

**Statement of
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**Submitted to the House Committee on Ways and Means
for the Record of the Hearing of February 8, 2012:
"Interaction of Tax and Financial Accounting on Tax Reform"**

I am currently President and Executive Director of the Institute for Research on the Economics of Taxation. I served as Deputy Assistant Secretary for Economic Policy in the Treasury Department for eight years during the Reagan Administration.

The Committee is seeking to determine how financial accounting practices might affect its efforts to reform the income tax, encourage investment, and promote economic growth and job creation.

The short answer is that the effect of tax policy changes on business balance sheets and income statements should not be the determining factor in the design of a sound, pro-growth tax reform. Accounting concepts can distort the impact of proposed tax changes. Annual and quarterly reports based on GAAP can misrepresent gains as losses. They can confuse business executives and policy makers as to which policy changes are most effective at encouraging investment and hiring.

It is best to think of the financial accounting presentation as a public relations communication between the business and the public, including its shareholders. This has, or should have, nothing to do with policy formulation, because it is of no relevance to economic growth and job creation.

Instead, policy work should be based on the actual effect of tax policy on a business's after-tax cash flow from new investment. This is the approach taken by businesses to make their investment decisions, and is the real driver of investment, productivity, and wages. If you want businesses to expand their investment and hiring, that is the button you must push. That should be your concern as you develop a pro-growth tax reform.

How businesses make investment plans

Business schools throughout the world teach students the optimal means of determining if a proposed investment will add value to the business (and to the economy) or subtract from it. The most common method requires the student to determine the net present value of the investment. The calculation compares the present value of the revenue expected each year from an investment, after taxes, with the present value of the costs incurred each year in association with the investment, using a discount rate appropriate for the riskiness of the investment and the alternative investment opportunities of the business. If the present value is equal to or greater than zero, the investment is viable. If several investments are viable, they may be ranked from the highest to the lowest in present value to determine which should be done first.

A related approach is to determine the internal rate of return that equates projected revenues and costs. If this expected rate of return matches or exceeds the minimum "hurdle rate" that the business expects to be able to earn on other projects, also known as its "cost of capital" or "service price," then the project is viable. If the two methods – present discounted value and internal rate of return – employ the same discount rate, and the rate is unvarying over the time span, they yield equal results. If the discount rate is apt to vary over the time frame, the present value approach is more accurate.

Finance texts stress that, in both methods, costs are to be expensed in the year they happen. They are not to be treated as if they were spread over the life of the asset, as with depreciation. Depreciation rules are used only to calculate each year's tax liability, not to value the cost of the investment. Thus, neither method has anything to do with accounting presentations, which pretend that only a portion of an investment expense is current, and the rest is spread over future years. Business students and executives in the real world understand the time value of money, while the tax system and the accounting rules that employ depreciation ignore it.

Surveys show that businesses generally employ these present value or internal rate of return valuation methods to formulate their investment plans. That is, businesses are being run by people with business school training in the right way to measure such things.¹ Consequently, a tax change that raises the discounted present value of a new investment, at the margin, will expand investment and the amount of capital the firm creates and employs. By contrast, a tax change that has no impact on the calculated value of additional investment will not spur added capital formation. Tax rebates or retroactive tax cuts on investment already in place would raise a business's cash, and be gratefully accepted, but they would not cause the firm to increase future investment.

The same business finance courses instruct budding stock analysts and fund managers in how to evaluate the worth of a company or its stock. The value of a company is the present value of its projected cash flow, using the same discounting method as when valuing an investment project. That includes ignoring depreciation and expensing costs in the year they occur.

¹ See John Graham and Campbell Harvey, "The Theory and Practice of Corporate Finance: Evidence from the Field", *Journal of Financial Economics*, Vol. 60 (2001).

Expensing and corporate tax rate reduction

The tax system is biased against capital intensive industries, distorting the methods of production and the mix of output. Depreciating assets over time for tax purposes understates costs. The capital consumption allowances lose value due to the time value of money and inflation. (See Table 1.) The understatement of costs is larger for long lived assets, and is made worse by inflation. The understatement of costs is matched by an overstatement of business income, and a higher effective tax rate on such industries. This depresses the present value of a proposed investment as calculated by business school methods and investors throughout the business community.

