

Corporate Tax Fate May Hinge on Modeling Omission

By Patrick Driessen

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By omitting corporate income, traditional distribution models overstate the U.S. corporate tax rate and overall tax progressivity. The prevailing capital gains realization approach could be replaced by an inclusive corporate income method that would correctly show corporate equity owners as more lightly taxed than capital gains realization models indicate. That replacement would accord with how the individual tax is modeled for distribution as well as with results from corporate tax studies conducted outside the distribution context. Augmenting corporate income in distribution models would also enable proper reflection of proposals, such as corporate integration, and provide a better perspective on how much corporate tax is borne by labor.

The dictum that each side of a debate should not be entitled to its own facts is not being observed in the corporate tax discussion. Advocates of lower corporate income tax rates focus on the relatively high corporate statutory rate, while proponents of the status quo or higher corporate effective tax rates (ETRs) point to studies and SEC filings showing that the U.S. federal corporate ETR applicable to worldwide income tends to be in the 10 percent to 20 percent range.¹

But the tax rates that any serious reformer has no choice but to consider are the rates faced by taxpay-

ers reflected in the Congressional Budget Office, Joint Committee on Taxation, and the Treasury Office of Tax Analysis distribution tables.² While not a formal legislative procedural requirement, in practice, a major tax bill can't be enacted without addressing distribution consequences. Current distribution tables used for tax policy and broader studies of inequality and mobility include embedded federal corporate ETRs of 40 percent or more, which is higher than most ETR studies find and greater than the U.S. statutory tax rate.³

Here's a gatekeeping test for the utility of reading the rest of this article: The CBO just issued a tax distribution study of 2011, including a projection that for 2013 the fiscal cliff deal would cause the average federal ETR (including income and other taxes) for the top 1 percent of households, arrayed by income, to rise to 33 percent.⁴ In framing federal taxes paid, the numerator of that ETR, the CBO allocates the corporate income tax paid by Berkshire Hathaway Inc. (BH) to shareholders like Warren Buffett, while someone like Michael Bloomberg is deemed to pay individual taxes on income he receives from the partnership Bloomberg LP. For the ETR denominator, the only BH income Buffett is assumed to receive is a gross-up amount equal to the corporate tax he is deemed to be burdened by, while Michael Bloomberg's denominator includes his full share of the income flowing through from the Bloomberg partnership.⁵ Moreover, major tax

²Explanations of the approaches of those groups are available at <http://www.cbo.gov>, <http://www.jct.gov> (particularly JCT, "Modeling the Distribution of Taxes on Business Income," JCX-14-13 (Oct. 16, 2013)), and <http://www.treasury.gov>; the Tax Policy Center also describes its distributions available at <http://www.taxpolicycenter.org>. While there are differences among the models (e.g., income classifier choices, whether the estate and gift tax is distributed), for the two major issues in this article, omitted corporate income and the shifting of corporate tax to labor, the models are similar.

³For more detail on that and other issues raised here, see Patrick Driessen, "Vanishing Corporate Income and Government Spending in Distribution Models," SSRN Working Paper 2506899 (Nov. 18, 2014).

⁴CBO, "The Distribution of Household Income and Federal Taxes, 2011" (Nov. 2014).

⁵The CBO also assumes that 25 percent of corporate taxes are shifted to labor, which is not reflected in this example but wouldn't change its gist. Further, Berkshire Hathaway Inc. generally pays no dividends, and to keep the example simple it is assumed that Buffett realized little or no capital gain on the

(Footnote continued on next page.)

