

Business Tax Reform and Economic Growth

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It is great to come back to NYU Law and especially fitting to be discussing business tax reform with all of you. Nearly a decade ago I co-taught the tax colloquium with Dan Shaviro. I am not sure how much anyone learned from me but I learned a huge amount from the NYU community and Dan in particular. And that learning continued in my close partnership with David Kamin for several years in the White House—and I thank him for inviting me today.

The focus of my remarks is on the role of business tax reform in promoting economic growth. To motivate this topic, I will start with a brief discussion of economic growth before getting to business tax reform specifically.

At the outset, I should note that the types of reforms I will be discussing will take some time to pass and implement. But some of the problems we face—the most notable being the wave of corporate inversions—are not waiting for us to resolve the bigger issues that are my focus today. That is why the President has been urging Congress to move ahead with anti-inversion legislation. And that is why today the Treasury Department announced a set of administrative actions that will, in the words of Secretary Lew, “make substantial progress in constraining the creative techniques used to avoid U.S. taxes, both in terms of meaningfully reducing the economic benefits of inversions after the fact, and when possible, stopping them altogether.” Secretary Lew also noted that “Treasury will continue to review a broad range of authorities for further anti-inversion measures as part of our continued work to close loopholes that allow some taxpayers to avoid paying their fair share.”

Economic Recovery and Economic Growth

The economy can grow, create jobs and raise wages in two distinct ways. The first is to use more of the economy’s full potential. In times when the economy is operating with underutilized resources, often signaled by a high unemployment rate, expanding *aggregate demand* can help create a virtuous circle of people being put back to work using the economy’s idle productive capacity. This in turn generates labor earnings and profits, which in turn fuel more consumption and investment that can put more people and factories back to work. The result is a temporary period of elevated economic growth as the unemployment rate comes down.

The second distinct way to grow the economy is by expanding its potential, or what economists call *aggregate supply*. We can do this with a combination of more and better trained workers, an improved allocation of capital and labor, increased investment, and technological innovation.

Both of these sources of growth are generally a concern for public policy, but their relative importance shifts over time depending on the position in the business cycle.

The Cyclical Recovery

When the unemployment rate rose to 10.0 percent in October 2009, together with a decline in the labor force participation rate and a dramatic increase in people working part-time for economic reasons, that was as clear an example of an economy operating below its full potential as we have seen since the Great Depression.

The United States has enjoyed a sustained economic recovery that has exceeded most contemporaneous and historical financial crisis benchmarks. Up until a year ago the unemployment rate was falling by an average of 0.7 percentage point per year, roughly tracking the more recent historical experiences and well exceeding the norm following a financial crisis. In recent months the pace of the decline in the unemployment rate has increased to over 1 percentage point per year. This has been one of the biggest economic surprises in recent years. Indeed, as recently as last year economic forecasters were projecting that the unemployment rate would not fall to 6.1 percent until 2017. While there is still much more to do, we have gotten there roughly three years ahead of expectations.

This rapid drop in the unemployment rate has resulted from a noticeable strengthening in the pace of job growth from 194,000 jobs per month in 2013 to 215,000 jobs per month so far in 2014. Not only is the unemployment rate falling more rapidly, but the participation rate has been stable since last fall, all of the jobs added in the last year have been full time, and real wage growth has picked up somewhat. Overall, this represents the culmination of 54 straight months of private-sector job growth—the longest streak on record.

At the same time, we still have a number of challenges in labor markets. Many of these challenges are due to both the continuation of longer-term trends, and the lingering consequences of the severity of the recession. For instance, we continue to see a high rate of long-term unemployment, a high rate of people working part-time for economic reasons, a shortfall in labor force participation, and a decline in labor market fluidity.

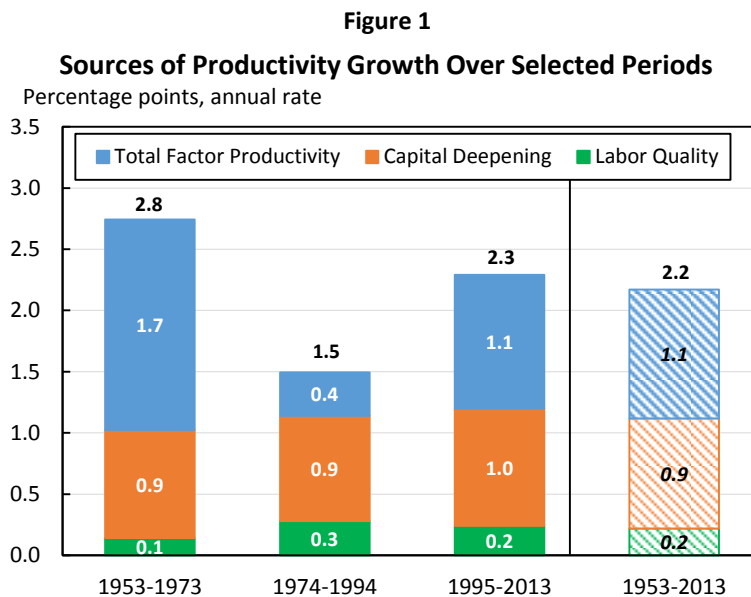
But today, measures of the unemployment rate that include discouraged workers and other marginally attached workers (i.e., people who are no longer actively searching for a job but would take one if it was available) are about 80 percent of the way back to pre-recession levels. We clearly have further to go, but we are rapidly approaching the point where increasing growth will not come from further rapid declines in labor underutilization but instead will require us to look to the second source of growth I mentioned earlier—expanding our economy's potential. This means more of an emphasis on aggregate supply.

Longer-term Growth

To orient the discussion of aggregate supply, I want to provide some perspective on the economy over a longer time horizon. We can decompose growth into two sources: increases in labor and increases in the output per unit of labor, otherwise known as productivity.