Asset lives:		3 Yrs	5 Yrs	7 Yrs	10 Yrs	15 Yrs	20 Yrs	27.5 Yrs	39 Yrs
Present value of first-year write-off of \$1 of investment:		\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00
Present value of current law write-off of \$1 if inflation rate is:	0%	\$0.96	\$0.94	\$0.91	\$0.88	\$0.80	\$0.74	\$0.65	\$0.55
	3%	\$0.94	\$0.89	\$0.85	\$0.79	\$0.67	\$0.59	\$0.47	\$0.37
	5%	\$0.92	\$0.86	\$0.81	\$0.74	\$0.60	\$0.52	\$0.39	\$0.30
Assumes a 3.5 percent real discount rate, 3-20 year assets placed in service in first quarter of the year, 27.5 - 39 year assets placed in service in January.									

One of the goals of tax reform should be to move toward immediate expensing of capital outlays, at least for equipment. For structures, the Committee should consider a "neutral cost recovery system" in which the delayed portion of the write-off is augmented annually by a real increase of about 3 percent plus inflation, to create the same present value as expensing but without any major near-term cost to the federal budget. These changes would encourage a more efficient use of resources and more efficient mix of output. The artificially beaten-down manufacturing sector and other capital intensive sectors would gradually recover and expand relative to the service sector. The policy would also be an efficient way to encourage investment from the point of view of the federal budget. It would concentrate the tax reduction on new investment, and lower the cost of investment more per dollar of static revenue loss than other types of tax relief, such as a corporate tax rate cut.

Some businesses would prefer a cut in the corporate tax rate, if a choice must be made. They are generally firms that earn their returns on non-depreciable assets, or short-lived assets, or intangible assets. Lowering the corporate tax rate would be good for growth for such industries, and for capital intensive sectors too, but would not redress the bias against the capital intensive industries. The corporate tax rate should be reduced in addition to, not instead of, expansion and extension of expensing.

Consider a business producing a standard sort of product through the use of machinery in a highly competitive industry in which extraordinary profits have been competed away. The present value of the earnings on its capital is just equal to or a very small bit higher than the cost of the capital it employs. In that situation, immediate expensing of its investment will roughly equal its earnings, and its net profit and net tax payment over time will be roughly zero, which is the correct result. If, instead, we retain depreciation, then matching the appropriate tax collection by means of reducing the tax rate would require a zero tax rate on the overstated income.

In contrast, a business which relies mainly on intellectual capital or intangibles, with little depreciable capital, might prefer a corporate tax rate reduction. Its income is correctly measured, and all it cares about is the tax rate. Also, businesses with extraordinary profits (economic profits or quasi-rents) have returns in excess of costs even with expensing of capital outlays. Such profits ought to be yielding taxes to the government. They arise from patents, superior R&D, brand loyalty, better service or management, etc. The costs incurred in earning such extra income are generally expensed as wages and salaries of researchers, managers, and people with the human capital to make the business unusually successful, and the returns should be taxable. Such businesses might prefer a reduction in the corporate tax rate to expensing. There is nothing wrong with lowering the corporate tax rate to make such firms more globally competitive, but that should be done in addition to correcting the bias against capital intensive businesses.

Trading expensing for rate cuts: bad for GDP and jobs

Several tax reform proposals have urged the lengthening of asset lives to pay in static terms for a reduction in the corporate tax rate. Do not trade away longer asset lives for a lower corporate tax rate. That would exacerbate the tax bias against capital intensive industries, especially those with long-lived assets. It would probably result in a higher cost of capital (higher "service price" or hurdle rate), a smaller capital stock, lower wages, and less employment.

Adopting longer asset lives would depress the economy and fail to yield any of the estimated "static" revenue to pay for the rate reduction. Indeed, it would reduce revenue. Such a trade is both unnecessary and unworkable. Making expensing permanent and lowering the corporate tax rate have little near term cost and, longer term, recover their cost by raising revenue from other taxes as they expand the economy. Both are good for the federal budget over time. However, expensing has less initial cost and a more powerful revenue reflow under current tax rates and the mix of assets that make up the capital stock.