¹Low ETRs reported for financial purposes are often caused by deferred foreign earnings and economic cyclical effects or the presence of other corporate tax expenditures. For recent calculations, see Andrew B. Lyon, "Another Look at Corporate Effective Tax Rates, 2004-10," *Tax Notes*, Oct. 21, 2013, p. 313; and Government Accountability Office, "Corporate Income Tax: Effective Tax Rates Can Differ Significantly From the Statutory Rate," GAO-13-520 (May 30, 2013). For policy purposes, calculations that exclude companies with net losses result in lower ETRs than ETRs calculated by including loss companies. Because we are concerned here with general ETRs and not refundability, the focus is on ETRs using positive-income-only companies.

expenditures that are presumed to help labor are included in the distribution analysis as grossed-up income for households, for example, Bloomberg, Buffett, and Buffett's secretary will all be considered to be receiving income in the form of employer-provided healthcare, but there are no similar income gross-ups for corporate tax expenditures imputed to corporate shareholders.

If you're satisfied with the progressivity results and tax policy and income distribution implications of a CBO (as well as other institutions and academics) approach that:

1. portrays Buffett paying something close to a 100 percent corporate tax rate on his BH income (because generally the only BH corporate item that goes into the ETR calculation for Buffett is the BH corporate tax itself that shows up in both the numerator and denominator) while the model has Bloomberg paying something like a 40 percent tax rate on his passthrough income from his ownership share of his eponymous partnership; and
2. treats noncorporate tax expenditures like employer-paid healthcare as household income in the ETR's denominator but excludes corporate tax expenditures (including accelerated depreciation and many forms of deferral) from income in the ETR denominator;

then read no more.

But if you find the CBO (as well as the JCT and Office of Tax Analysis) approach puzzling, this article summarizes how omitted corporate income in traditional distribution models misinforms corporate and other tax policies.

A. Corporate Income Omission Begets Distortion

Distribution models generally use gross income (adjusted gross income or other) received by individuals as their core. That foundation is supplemented depending on the interests of modelers (for example, fringe benefits, including health insurance, have been of long-standing interest) and data availability in attempts to capture comprehensive or a select form of income. In contrast to that gross income approach augmented by imputations to reflect tax expenditures that forms the model's framework on the individual nonbusiness side (call this "labor" for lack of a better term), corporate income is included in the model only stingily.

The only components of net corporate income included in the traditional model are dividends,

sale of BH stock in 2013. Those assumptions are relaxed below for the discussion of the broader set of taxpayers and companies.

capital gains from the sales by individuals of corporate equities, and the corporate income tax itself. That traditional distribution approach is termed the capital gains realization (CGR) method in this article because it relies on capital gains realizations (as well as the more obvious corporate dividends received by individuals) to reflect corporate income (setting aside the income gross-up for the corporate tax itself). But the CGR approach is flawed: Realized capital gains are particularly volatile because of business cycles, changes in tax policy (for example, capital gain or ordinary income tax rate changes), and trends like decorporatization. Perhaps most troubling is that because of step-up in basis and other options for avoiding capital gains taxes, capital gains realized by shareholders on the sale of corporate equities will generally fall well below net corporate income that is subjected to the corporate income tax. Thus, capital gains realizations are a lousy proxy for corporate income because the realizations are too volatile and too low.

It's well known that distribution models, to the extent that they are anchored by current tax payments as they are in the legislative context, are not very good at reflecting the value of deferral (and for that matter, tax expenditure analysis has the same problem). Because the core tax benefit associated with the corporate tax is deferral in a variety of forms, the essence of the corporate tax is particularly difficult to capture in distribution models. But the traditional CGR approach of treating the corporate tax like the employer payroll tax, that is, just adding a gross-up of the corporate tax to individuals' incomes (based on some ownership algorithm) and then employing realized capital gains (and dividends) already in the model to reflect the remainder of corporate income (while suggesting that potential double counting or complicated foreign and tax-exempt corporate ownership prevents further refinement), is inadequate. There are too many important tax policy (including inequality and mobility) questions for which the CGR distribution model either isn't able to give a sensible result (for example, for the integration of corporate and individual income taxes) or is misleading (for example, for measurement of baseline progressivity).⁶

⁶For criticism of the CGR model, see Martin Feldstein, "Piketty's Numbers Don't Add Up," *The Wall Street Journal*, May 15, 2014, at A15; Alan Reynolds, "Why Piketty's Wealth Data Are Worthless," *The Wall Street Journal*, July 10, 2014, at A11; Phil Gramm and Michael Solon, "How to Distort Income Inequality," *The Wall Street Journal*, Nov. 11, 2014; Greg Mankiw, "The Growth of Pass-Through Entities," *Greg Mankiw's Blog: Random Observations for Students of Economics*, Mar. 28, 2014; Philip Armour et al., "Levels and Trends in United States Income and Its Distribution: A Crosswalk From Market Income Towards a
(Footnote continued on next page.)