A major determinant of the growth of labor is exogenous demographic forces like the movement of the baby boom generation through its prime age years and into retirement. This demographic trend is having a substantial impact on the economy's potential. While there are policies that can help boost participation, including immigration reform, or steps to increase labor force participation among mothers and lower-skilled men, we know that longer-term trends in participation will also be shaped by workers' choices around retirement and schooling. These factors, however, are outside the scope of today's discussion.

Instead, I will focus on the amount of output we get per hour of labor, or labor productivity. This itself depends on three factors. First, it depends on the quality of labor, which is enhanced through education and training. Second, it depends on the amount of capital workers have at their disposal, which reflects the quantity of investment in plant and equipment. Third, it depends on what economists call total factor productivity (TFP). TFP is what allows us to combine a given amount of capital and labor into a greater amount of output and reflects many different aspects of the production process. Increasing TFP may be due to technological progress, organizational innovations, improvements in the allocation of capital and labor, and enhanced returns to scale due, for example, to the opening of new markets. Figure 1 uses the Bureau of Labor Statistics' (BLS) breakdown of these factors to show in broad terms how productivity has evolved in the postwar years, breaking those developments into three broad periods.

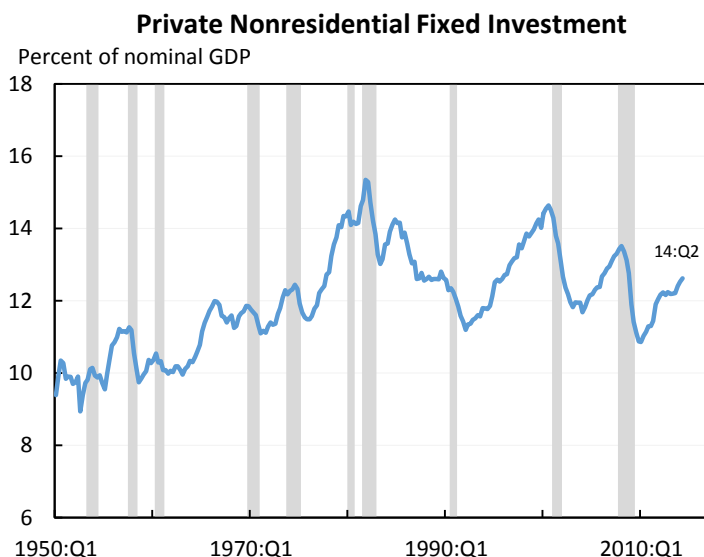


This figure contains three important lessons which will inform my discussion of business tax reform:

- 1. We have seen a tremendous increase in productivity growth.** The typical worker in 2013 could produce nearly four times as much as his or her counterpart sixty years ago, the result of 2.2 percent annual productivity growth compounded over time. Half of this increase is due to higher TFP, about 40 percent is due to the worker today having more equipment at his or her disposal, and about 10 percent is due to increased education and training.
- 2. Productivity growth varied substantially over this period.** Productivity growth was especially rapid in the post-war decades, in part due to factors like the commercialization of World War II innovations, as well as tremendous public investments like the interstate highway system. The oil shocks and other economic uncertainty in the 1970s were part of a broader slowdown in productivity growth that lasted for two decades. Finally, since 1995, productivity growth has picked up again—although not all the way back to its pre-war highs.
- 3. Almost the entire variation in labor productivity over longer periods is due to variations in TFP.** Capital deepening made almost the same exact contributions to labor productivity growth in the three periods I show, while education and labor composition only varied slightly. The real differences are in TFP—which is not only large in absolute value but also has varied by a factor of four. In fact, the importance of TFP is not only a domestic issue, but a global one as well. Differences in TFP explain the majority of differences in incomes across countries.

One reason that changes in the simple quantity of investment have not been a major driver of changes in growth rates is simply that there has not been much of a pattern to the dollar value of investment in the postwar period, with it generally remaining between 10 and 14 percent of GDP, as shown in Figure 2, although its average was somewhat lower in the decades before 1980 and somewhat higher in the decades since. It may seem counter-intuitive to say that the *quantity* of investment has not been a major driver of productivity growth, but one of the themes of my talk today is that it is actually the *quality* of investment—as embodied in total factor productivity—that is a much more important element of long-run economic growth. And this lesson is, I believe, especially critical, in the aftermath of a period where we saw an over-allocation of investment resources to homebuilding.

Figure 2



Looking forward, there is a raging debate over the future of U.S. economic growth based on the observation that the 1995-2013 period I showed in Figure 1 has not been uniform—exhibiting more rapid productivity growth through around 2005 and then slower productivity growth since then. The pessimistic interpretation from Robert Gordon, John Fernald and Bob Hall is that this is a harbinger of slower productivity growth to come. An alternative perspective from Ben Bernanke, Erik Brynjolfsson and Joel Mokyr is that there is no reason to believe that we will run out of ideas anytime soon, and that the measurement of recent productivity trends is affected by the recession and shortcomings of capturing the quality of high-tech products and services. Although some of the debate over our economic future hinges on different assumptions about the quantity of labor, particularly the trajectory for the participation rate, most of the debate is about TFP. Virtually none of the debate is about the quantity of investment we can expect in the future, which makes sense given it has not been a major source of variations in the growth rate of productivity when examined over a broader time period.

How Business Tax Reform Can Boost Economic Growth

Regardless of who is right about the future of U.S. growth—and personally I find myself in the middle although leaning toward the optimistic side of the debate—we can and should be seeking to do better. And business tax reform can play a role in helping us to do better.

I will first review arguments for reform based on the quantity of investment before turning to my main focus today: the quality of investment and its importance for TFP.

The Cost of Capital and the Quantity of Investment in the Long Run

The traditional growth argument for business tax reform is that it has the potential to lower the cost of capital, thus increasing investment and boosting output. (I should note, for those of you who were taught the distinction between an increase in the *level* of output and an increase in the

growth rate of output, I will be deliberately blurring them in my remarks today because for all intents and purposes an increase in the level of output spread over a ten or twenty year period looks an awful lot like an increase in the growth rate.)