Table 2 displays the effect of altering expensing and the corporate tax rate.

Table 2
EFFECT OF EXPENSING FOR EQUIPMENT AND
CUTTING THE CORPORATE TAX RATE ON GDP, CAPITAL STOCK,
LABOR INCOME, SERVICE PRICE, AND FEDERAL REVENUE
(Effects and revenue estimates are modeled at 2008 income levels.)

Tax options	1*	2*	3*
GDP	2.71%	2.33%	2.26%
Private sector GDP	2.81%	2.41%	2.34%
Capital stock	7.64%	6.54%	6.34%
Wages	2.29%	1.97%	1.91%
Hours worked	0.51%	0.44%	0.42%
Million jobs	0.71	0.61	0.59
Service price			
Corporate	-5.56%	-5.58%	-5.58%
Non-corporate	-1.94%	0.17%	0.17%
Total	-4.49%	-3.87%	-3.87%
Static revenue (\$ billions)	-34.2	-20.2	-51.6
Dynamic revenue (\$ billions) **	48.7	51.3	19.1
% revenue regained from economic change **	243%	353%	137%

* Tax options:
1: 100% expensing of equipment for all businesses
2: 100% expensing of equipment for corporate sector only
3: cut corporate tax rate to 25%

** Tax rate decrease raises GDP to the point of gaining revenue.

- Case 1: The current provision for 100% expensing of equipment would raise GDP by 2.71% over time, if made permanent. Its static revenue cost of \$34 billion would be converted to a dynamic revenue gain of \$49 billion, a 243% reflow of revenue (at 2008 income levels). It focuses the tax reduction on newly acquired capital equipment, and is of particular interest to new or rapidly growing businesses. Eventually, all capital is replaced, so even established businesses gain as their stock of equipment rolls over.
- Case 2: The corporate sector's share of the expensing provision would boost GDP by 2.33%, or about 86% of the total expensing provision. Its static cost is \$20 billion. Growth returns about \$71 billion, or 353% of the static cost, for a net revenue gain of \$51 billion.
- Case 3: A reduction in the corporate tax rate to 25% would generate a 2.26% rise in GDP, about the same as the corporate expensing provision. It would have a higher static cost, about \$52 billion, generate a similar \$71 billion dollar reflow, or 137% of the static cost, and net the government a gain of \$19 billion. The higher static cost is due to the application of the lower corporate tax rate to returns on existing capital as well as new capital. This approach favors established or slow growing businesses, or those with more investment in structures than equipment.

Giving up corporate expensing in exchange for a lower corporate tax rate in the range shown would yield roughly offsetting GDP effects, but cost more revenue on both a static and dynamic basis. It might please established businesses in the short run, but would not be as focused on rapid growth. The trade should not be necessary, because neither provision costs revenue after growth effects are considered. If Congress insists on relying solely on static revenue estimates, a lower short term revenue impact might be had by phasing in the corporate rate cut. If expensing must be altered, it could be replaced by a "neutral cost recovery system" in which the deferred portions of the depreciation write-off are augmented each year by an appropriate interest rate, such as inflation plus the long term real return on capital of about 3%. The present value of the deductible business cost for the investment would be preserved at 100 cents on the dollar.

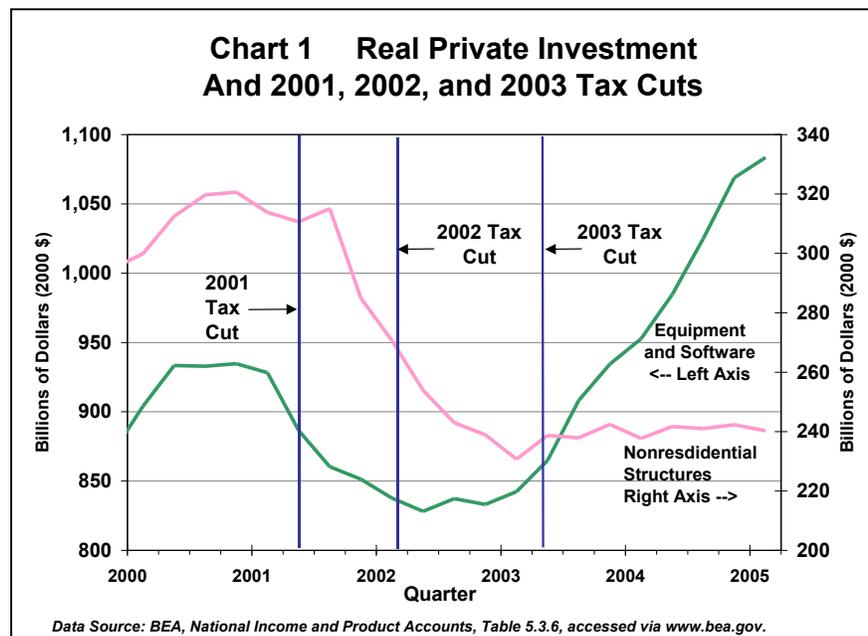
Historical evidence of the need to cut the cost of capital