Corporate Income Components in Distribution Models ^a			
Component	Data Source	Model Treatment (2013 billions of dollars, in parentheses)	
		Traditional Capital Gains Realization Model	Inclusive Corporate Income Model
Corporate dividends received by individuals and realized capital gains on sales of corporate equities	Individual income tax returns	Included (300)	Included (300)
Corporate income tax ^b	Corporate tax filings	Included (208)	Included (208)
Corporate post-tax income net of dividend distribution and realized capital gains on sales of corporate equities (<i>i.e.</i> , net retained earnings)	Corporate tax filings	Excluded	Included ^c [(1,000 × 0.892)-300-208=384]
Deferred earnings of controlled foreign corporations	Corporate tax filings and financial reports	Excluded	Included ^c (0.892 × 325=290)
Net book-tax differences other than deferred CFC earnings	Corporate tax filings and financial reports	Generally excluded ^d	Included ^e (0.892 × 350=312)
Accrual not reflected in other items	Generally not available	Generally excluded ^f	Excluded
Addendum: Embedded corporate tax rate		41% (208/508)	14% [208/(508+384+290+312)]
<p><i>Source:</i> Author calculations or assumptions, or drawn from JCT, JCX-14-13. See Driessen, "Vanishing Corporate Income and Government Spending in Distribution Models," SSRN Working Paper 2506899 (Nov. 18, 2014), for detail.</p> <p>^aAll components are annual flows.</p> <p>^bClassifier income is grossed up by corporate tax. To account for foreign shareholders, 10.8 percent, excluded per JCT, JCX-14-13.</p> <p>^cWith adjustment for foreign shareholders.</p> <p>^dSome book-tax wedge issues (<i>e.g.</i>, depreciation) included as reflected on individual alternative minimum tax Form 6251.</p> <p>^eExtrapolate for closely held and/or small corporations as needed; \$350 billion used to approximate the net cumulative effect of these differences.</p> <p>^fTPC include some pension accruals in the income classifier.</p>			

To match the way individual taxes and noncorporate income are treated in distribution models, the corporate income imputation should aspire to income comprehensiveness (thus approaching the financial report ETRs) and not the narrow CGR imputation of corporate income, which doesn't even match the net income concept used to compute corporate tax liability. The above table summarizes the differences between the traditional CGR

model and an alternative approach, referred to as the inclusive corporate income method, which uses tax and financial filings to augment the corporate income imputed for distributions.

The more inclusive corporate income approach reflects all corporate net income subject to corporate tax, adjusted to prevent double counting of dividends and pertinent capital gains, plus assorted tax expenditures, including the deferral of U.S. tax on foreign earnings as well as other book-tax differences. That approach, which is conservative for preventing double counting and the magnitude of the book-tax differential,⁷ decreases the embedded corporate ETR for 2013 from 41 percent in the CGR model to 14 percent. That transposition of the corporate ETR has consequences for overall progressivity, especially in the higher-income classes. For example, for taxpayers with incomes exceeding \$200,000, the use of a more inclusive corporate income method changes their overall ETR (including all major federal taxes except the estate and gift