Most of the analyses that attempt to quantify the growth impacts of business tax reform use, for example, infinite horizon or overlapping generations models, which essentially translate a cost of capital into a level of investment which in turn affects the level of output. These traditional models tend to find meaningful but relatively modest impacts of revenue-neutral business tax reform on output.

To a first approximation revenue-neutral business tax reform cannot, by definition, radically reduce the overall taxation of capital, and thus we would not expect it to have a large impact on the *quantity* of investment. There are a number of important caveats to this point, some of which I will address further below, but I wanted to put this broad point out there at the outset.

Moreover, while revenue-losing business tax reform could result in larger reductions in the cost of capital, it would also boost deficits, lowering net national savings and thus offsetting any other incentives it would create for greater investment. In fact, many dynamic models show that the cost of higher deficits associated with unpaid for corporate tax reductions outweighs any potential efficiency benefits of the tax cuts themselves—leaving the level of output lower as a result.

A Digression on Temporary Policies to Expand Aggregate Demand in the Short Run

Policies that temporarily reduce the cost of capital can play an important role in increasing the quantity of investment, and thus economic growth, in the short run when the economy is operating below its potential. A good example of this is the temporary bonus depreciation that was passed on an emergency basis to help combat the Great Recession and was expanded for one year, in 2011, to full expensing. Bonus depreciation and expensing operate as a *de facto* interest-free loan to businesses—firms get larger deductions today, reducing current tax payments, and smaller deductions in the future, increasing future tax payments. Given the credit constraints created by the financial crisis, these policies effectively lowered the cost of capital from infinity for some businesses. This same logic applies even more forcefully to expanding Section 179 expensing, which is targeted at the small businesses that are more likely to be credit constrained. It also helps explain why extending net operating loss carrybacks, which do not reduce the cost of capital in a standard model, may be effective in the midst of a financial crisis.

When borrowing constraints exist, the expansion in investment will be sensitive to the immediate cash flow change while the cost to the federal budget will be the much lower time value of money cost of delaying revenue collections, making it plausible that these policies have a relatively large multiplier. In addition, by offering preferential treatment of business investment today relative to future investment, temporary bonus depreciation can shift investment demand forward from stronger future periods to a current weaker period.

These temporary business tax cuts contributed to the fact that business equipment investment has increased at a 5.1 percent annual rate over the course of this economic recovery, which is faster than the pace seen in the 2000s recovery and similar to the average of the previous three recoveries. This is consistent with recent research by Eric Zwick and James Mahon, which finds relatively large multipliers for the recent episode, especially for financially strapped firms.

It is important to note that the Administration's current focus in business tax reform is on permanent changes to increase longer-run growth, not the types of temporary demand side considerations that motivated temporary bonus depreciation and expensing. The overall strengthening of the economy combined with the fact that more credit is flowing to businesses means both the effectiveness and desirability of bonus depreciation are considerably less today than they were in the recent past. Moreover, extending bonus depreciation would risk turning it into a permanent, unpaid-for extender adding a substantial long-run cost to the deficit. It is this combination of lower benefits and higher costs that explain why the President has not supported the extension of bonus depreciation.

The Quality of Investment in the Long Run

The cost of capital perspective I have been discussing misses what may be an even more important aspect of business tax reform—the potential it has to raise TFP. And, as we have seen, this is the real source of variations in growth rates over the longer periods of time we are concerned with. My shorthand for this in the context of business tax reform is the importance of the *quality* of investment. By this, I do not mean more expensive or higher-end equipment, which, after all, would show up in the dollar value of investment. Instead I mean better choices about what to invest in, where to make those investments, how to finance them, and so on.

To be a bit more concrete, let me offer three examples of ways in which business tax reform has the potential to improve the quality of investment. One is by shifting capital from less productive areas of the economy to more productive areas of the economy. Another is ensuring that capital is distributed in a globally efficient manner, including not overallocating capital overseas and having more economically productive global sales and supply chains. A third example is encouraging investment in projects with externalities, like research and development in general, or clean energy in particular. And there are many more that I will touch on in this discussion today.

The Fundamental Underpinnings of Business Tax Reform

This perspective on how business tax reform can boost output and growth has three important implications for some of the fundamental underpinnings of business tax reform:

- 1. In general the tax system should strive for *neutrality*.** Neutrality is the concept that the tax system should not tilt the playing field between different business decisions, allowing business decisions to be made for business reasons and not for tax reasons.

And this, with a few very important exceptions, maximizes overall efficiency and increases the level or growth of output.

One advantage of starting with the concept of neutrality is that it, at least temporarily, takes you out of the charged debates over the level and distribution of revenue, or even the rate of capital taxation. For any given revenue level, and distribution and rate of capital taxation, we could all agree that a system that exhibits a greater degree of neutrality generally dominates a system that has arbitrarily varying tax rates on different types of activities.

2. **In carefully delineated specific cases, the tax system should deviate from neutrality to correct externalities.** In some cases a business will not take into account the spillovers its activities will have on other businesses, consumers, or the economy more broadly—including both positive and negative spillovers. As a result, this would lead a business left to its own devices to make decisions that are suboptimal from the perspective of society more broadly—a situation the tax code can remedy with subsidies or taxes depending on the sign of the externality.
3. **The tax system should be simpler.** We will never have a completely simple business tax system because the measurement of income is inherently complicated, and, in fact, even in the absence of business taxation corporations would have to undertake relatively complicated accounting for internal controls and external information. But we can strive for a system that is simpler, reducing the effort that goes into compliance and thus freeing up resources for higher quality investment and innovation.

Shortcomings of the Current U.S. Business Tax System

The U.S. business tax system does a poor job when measured against the ideal of a neutral tax system. And it does a poor job when compared to many of our peer countries, which is itself an aspect of neutrality given the fact that production and profits can be internationally mobile.

The U.S. Tax System in International Context

In the early 1980s the United States had about the same tax rate as the rest of the OECD, as shown in Figure 3. Then we cut our tax rate below many of our peer countries—but they followed suit and eventually leapfrogged over the United States leaving us with the dubious distinction of having the highest corporate tax rate in the world, as shown in Figure 4.