Accelerated depreciation, corporate tax rate reductions, investment tax credits, and lower tax rates on capital gains and dividends act to reduce the cost of capital at the margin and spur growth. By contrast, taxes that are not at the margin, or not much at the margin, such as the 1975 Ford tax rebate, the 2001 rebate-like refund reflecting the 10% tax bracket, and the more recent stimulus rebates, make little difference to production and employment.

The last recession and the Bush tax cuts. Chart 1 tracks the effect of the 2001 and 2003 tax cuts on GDP. There was a very slow "jobless recovery" from the 2000-2001 recession in the

first two years after the 2001 tax reduction. The individual marginal rate cuts were phased in so slowly that there was little initial incentive effect. It was not until the 2003 tax cut that there were significant incentives for saving and investment. In that year, the capital gains and dividend tax rates were reduced to 15%, lowering the double taxation of corporate income; expensing, introduced in 2002 at 30% of equipment spending, was boosted to 50% of equipment outlays

for corporate and non-corporate businesses; and the rest of the individual marginal tax rate cuts were brought forward. Estate tax relief helped too. After 2003, investment in equipment rose rapidly, and job growth accelerated. More recently, the expensing provision was increased to 100% for equipment as a counter-cyclical tool. It would be more effective if made permanent, which is also good tax policy.



The Tax Reform Act of 1986 (TRA86). TRA86 raised the net tax at the margin on capital and reduced it for labor. We estimate that, on balance, it slightly reduced potential output by about 0.6 percent. The business provisions alone would have reduced GDP by 2.3 percent, while the lower individual tax rates would have increased GDP by 1.5 percent.² The bill would have been a modest positive for the economy if Congress had followed the Treasury reform plan as submitted, but it did not. Treasury had recommended indexation of depreciation allowances for inflation. That would have helped to reduce slightly the required service price or "hurdle rate of return" that capital must earn in order to be a feasible investment, in spite of the longer assets lives and repeal of the investment tax credit that were part of the bill. Congress dropped the indexing provision, and the hurdle rate went up, discouraging investment.

TRA86 cut the corporate rate 12 points from 46% to 34%, but offset about half that reduction by eliminating provisions that were already mitigating some of the corporate tax at the margin (loophole and preference closings). TRA86 cut the top individual tax rates from 50% to 28%, with a 33% rate bubble to recapture the benefits of rates below 28%. These cuts lowered the top tax rate on dividends to 28% or 33%. However, TRA86 also raised the top tax rates on capital gains from 20% to 28% or 33%. TRA86 raised taxes on capital in other ways. It eliminated the investment tax credit. It switched from ACRS (accelerated cost recovery system) to MACRS (modified ACRS), with longer asset lives, especially for long lived structures, which went from 31.5 years to 39 years. Passive loss rules were tightened on real estate, and upper income taxpayers were limited in their access to IRAs. TRA86 is not a good model for a pro-growth fundamental tax reform. It moved away from a neutral tax base toward a more-inclusive and more anti-investment version of the broad-based income tax.