Comprehensive Haig-Simons Income Approach," NBER Working Paper 19110 (June 2013); and Richard V. Burkhauser and Jeff Larrimore, "The One Percent," *J. of Econ. Persp.*, 28:1, Correspondence, 245 (2014). In response to criticisms of the CGR model, see Facundo Alvaredo et al., "The Top 1 Percent in International and Historical Perspective," *J. of Econ. Persp.*, 27:3, 3 (2013). Those critics of CGR models are only partly right because they ignore that realized capital gains and dividend flows in CGR models reflect some of the decorporatization of the last few decades (in CGR models, decorporatization results in more income directly flowing through to noncorporate business owners, but also results in lower corporate dividend payments to individuals and capital gain realizations by individuals on the sale of corporate equities). The fundamental issue those criticisms hint at is that the CGR model is inadequate in its depiction of corporate income to begin with. However, addressing that inadequacy with something like the inclusive corporate income approach advocated in this paper will not necessarily support the policy views on inequality and immobility of those criticizing CGR models regarding the decorporatization phenomenon.

⁷It is assumed that all capital gains realized from the sale by individuals of corporate stock overlaps with corporate net income, which may be a strong assumption. Moreover, the book-tax wedge, even without including deferred foreign earnings, is likely to be greater than \$350 billion.

tax) from 28.7 percent to 24.9 percent,⁸ and the effect for the very top (the 1 or 0.1 percent of top taxpayers) is likely to be even greater.⁹

B. Policy Implications

A more inclusive corporate income approach would properly reflect the distribution effects of broad tax restructuring proposals (for example, corporate integration) and trends (for example, decorporatization). At the National Tax Association conference last month, there was a panel on corporate and business tax reform proposals by Alan J. Auerbach and Edward D. Kleinbard and one by Eric Toder and Alan Viard. The traditional distribution models would flub those proposals because those CGR models would show unintended results (such as a swelling of classifier income) related to the pushdown of corporate income to individuals and the shifting of taxes on capital within models that have a sparse imputation of corporate income to begin with.

Omitted corporate income interacts with the “it” topic in corporate tax distribution: How much corporate tax is borne by labor? Both a more inclusive corporate income approach and the assumption of shifting of corporate taxes to labor reduce progressivity in distribution models, although the former has larger effects on progressivity than the latter.¹⁰ Shifting of the corporate tax to labor doesn’t affect overall progressivity as much as it pits high-labor-compensation workers against high-income investors.¹¹ Perhaps the attention-absorbing topical focus on whether capital owners or workers bear the corporate tax burden has distracted from the proper modeling of omitted corporate income.

⁸Driessen, *supra* note 3, at 19, Table 5.

⁹For example, the effect of using a more inclusive corporate income approach is likely to more than counter the tax rate effect of the 2012 fiscal cliff legislation.

¹⁰Because labor compensation is progressively distributed, the assumption of substantial shifting of the corporate tax to labor means that repealing or reducing the corporate tax still is likely to be almost as regressive as corporate tax repeal would be if corporate taxes were presumed to burden only corporate shareholders (including perhaps creditors holding corporate debt). More shifting of the corporate tax to labor is not, on progressivity grounds, a reason for abolishing the corporate tax, any more than the shifting of employer payroll taxes to labor is a reason to kill the employer payroll tax (although that shifting encourages the lifting of the cap on wages subject to payroll taxes to the extent that Social Security is more of a transfer program than a retirement insurance plan).

¹¹It’s a different story for the shifting of noncorporate business tax to labor. Because noncorporate business ownership is more concentrated at higher-income levels than labor compensation or corporate ownership, shifting noncorporate business tax to labor is more regressive for a given \$1 of shifting than the shifting of corporate tax to labor. See JCT, JCX-14-13, and Driessen, *supra* note 3, for more on that comparison.

But the biggest consequence of a substantial shifting of the corporate tax to labor may be that the assumption precludes using the corporate tax as a vehicle to achieve the ersatz progressivity (ersatz because of omitted corporate income) of the traditional CGR model. If, after accounting for omitted corporate income, there is an appetite to achieve, say, the 33 percent rate that the CBO with its CGR model projects for the top 1 percent in 2013,¹² some other means (for example, corporate integration or tax rates on capital gains) would be needed to achieve progressivity if it is assumed that the corporate tax is shifted to labor.¹³ On the other hand, if it is assumed that little of the corporate tax is shifted to labor, raising the effective corporate tax rate might be a feasible means of achieving that 33 percent overall federal tax rate for the top 1 percent in a distribution model with more inclusive corporate income.