Figure 3

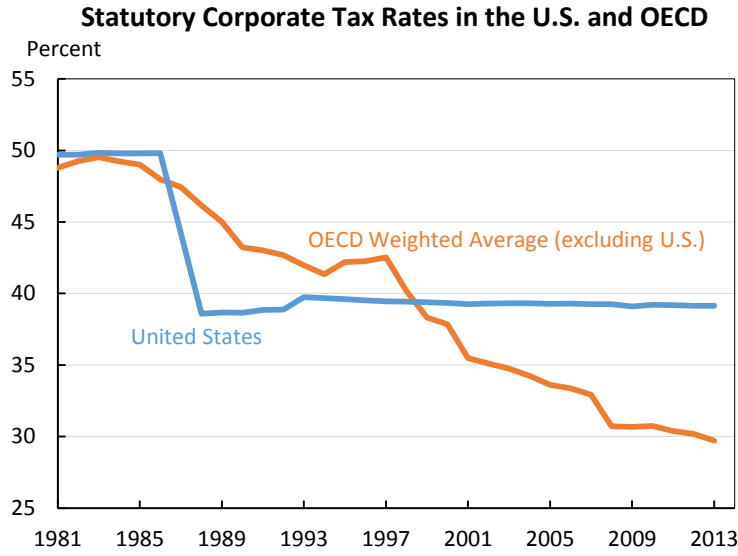
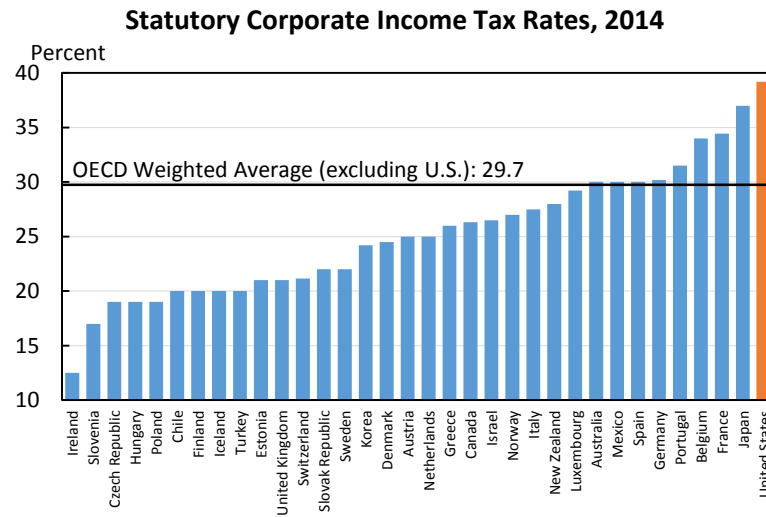
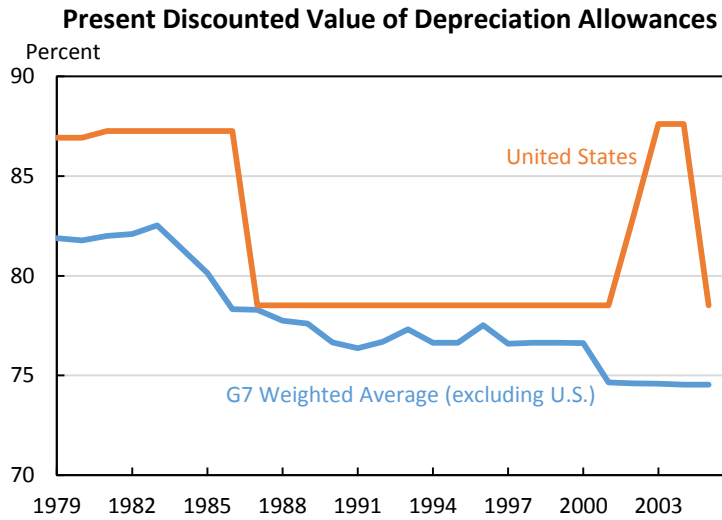


Figure 4



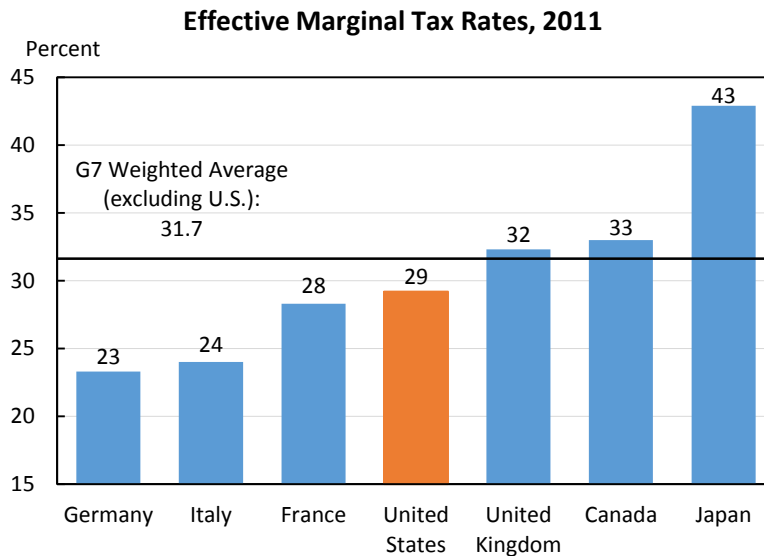
These relatively high statutory rates do not, however, reflect a commensurately highly taxed corporate sector. As other countries lowered their rates, they also shifted away from accelerated depreciation—reducing the present value of their depreciation allowances from about 82 percent of the cost of investment to about 75 percent, as shown in Figure 5. The United States has followed a similar path, reducing the present value of depreciation allowances when it cut the corporate rate in the late 1980s. Since that time, as depreciation allowances have continued to trend downwards elsewhere, the value of U.S. allowances has remained constant along with the rate—other than a temporary increase in the generosity of allowances as a countercyclical measure.

