*		*$840*		*$1,111*
Alt 1: Gross Tax @ Current Base, 11.4%		$451		$780		$903		$1,231
Change in Total Tax		*$134*		*$264*		*$63*		*$120*
Alt 2: Gross Tax @ Current Base, 14.68%		$581		$1,004		$1,163		$1,585
Prebate		$576		$979		$1,151		$1,555
Net Tax		$6		$25		$12		$31
Change in Total Tax		*-$312*		*-$491*		*-$828*		*-$1,080*
Alt 3: Broad Tax Base (% of Inc):	(140%)	$15,400	(125%)	$23,750	(125%)	$27,500	(125%)	$37,500
Gross Tax @ 6.42%		$989		$1,525		$1,766		$2,408
Prebate		$659		$1,121		$1,318		$1,780
Net Tax		$330		$404		$448		$628
Change in Total Tax		*$12*		*-$112*		*-$392*		*-$483*

CONCLUSIONS

The analysis presented here illustrates the range of options available for a shift to a consumption base of taxation from the current combination of income and a narrow consumption base. Once again, the taxes assumed to be eliminated include the current state sales and use tax along with the state personal and corporate income taxes.

The options differ in the inclusion of a prebate payment and in the breadth of the tax base, from the current narrow base to a broad base modeled after the proposed South Carolina Fair Tax. The results of the analysis show what the tax rates would need to be under each scenario to result in revenue neutrality for FY2012 on a static basis—rates for each alternative as follows:

- Alt. 1: 11.4 percent with the current base and no prebate;
- Alt. 2: 14.7 percent with the current base and a prebate at the same rate on 36 percent of marriage-adjusted poverty level income; and
- Alt. 3: 6.4 percent with the broad base and a prebate at the same rate on 100 percent of marriage-adjusted poverty level income.

Further analysis is needed to understand the effects on taxpayers farther above the poverty level of income, but results for those at the poverty level show that only the first alternative negatively impacts those taxpayers.

Other considerations for further analysis include the possibility of dynamic effects from a shift to consumption taxation with a broad base and low rates, and the possibility of savings to government and to taxpayers in administration and compliance under a consumption tax. In addition, if such a system were to be implemented, it is possible that local governments may decide to piggyback on the new system, with a broader base, and are able to lower their sales tax rates from current levels as a result. The Fiscal Research Center is prepared to assist in these or other analyses as the committee desires.

Finally, it is worth noting that many of the same potential benefits of base-broadening and lowering of rates, including benefits from tax simplification, may also be obtainable from revisions to income taxes. We have written about various options for simplification, broadening the base, and lowering rates on income taxes in the past and can assist further there as well.

NOTES:

1. The imputed rental value of owner-occupied housing is included in PCE as a component of housing expenditures, along with actual rent on rental housing.

2. BEA reports residential fixed investment without distinguishing owner-occupied from rental homes. We assume for simplicity that new single family and manufactured homes, which together account for 87 percent of new homes in 2011-2012 nationally, are to be owner-occupied. 87 percent of the values of home improvements and ownership transfer costs, which are also included in BEA figures for residential fixed investment (and not in PCE), are also assumed related to owner-occupied housing.

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