The 1981 Reagan tax cuts and the 1962 and 1964 Kennedy cuts. President Reagan's Economic Recovery Tax Act of 1981 cut asset lives, increased the ITC, and lowered tax rates on capital gains and dividends along with individual marginal income tax rates. It was enacted too late, and phased in too gradually, to avert the 1981-82 recession, but produced an unusually strong recovery in 1982-1986. Had it remained in full effect, we estimate that it would have increase long term GDP and labor income by over 12 percent. Subsequent tax increases in 1982, 1983, and 1984 would have held the GDP gains to about 10 percent. Taken together, the Acts reduced the service price of capital by nearly 13 percent.³

President Kennedy cut asset lives by switching from Bulletin F lives to Guidelines and implemented an investment tax credit (ITC) of up to 7 percent in 1962. In 1964 and 1965, his income tax plan reduced the corporate tax rate from 52 percent to 48 percent, and cut marginal individual income tax rates across the board. About two-thirds of the reduction in the service price of capital and about 55 percent of the economic gains came from the investment incentives and corporate rate cut. Growth was strong following the Kennedy cuts. They reduced the

² Stephen J. Entin, "The Reagan Era Tax Policies," *IRET Policy Bulletin*, No. 102, November 11, 2011, available at <http://iret.org/pub/BLTN-102.PDF>.

³ *Ibid.*

service price of capital by nearly 11 percent. We estimate that they would have raised long term GDP by nearly 8 percent had they not been interrupted by the Johnson surtax.⁴

Proposals to avoid

Wyden-Coats and Bowles-Simpson. The Wyden-Coats bill (formerly Wyden-Gregg) and the Bowles-Simpson Commission emulate TRA86. They would cut tax rates on businesses in exchange for higher tax rates on capital gains and dividends, and much slower tax depreciation of plant, equipment, and structures. They cut taxes on labor income where the growth benefits are small, and on balance raise taxes at the margin on capital income where the adverse effects are large. They are heavier on the penalties and lighter on the rate reductions than TRA86, and would do even more damage to GDP and employment. For example, we estimate that Wyden-Coats would reduce GDP by 4.32%. A small estimated revenue increase of \$33 billion would turn into a revenue loss of \$105 billion.⁵

Wyden-Coats would revert to asset lives of the old Guidelines system from 1962, but make them even worse with straight line depreciation instead of double declining balance. The bill would raise the tax on capital gains and dividends from a maximum of 15% to 22.75%. Expensing would end for large firms doing most of the nation's investment. Businesses would not be allowed a deduction for the inflation portion of their interest costs, but lenders would be taxed on the full amount of interest received. The bill would increase the standard deduction to 2.5 times its current level. The top individual rate would remain at 35%. The graduated corporate tax rates with a top rate of 35% would be replaced by a flat 24% rate. The depreciation changes and the higher tax rates on capital gains and dividends would make the bill a strong negative for the economy, in spite of the rate cuts and enlarged standard deduction.

How accounting rules can distort appearances.

Consider a business that is carrying unused tax credits on its books. Perhaps these credits are investment tax credits that have remained unused because the business was not profitable at the time the investment was made. The unused credits are an asset on its balance sheet, according to the accounting rules, because they will lower future tax liabilities when the company becomes profitable. Suppose Congress were to eliminate the corporate income tax going forward, without making such unused credits refundable. The accountant would report the loss of an asset, marking down the company's value on the balance sheet. In reality, the company's future income tax liability is reduced more by the permanent elimination of the tax than it would have been by the credits. The company's value, the discounted after-tax profit stream, is higher, not lower, in spite of the loss of the credits. The accounting convention turns a genuine gain into an apparent loss. However, the amount of future taxes saved by the elimination of the tax is not counted under accounting rules, because the future profits and taxes that would have been owed are uncertain. Trained stock analysts, mutual fund and pension managers, and thoughtful investors are not fooled by the accounting misdirection.

⁴ Stephen J. Entin, "Economic Consequences Of The Tax Policies Of The Kennedy And Johnson Administrations," *IRET Policy Bulletin*, No. 99, September 6, 2011, available at <http://iret.org/pub/BLTN-99.PDF>.

⁵ Stephen J. Entin and Michael Schuyler, "Economic Consequences Of The Wyden-Coats Tax," *IRET Policy Bulletin*, No. 100, October 28, 2011, available at <http://iret.org/pub/BLTN-100.PDF>.