Figure 5



More generous depreciation allowances and other structural features of the U.S. tax system combine to result in effective marginal tax rates on U.S. investment roughly in line with, and even slightly lower than, other G7 countries, as shown in Figure 6, although I should note that any such comparison is complicated by factors like how to account for sales and value added taxes.

Figure 6

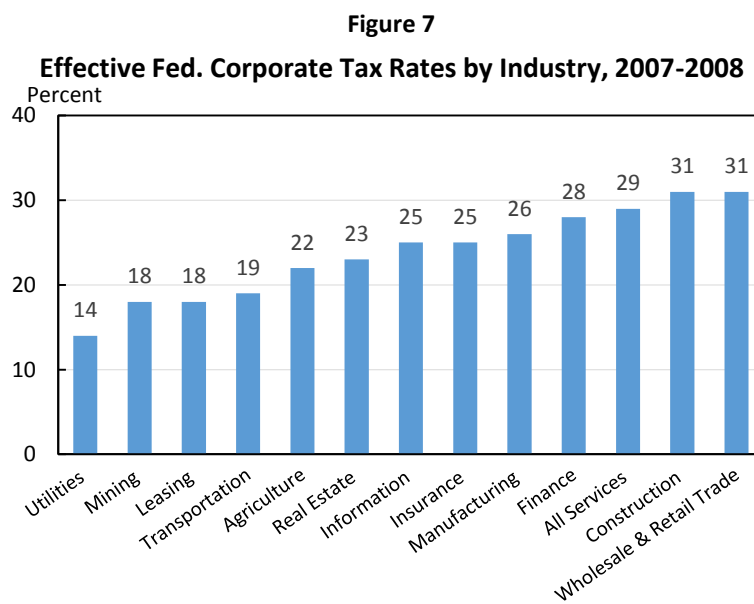


This, however, is not a reason to be content with our tax system the way it is. The international context for the statutory rate itself matters, for reasons I will discuss. Moreover, even looked at from a purely domestic perspective the U.S. tax system includes a number of problematic deviations from neutrality.

Ways in Which the U.S. Business Tax System Violates the Standard of Neutrality

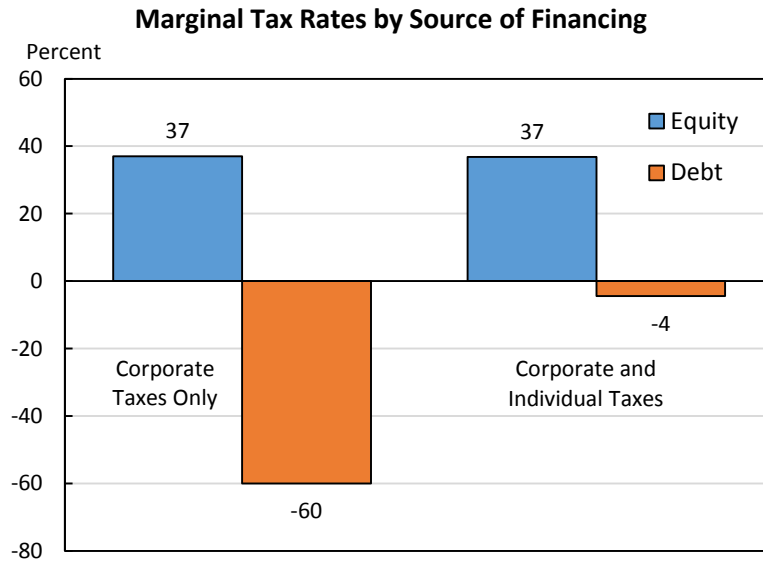
Specifically, the U.S. tax system violates the standard of neutrality in four important ways:

- 1. Distorting investment by industry and asset.** The tax code has numerous benefits for particular industries as well as a complex set of rules around depreciation that do not match the actual economic depreciation of the assets. As a result, there is wide variation in effective tax rates by industry, ranging from 14 percent for utilities to 31 percent for construction and wholesale and retail trade, as shown in the Treasury Department estimates in Figure 7. These differences can potentially lead to too much capital in industries that are tax-preferred and too little capital in industries that are tax-disadvantaged. This misallocation of capital reduces output.



- 2. Distorting the financing of investment, in particular, creating a strong preference for debt over equity.** The Treasury Department estimates that the marginal corporate tax rate on equity financed investment is 37 percent while the marginal corporate tax rate on debt financed investment is -60 percent as shown in Figure 8, largely due to the combination of accelerated depreciation, the full deductibility of interest, and the non-deductibility of dividends. The United States has the lowest tax rate on debt-financed investment in the OECD and the largest debt-equity disparity in the OECD. Even taking into account individual level taxes, which tax equity returns more lightly than interest payments, the disparity is still large, with a 37 percent tax rate for equity investment and -4 percent for debt.

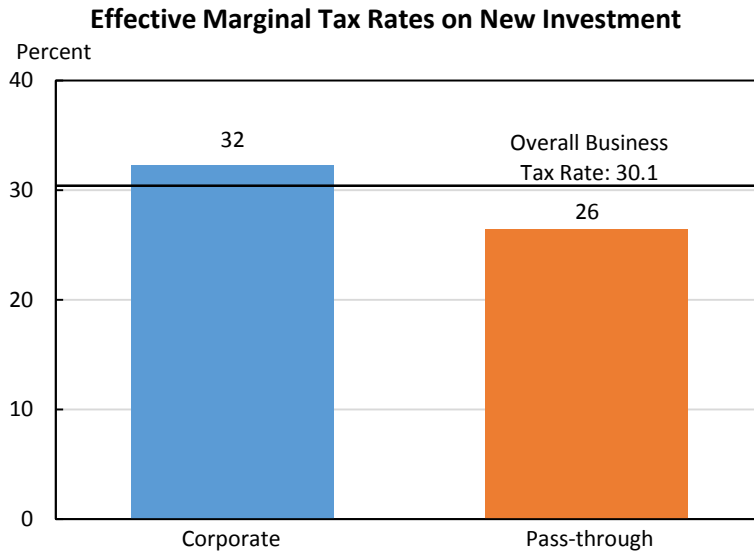
Figure 8



The debt-equity tax differences lead to overleveraging. Overleveraging increases financial fragility as firms have less of a cushion in downturns, potentially leading to fire sales, contagion, and larger and less efficient macroeconomic fluctuations.