A recent example of the potential policy implications of a more inclusive corporate income approach can be found in the 2014 tax plan offered by House Ways and Means Committee Chair David Camp, R-Mich. Camp felt compelled to raise both individual statutory capital gains tax rates and the ETR on capital gains (the latter rises because of the plan’s repeal of the state and local income tax deduction).¹⁴ Camp’s proposal of those increases that are anathema to Republicans presumably was necessary to hold harmless the progressivity of present law. However, if progressivity had been measured using an inclusive corporate income method that properly reflected a much lower corporate ETR, Camp may have chosen to raise the corporate ETR (perhaps by changing his plan to apply territorial taxation or targeting more corporate tax expenditures the way then-Sen. Max Baucus’s 2013 discussion draft would, or by going with a 27 percent or 28 percent corporate statutory rate rather than 25 percent) rather than raising individual income ETRs on dividends and capital gains.

C. Arguments Against More Income Inclusion

There are several criticisms of the alternative inclusive corporate income approach to distribution. Some of those arguments favor the traditional CGR approach, while others support a different alternative to the CGR approach.

¹²See CBO, *supra* note 4.

¹³There may not be enough labor income at the top of the income structure to allow for much of a progressivity change, or it may be too difficult, politically or mechanically, to increase taxes on the labor income in the top income class without also causing unacceptable tax increases in other income classes.

¹⁴See Driessen, “Camp Channels Reagan in Taxation of Capital Gains,” *Tax Notes*, Oct. 27, 2014, p. 437.

1. No accrual. One criticism suggests that because the inclusive corporate income method involves more accrual or accrual-like imputations than the CGR approach, it violates some kind of distribution model rule.

Response: No matter how we define accrual, CGR models already include sophisticated notions of tax burden (with imputations of the employer payroll tax, excise taxes, and the corporate tax itself) and accrual-like concepts (for example, the imputations of employer-paid health insurance to employees and the income inclusion of the insurance value of Medicare). Further, in general, it's difficult to see why adopting more accrual-like concepts or deviating from a strict realization approach is wrong as long as there is data and the adoption is done consistently and is needed (as it is with the corporate income tax) to capture the character of a particular tax in distribution models.

2. Full accrual. Another criticism suggests that a full accrual method using corporate equity values and other means is preferable to the inclusive corporate income method offered in this article.

Response: In principle, full accrual may be the superior replacement for the CGR approach. But because of omitted data, conceptual inconsistency when it comes to treatment of human capital and leisure, and the deviation of the full accrual method from actual tax bases, the full accrual method is not ready for use.¹⁵ In contrast, the inclusive corporate income method outlined in this article employs available tax and accounting data that align with tax expenditure and tax base patterns in a way that would better inform tax policy, inequality, and mobility considerations.

3. What about government transfers? That criticism implies that the change in progressivity from including more corporate income would be offset if more government transfers (payments and in-kind) were included in distribution models.

Response: Even if we knew that those two changes together would leave us, progressivity-wise, about where we are with the traditional CGR approach, that's not a sufficient reason for staying with the CGR status quo (for example, there may be differences over time even if the two changes happen to perfectly offset each other in, say, 2013). More importantly, there is no reason to stop at considering government transfer efforts: We should also consider all government spending (as well as deficit effects), and the CBO's analysis for the year 2006 suggests that the distribution effect of government

¹⁵See Armour et al., *supra* note 6, for full accrual example.

nontransfer spending is not very progressive,¹⁶ so we should be wary of selective inclusion of transfer payments in distribution models.¹⁷

4. The CGR philosophy. The argument defends the CGR approach by suggesting that the CGR method adheres to a particular philosophy and answers policy questions.