Suppose the credits in the example are unused foreign tax credits. Suppose the United States were to reduce the U.S. corporate tax rate below that of nearly all other nations or were to move to a territorial tax system to enhance the competitiveness of U.S.-based companies producing here or abroad. In either case, the existing foreign tax credits would be of no use (unless the legislation made them refundable in the transition), because there would be no future U.S. tax owed on the foreign income. The accounting rules would declare that the business had suffered a loss of an asset. In reality, its future after-tax income stream would have been increased, as would the present value of the business, neither of which is reported on the balance sheet by the accountants. The balance sheet is not telling the whole story. Knowledgeable observers are not fooled.

Could a business care more about accounting than real profits?

Would business executives ever wish to give up a permanent improvement in after-tax income and the value of the company to protect a rosy picture being painted by the current accounting rules? Perhaps, if they are trying to hide something from their shareholders, and if they assume that the shareholders are not capable of seeing through the ruse. I recall a real world example.

The late 1970s was a time of high inflation. Depreciation allowances are not adjusted for inflation, and the cost of plant, equipment, and buildings allowed for tax purposes greatly understated the true cost of these investments in that period. The result was an overstatement of business income, sometimes even turning real losses into apparent accounting profits and taxable income. The consequence was a rise in the effective tax rate on the real earnings of businesses. The effect of the inflation was greatest for capital intensive industries with long-lived assets, such as steel mills, power plants, dams, and transmission lines, commercial and residential rental structures, etc. The lower real after-tax returns on investment were discouraging investment and depressing productivity and real wages.

Dr. Charles Schultze was the Chairman of President Carter's Council of Economic Advisors. He was on a panel with several business leaders, including CEOs of a steel firm and an electric utility. The topic of the discussion was the state of the economy and policies to fight stagflation. I was on the staff of the Joint Economic Committee at the time, and was in the audience. During the question and answer period, I asked Dr. Schultze if indexing depreciation allowances for inflation might more nearly reflect the replacement cost of the capital, offset some of the disincentive to invest caused by the inflation, and help restore real growth and wage gains. He replied that the idea was sound economics, but that the Administration would be concerned about the near term effect on the federal deficit, and not support the policy at that time.

The utility executive interjected that he did not want replacement cost accounting for depreciation in any event. The steel executive asked, "Why ever not?" The utility executive said, "Because if my shareholders ever found out that we are actually losing money instead of making money, they would have my head!" The steel executive retorted, "Really? What has

happened to your share price in the last two years?" [It had dropped sharply as the inflation took hold.] The utility executive turned red in the face and the audience laughed.

The point is that shareholders, especially professional stock analysts and mutual fund and pension managers, are not fooled by false pictures painted by narrow accounting rules. Professional analysts are also trained in business school to ignore artificial concepts like depreciation and to count costs when incurred, not when they are allowed for tax purposes. They are taught to value a whole company according to the discounted present value of its expected cash flow (in much the same way as they are taught to evaluate the merits of a particular investment project within a company).

Nothing is to be gained by giving up a real improvement in the production climate to keep a fictitious asset or income number in the annual reports to the shareholders. Similarly, the economic benefits or costs of a tax policy change cannot be judged by the effect on the accounting statements. The policy changes can only be judged by their effect on the cost of creating and employing capital. If one wishes to encourage capital formation, higher labor productivity, wages, and employment, look to the cost of capital. That is what business decision makers do when they practice what they are taught in business school. That is what business leaders ought to be telling you when they testify. If they do not do so, they are playing games with numbers instead of growing their businesses.

Conclusion

Expensing is a more efficient way to spur investment than a corporate rate reduction, but both are worth doing.

Static scoring aside, doing both is affordable because both increase GDP and bring in revenue from other taxes.

A truly pro-growth policy change with little or no adverse impact on the federal budget should include all of the following features:

- Make permanent the 100% expensing of equipment.
- Make permanent the 15% tax rate on long term capital gains and dividends.
- Gradually lower the corporate tax rate by ten points or more while phasing out the manufacturers credit.
- Introduce neutral cost recovery for structures (raising outyear write-offs by an appropriate interest rate, perhaps 3 percent plus inflation).

Accounting issues, and complaints by firms with little or no depreciable capital that expensing is of no concern, should be ignored in developing a pro-growth tax reform plan.