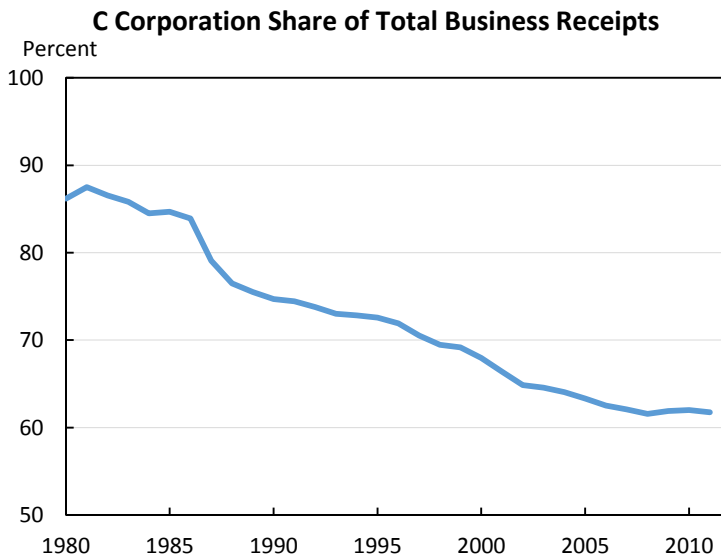
- 3. Distorting the form of business.** Overall the tax system advantages large pass-through entities, such as S corporations and partnerships, over large C corporations. This is because the combination of corporate income taxes and capital gains and dividend taxes faced by a C corporation exceeds the ordinary income taxes faced by a pass-through entity. As a result, according to the Treasury Department's analysis shown in Figure 9, C corporations face a 32 percent effective marginal tax rate on new investment while pass-through entities face a 26 percent effective rate.

Figure 9



This has not always been the case, and the increase in this disparity has led to a large shift in the distribution of revenue across business forms. Since 1980, the C corporation share of revenues has fallen from nearly 90 percent to just above 60 percent today, as shown in Figure 10. To the degree this trend has been driven by tax considerations, it represents an inefficient way for businesses to choose to organize themselves and a bias against the C corporate form.

Figure 10



- 4. Distorting the location of production and profits.** The final non-neutrality is the trickiest because in this case there are different and competing concepts for neutrality. On the one hand, capital export neutrality says that a given amount of capital will be located most efficiently across countries if the income it generates faces the same tax

rate regardless of the country in which it is invested. Under this concept, the preferences associated with deferred taxation of foreign subsidiary income (and often non-taxation of foreign subsidiary income) result in too much production located overseas. The solution, on this concept, is worldwide taxation to avoid providing tax subsidies for companies to locate production and shift profits overseas purely to generate tax savings.

On the other hand, capital ownership neutrality says that for a given pattern of worldwide capital allocation, ownership relationships will be most efficient if each company faces the same tax rates as every other company operating in a given jurisdiction. The solution, on this concept, is territorial taxation—at least given the tax systems in effect in our peer countries. Such a system would ensure that American firms can compete effectively for foreign subsidiaries, getting access to local markets and forming efficient global supply chains. But at the same time, a pure territorial tax system would greatly exacerbate the incentive to inefficiently overallocate investment overseas and to use techniques like transfer pricing and interest stripping to avoid paying taxes on U.S. profits.

This last point is the issue of base erosion—which is not where you locate your investment but where you locate your profits. In theory this should be determined by the location of economic activity but in practice it is often not. Unlike the location and ownership of investment, this factor is less subject to any type of tradeoff or difficult tension. Base erosion is unambiguously problematic because, for a given amount of revenue, it necessitates higher tax rates on U.S. businesses that are unable to shift their profits overseas.

Such profit-shifting is extensive. The pre-tax profitability of controlled foreign corporations is negatively correlated with local country statutory tax rates, even after you take into account a variety of real, economic factors. To leave economic studies and just put forward a stark fact, I feel safe in saying that the fact that in 2010 U.S. controlled foreign corporation profits represent 1,578 percent of Bermuda's GDP and even 15 percent of the Netherlands' GDP, as shown in Figure 11, probably does not simply reflect business decisions made for purely business reasons.

Figure 11

Country	U.S. Controlled Foreign Corporation Profits Relative to GDP (2010)
Bahamas	104%
Bermuda	1,578%
British Virgin Islands	1,009%
Cayman Islands	1,430%
Cyprus	13%
Ireland	38%
Luxembourg	103%
Netherlands	15%
Netherlands Antilles	25%

Overall under current U.S. law, Roseanne Altshuler and Harry Grubert’s simulations show that the effective tax rate on investments in a low-tax country (defined as a 5 percent rate) is -24 percent and the effective tax rate on investments in a high-tax country (defined as a country with a tax rate of 25 percent) is 13 percent. In other words, the United States is nowhere close to the worldwide system some have ascribed to it. In fact, the U.S. system generates even less revenue than a well-designed territorial system, in part because the combination of immediate interest deductions and deferred (often indefinitely) taxation of profits creates a system that can result in lower taxes than if you were not subject to taxes at all. As a result, our system today is closer to what I would call a “stupid territorial” system that raises little revenue on overseas activities while still imposing substantial distortions associated with avoiding the statutory taxes.

The President’s Framework for Business Tax Reform

These serious shortcomings in the U.S. business tax system were the motivation for the White House and the Treasury releasing *The President’s Framework for Business Tax Reform* in February 2012. All of the words in this title are meaningful: the document is not an academic exercise but a reflection of the President’s approach, based on extensive discussions with him preceding and following his call for a lower corporate rate and broader base in his 2011 State of the Union Address. It is a “Framework”, which is to say not a fully specified plan but considerably more specific than just high-level principles. And the Framework focuses not just on corporations, but on businesses more broadly—including small businesses and pass-throughs.