Response: The CGR approach may approximate a cash perspective better than a more inclusive corporate income approach (or, for that matter, a full accrual method). But the CGR method is internally inconsistent on the corporate and noncorporate sides: Many noncash income inclusions are made in the traditional CGR model to labor income, including fringe benefits. Moreover, if one of the defining characteristics of a tax, like the corporate tax, is something like deferral that isn't captured well in a cash approach, you'll never be able to properly model that type of tax in a cash model and therefore the corporate tax should be left out of a cash-focused distribution model to begin with. Whether or not it's based on a philosophy, it's difficult to find a tax policy question for which the inclusive corporate income approach doesn't give at least as good an answer as the CGR approach, and there are plenty of questions, particularly those dealing with the entirety of the corporate tax itself (for example, integration, decorporatization, corporatization, and territorial taxation), for which the CGR model yields incorrect results.¹⁸ Choosing the framework for a distribution model may involve philosophy, but a choice of philosophy need not be any more subjective than concerns about consistency, robustness, and reliability.

D. Disappointing Results From Model Flexibility

The renewed interest in inequality and mobility should be exciting regardless of what role you feel government policy has played, or should play, in those areas. Interest in distribution has extended tax research and principles beyond the typical narrow tax policy focus. For example, many distribution modelers outside the public finance circle follow the treatment of employer payroll taxes or employer-provided health insurance pioneered in tax distribution models.

¹⁶See CBO, "The Distribution of Federal Spending and Taxes in 2006," Publication 4314 (Nov. 2013); see also Driessen, *supra* note 3, for a detailed discussion of this issue.

¹⁷If someone wants to roll nonfederal government spending and taxes into the model, that's fine, but for federal legislative purposes, the federal-government-only result will always be a focus.

¹⁸At the very least, all approaches should quantify something as important as the embedded corporate ETR.

But in some ways, the evolution of tax distribution models has been disappointing. Compared with some of the other empirical tax analyses performed for legislative and other purposes, distribution analysis is not as constrained as, say, revenue estimating or tax expenditure analysis.¹⁹ But the flexibility in distribution analysis to experiment with income classifiers and tax choices, including selective addition of government spending components, does not seem to have paid off in clarity or probity. The CGR models don't get the corporate tax and, more specifically, corporate income right; the absence of full government spending and deficits in distribution models makes them "open" models that by themselves favor tax reductions and deficit spending, leaving readers on their own to consider government spending and deficit effects. The result of experimentation seems to be a classifier war across institutions and researchers that befuddles readers while it masks models that are perhaps too similar in many dimensions.

Despite that gloom, there may be hope for omitted corporate income in distribution models. The calculation of embedded corporate ETRs as detailed here, plus the recent debate about CGR model effects on inequality results,²⁰ have raised awareness. One path is to consider a national income approach as an alternative to the CGR method of modeling corporate income.²¹ Alternatively, proponents of a full accrual method are improving their early prototype (particularly by filling in missing data). So combined with the inclusive corporate income approach outlined above and the availability of rich IRS data from forms 5471 and M-3 and financial filings, there are three promising directions for avoiding the pitfalls of the CGR approach.

In the meantime, those considering corporate tax reform would do well to adhere to the modified fact-entitlement dictum: You're entitled to your own opinion, but you're not entitled to look exclusively at one tax rate, and you should consider the embedded corporate ETR in a distribution model.

¹⁹Revenue estimating is constrained by convention and a set of rules agreed to by the CBO and Office of Management and Budget, while tax expenditures were defined by the Congressional Budget Act of 1974; see JCT, "Estimates of Federal Tax Expenditures for Fiscal Years 2014-2018," JCX-97-14, at 2 (Aug. 8, 2014) (explaining why the JCT is required to calculate tax expenditures from an income instead of a consumption perspective).

²⁰See *supra* note 6.

²¹Professor Emmanuel Saez is exploring a national income-based approach to capital income.

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