Some of the key elements of this Framework are:

- **Cutting the corporate rate to 28 percent, paid for by closing loopholes and structural reforms.** At 28 percent the U.S. corporate rate would be generally in line with other large OECD economies. This change would be paid for in part by closing “loopholes”—which I would define as a provision that benefits a specific industry without a sound justification in broader spillovers. The special provisions for oil and gas that President Reagan unsuccessfully targeted for elimination in his tax reform plan are one clear example. Closing loopholes, however, would not raise sufficient funds to pay for the rate reduction nor would it sufficiently address the non-neutralities I discussed in the previous section. As a result the Framework also stated that business tax reform would require at least some subset of three structural reforms: addressing accelerated depreciation, the deductibility of interest and the taxation of large pass-through entities.

Most sound combinations of these measures would result in increasing neutrality on all of the dimensions I described—more similar taxation of different types of investment, forms of financing, forms of business, and, with a lower rate, less of a distinction between the competing international neutrality concepts.

- **Making permanent, expanding, and reforming key incentives.** The key test for any incentive is whether it is motivated by a positive externality such that the underlying good or service will be underprovided by the private economy. The Framework singles out three incentives as passing this test: the research and experimentation tax credit because the social returns to R&D are roughly twice the private returns, the Production Tax Credit (PTC) because of the negative externalities associated with carbon emissions, and the manufacturing deduction (Section 199) because of the broader spillovers in the manufacturing sector. While one can and should debate what provisions should be added to or subtracted from this list, the key is orienting the argument around the principle of economy-wide spillovers.
- **Establishing a hybrid international system with a minimum tax on the earnings of foreign subsidiaries.** This system would be much more effective at preventing base erosion than the current system, and could effectively deter some tax-based decisions on the location of production, while also having the potential to improve the global competitiveness of U.S. corporations. A smarter hybrid reflects a balance of the competing neutrality concepts in rejecting a pure territorial or a pure worldwide system, instead offering the potential of a system that both collects more revenue and has fewer distortions than our current “stupid territorial” system.
- **Simplifying and reducing taxes for small businesses.** Many of the base broadeners in the Framework would apply to all businesses, while the rate reductions would only benefit C corporations. In order to protect and in fact help small businesses, the Framework proposes measures like expanded Section 179 expensing and cash accounting that would both simplify and reduce taxes for small businesses. In this way, the

Framework can be implemented on a standalone basis without broader individual reform while still protecting small businesses, including small pass-through entities.

- **Funding infrastructure investments in the short run while being revenue neutral over the medium and long run.** The types of plans consistent with the Framework would generally raise some one-time revenue from the transition to a new system. The President proposes to invest \$150 billion of this one-time revenue in paying for a one-time, expansion of surface transportation infrastructure spread over a four-year period. Over the longer run the plan would be revenue neutral.

It is essential to measure the revenue impact of business tax reform over not just the traditional 10-year budget window but also to make sure that it does not add to the deficit in the longer term, which is precisely when our fiscal challenges start to grow again. This is particularly important when reform proposals include measures like shifting to economic depreciation, which results in inflated scores for savings within the traditional 10-year budget window because it shifts revenue collection into the window. Business tax reform is an opportunity to increase economic growth and improve the functioning of our economy. It should not be an opportunity to hide a deficit-increasing tax cut under the guise of reform.

Addressing Four Objections to This Approach on Tax Rates

Different sets of critics have raised four objections to this approach on tax rates. I want to briefly address all four of these.

The Traditional Economist's View: Tax Rate Reductions are a Windfall for Old Capital

The first objection raised by economists trained in the traditional public finance approach to tax policy is that the benefits of rate reductions go to a combination of increased incentives for new capital and windfall benefits to owners of old capital. Insofar as rate reductions are paid for with tax changes that exclusively or disproportionately apply to new capital this would leave new capital a net loser while old capital would be a net gainer. Not only is this unfair, it is argued, it is also economically inefficient.

This perspective is a powerful and important one but it misses several critical points that are increasingly salient in the modern, global economy. In particular, this perspective is limited to thinking about the *marginal* investment—whether or not to allocate an additional unit of capital to an activity that will earn a normal return. The old capital, new capital perspective is much less useful for considering *lumpy* investment decisions, like where to locate a plant, that are combined with *supernormal* returns. In this case, it is the average effective tax rate that matters—and this case may be particularly important for the type of investment we most want to attract and retain in a globalized economy.

Moreover, many of the other non-neutralities I discussed—like debt-equity distortions—are reduced at lower statutory rates. And lower statutory rates can be particularly important in

relieving some of the otherwise irreducible tradeoff between capital export neutrality and capital ownership neutrality in international taxation.

Finally, it is worth considering the nearly universal view among businesspeople and tax practitioners that the statutory rate is particularly salient because business decisions are made based on earnings per share and not cash flow, although I am far from certain whether this understanding is applicable in thinking about meaningful regime changes in business taxation.

The New Economist's View: The Corporate Tax Rate Should be Zero

An increasingly common objection, again often from economists, goes in precisely the opposite direction—and argues that we should eliminate the corporate tax entirely and instead tax capital at the individual level, an idea that has been advanced by people across the political spectrum like Eric Toder, Len Burman, Alan Viard, Greg Mankiw, and Larry Kudlow. The idea of shifting from the taxation of more mobile corporations to less mobile individuals has some appeal. But it also has serious shortcomings.

The most naïve form of the argument is that corporate taxes “only” raise \$315 billion per year, or 1.8 percent of GDP, so we do can do without them. This observation itself is wrong because the cost of eliminating the corporate tax would greatly exceed the amount of revenue the system raises as more people and businesses would avoid individual income taxes by shifting to the now untaxed corporate form. In the messy reality we live in where it is often difficult to distinguish business from individual income and capital income from labor income, having a corporate-level tax can help act as an effective backstop for the individual income tax.

Furthermore, it is an odd statement when even \$315 billion per year is substantially larger than the discretionary budget of any one government department (except the Department of Defense) and is also substantially larger than just about any single major proposal to cut the deficit. Not to mention the massive regressivity that would stem from eliminating this revenue and making up for it in other ways.

A slightly less naïve but still completely mistaken form of the argument is that we should raise the tax rate on capital gains and dividends to ordinary income rates to pay for a large reduction in corporate tax rate. But the math on this approach does not come close to adding up—taxing capital gains and dividends at the ordinary income tax rate would be unlikely to raise enough money to cut the corporate rate by even two percentage points. The reason is that substantial capital income avoids individual-level taxation because it is held by tax-exempt entities such as pension funds and foundations. In addition, taxpayers can use a variety of strategies such as delayed realization of capital gains to avoid realization-based capital income taxes.

Absent a much larger overhaul of capital taxation, including accrual accounting for capital gains and retaining the corporate tax as a withholding tax and then providing credits or deductions when corporate earnings are distributed to owners who are not tax-exempt, purely individual-level capital taxation is a non-starter. Toder and Viard have a more thoughtful proposal to shift to taxing capital gains on accrual for publicly-traded companies, but even if we overcame the

substantive and political challenges in transitioning to a new system, their framework still replaces only half of the revenue from the corporate tax.

The Conservative View: The Top Individual Rate Needs to Be Cut with the Corporate Rate

An argument often advanced by conservatives is that individual and corporate tax reform need to be done together and, in particular, that there should be parity between the top individual rate and the top corporate rate. Some proposals called for cutting both to 25 percent. It is notable, however, that House Ways & Means Chairman Dave Camp's tax reform proposal departed from this standard with a corporate rate of 25 percent and a top individual rate of 35 percent.

This argument raises some valid concerns. Different rates on activities with different labels create opportunities for gamesmanship, for example building up income inside a corporation rather than paying annual tax on it at the individual level. But overall, this argument also suffers from serious economic and practical objections.

On the economic merits, it is important to remember that C corporation income is partially taxed at two levels while pass-through income is only taxed at one level. As a result, today C corporations face an effective marginal rate that is 6 percentage points higher than that on pass-through businesses. Although the President's Framework would cut and simplify taxes for small business, including small pass-through entities, for larger businesses we should be moving towards greater parity—with the goal of equal effective rates on an integrated basis, a goal that would not be served by parallel reductions in individual and corporate tax rates.

Moreover, a package of rate reductions that achieved a maximum rate of 25 percent on the individual and corporate side would cost \$5 trillion. Even eliminating all of the tax expenditures for high-income households would not be enough to pay for this cost, meaning that the inevitable cost would either fall on tax increases on the middle class or on a higher deficit.

Finally, while reducing the top individual rate is often motivated by reference to small business, reducing it is an inefficient way to target small businesses because so much of the revenue loss is simply for high-income individuals. Tools like expanding Section 179 expensing can be used to ensure that reform, taken as a whole, both simplifies and cuts taxes for small businesses—without requiring a lower individual rate.

The Progressive View: Corporate Loophole Closures Should Not Fund Rate Reductions

The final objection is that we should take all of the steps I have described to close loopholes and broaden the tax base, but that the savings would be better used to fund productive investments or cut the deficit—rather than returning them in the form of rate reductions to the same corporations that helped create these loopholes in the first place.

I have a certain amount of sympathy with this perspective. We have enormous investment needs with significant political obstacles in funding them. And we have a medium- and long-term

deficit challenge that should not be addressed by making our growth or inequality problems worse.

I should note that the President's Framework does include revenue that would help pay for increased infrastructure investment. The President also agrees that we should be raising additional revenue to close the deficit, and in particular he proposes to get this revenue by limiting tax expenditures for high-income households.

But we should also recognize some of the substantive and political shortcomings of the idea that all of the money raised from business reform should go to other purposes. In Chairman Camp's plan, for example, the single largest raiser is cutting accelerated depreciation—which raises \$270 billion over ten years according to Congress' Joint Committee on Taxation (JCT). I cannot believe there would be any support for this as a standalone provision to pay for other investments or for deficit reduction. This is not something that is generally perceived as a special interest loophole, but instead is something that the political system likely would—and possibly even only should—consider as part of a swap for lower corporate tax rates.

Conclusion

I began this discussion with America's economic recovery and longer-term growth. Business tax reform is a part of the solution but it is only a part. It is essential that the way in which we go about reform does not make it harder to move forward with other parts of that solution, for example by adding to the medium- or long-term deficit or crowding out other investments. In fact, business tax reform can and should complement other elements of the growth agenda—for example by funding investments in infrastructure.

Other elements of the President's agenda are also critical. Perhaps no policy would have a larger effect on growth than commonsense immigration reform. In addition, we should be improving education, addressing housing and moving forward on greater economic integration with Europe and Asia.

Growth itself, however, may be necessary but is certainly not sufficient to ensure that American families enjoy the gains in the form of higher wages and income. Ensuring that these gains are shared will mean implementing policies the President has championed including raising the federal minimum wage, expanding the Earned Income Tax Credit (EITC) for workers without children and noncustodial parents, and making the workplace more inclusive through policies like workplace flexibility, paid leave, and childcare.

While I would love to go in-depth on each of these important topics, I will instead thank you for your attention and open it up for questions.

Notes to figures

Figure 1

Bureau of Labor Statistics; CEA calculations.

Figure 2

Bureau of Economic Analysis; CEA calculations.

Figure 3

Source: OECD.

Figure 4

Source: OECD.

Figure 5

Source: Institute for Fiscal Studies.

Figure 6

Source: U.S. Department of the Treasury, Office of Tax Analysis and OECD.

Figure 7

Source: U.S. Department of the Treasury, Office of Tax Analysis.

Figure 8

Source: U.S. Department of the Treasury, Office of Tax Analysis.

Figure 9

Source: U.S. Department of the Treasury, Office of Tax Analysis.

Figure 10

Note: RICs and REITs excluded from both C corporation share and total.

Source: IRS; CEA calculations.

Figure 11

Source: IRS and United Nations; CEA calculations.