

**TAX REFORM OPTIONS: INCENTIVES FOR CAPITAL
INVESTMENT AND MANUFACTURING**

HEARING

BEFORE THE

**COMMITTEE ON FINANCE
UNITED STATES SENATE**

ONE HUNDRED TWELFTH CONGRESS

SECOND SESSION

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MARCH 6, 2012
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TAX REFORM OPTIONS: INCENTIVES FOR CAPITAL INVESTMENT AND MANUFACTURING

TUESDAY, MARCH 6, 2012

U.S. SENATE,
COMMITTEE ON FINANCE,
Washington, DC.

The hearing was convened, pursuant to notice, at 10:03 a.m., in room SD-215, Dirksen Senate Office Building, Hon. Max Baucus (chairman of the committee) presiding.

Present: Senators Rockefeller, Wyden, Cantwell, Carper, Hatch, Grassley, Coburn, Thune, and Burr.

Also present: Democratic Staff: Russ Sullivan, Staff Director; Lily Batchelder, Chief Tax Counsel; Holly Porter, Tax Counsel; and David Hughes, Senior Business and Accounting Advisor. Republican Staff: Chris Campbell, Staff Director; Tony Coughlan, Tax Counsel; and Maureen McLaughlin, Detailee.

OPENING STATEMENT OF HON. MAX BAUCUS, A U.S. SENATOR FROM MONTANA, CHAIRMAN, COMMITTEE ON FINANCE

The CHAIRMAN. The committee will come to order.

Warren Buffett once said, “It has never paid to bet against America.” From Montana’s lumber, to Michigan’s automobiles, to California’s semiconductors, American products have always been world-class, and U.S. manufacturing remains critical to the long-term strength of the American economy. Make no mistake, “Made in the USA” still matters.

The reasons are simple: manufacturing creates jobs, and manufacturing pays good wages. The average wage at a manufacturing company is 20 percent higher than those in the wider economy. These wages give Americans the purchasing power to help their family and the entire economy.

Manufacturing also spurs innovation, and it generates related jobs for engineers, scientists, designers, shippers, and many others. In fact, though manufacturers accounted for only 11 percent of the GDP in 2008, they contributed 68 percent of U.S. corporate spending on research and development. In 2010, manufacturing employed 35 percent of all engineers in this country. If we want these jobs to stay in the United States, we need manufacturing to stay here.

U.S. manufacturing is essential to America’s economic stability. It is critical to U.S. innovation, to our national security and intellectual property, and it is central to our balance of trade. So manufacturing is key to our competitiveness in the world and our economic growth.

Despite its importance, manufacturing is a declining percentage of our economy. After World War II, manufacturing made up more than one-quarter of our economy's total output, and today makes up just a tenth. We need to stem this downward trend, and we should consider the best ways to do so through tax reform.

There are numerous incentives in the tax code to encourage manufacturing, and there are many provisions to boost capital investment in the United States generally. Manufacturers claim more than one-quarter of the capital investment incentives. We need to ensure that these tax incentives are effective to make sure we are getting the most bang for our buck.

These incentives include accelerated depreciation and expensing provisions. Accelerated depreciation is currently the largest business tax expenditure. In some cases, bonus depreciation and section 179 allow companies to fully write off the cost of equipment in the year placed in service.

The tax code also provides special depreciation schedules for everything from racehorses and NASCAR racetracks to corporate jets. America's depreciation rules are some of the most generous among developed countries. Only Greece, Italy, and Portugal are more favorable.

Faster depreciation, however, helps to offset the United States' higher statutory corporate tax rate. As we work to make our corporate tax rate more competitive, we must carefully examine changes to our current depreciation system and strike the right balance.

Today we will ask whether these policies are working to encourage broad-based economic growth and job creation. Do they spur investment in the United States' economy? Are they more effective than a rate reduction with the same cost?

We will also discuss the deduction for domestic production activities, which was enacted in 2004. This provision reduces the effective tax rate on manufacturing activity by 3 percentage points, but unfortunately, even with this provision, manufacturing has still declined.

There is no single cause for the struggles of U.S. manufacturing in recent years. Some argue that low labor costs and the availability of technically skilled employees have pushed manufacturing overseas. Others say that technological improvements and increases in productivity may have reduced the need for workers in the U.S.

But we cannot give up on American manufacturers. We need to determine whether the current incentives adequately address the existing challenges, or whether there are simpler, more effective ways to encourage manufacturing and investment in the United States.

So let us find the best and the most efficient ways to boost American manufacturing. Let us ensure that our tax code is helping businesses create jobs here at home. Let us keep the "Made in USA" label strong.*

*For more information, *see also*, "Background and Present Law Relating to Cost Recovery and Domestic Production Activities," Joint Committee on Taxation staff report, February 27, 2012 (JCMX-19-12), <https://www.jct.gov/publications.html?func=startdown&id=4401>.

[The prepared statement of Chairman Baucus appears in the appendix.]

The CHAIRMAN. Senator Hatch?

**OPENING STATEMENT OF HON. ORRIN G. HATCH,
A U.S. SENATOR FROM UTAH**

Senator HATCH. Thank you, Mr. Chairman. Thank you very much for calling this hearing on tax reform and its relationship to manufacturing and capital investment. The manufacturing sector remains a critical segment of our economy. For the year 2010, the manufacturing sector generated about \$1.8 trillion in Gross Domestic Product. The United States still has the world's largest manufacturing sector. If it were a separate economy with its own GDP, the U.S. manufacturing sector would be the world's 9th-largest economy.

At the same time, America's manufacturing sector is not static, and it has experienced significant changes in recent decades. Manufacturing jobs have been in decline for a number of years. In 1979, manufacturing employment peaked at about 19.6 million workers. In 2010, manufacturing employment was about 11.5 million workers.

Coupled with this decline in U.S. manufacturing jobs is a decline in U.S. manufacturing as a percentage of GDP, from about 27 percent of GDP in the 1950s to about 11 percent in 2010. Much of the decline in manufacturing jobs is due to increased productivity and automation. Because U.S. workers are among the most productive in the world, the number of manufacturing jobs necessary to achieve similar outputs has declined.

However, part of the decline in the U.S. manufacturing is also due to offshoring. In a recent survey of 287 manufacturing companies, labor costs were listed as the most important factor in selecting locations for manufacturing operations or supplier operations. U.S. labor costs are significantly higher than labor costs in many countries around the world.

After labor costs, the next three most important factors identified in the survey were proximity to the market, skills in the workforce, and taxes. As a result, taxes can play an important part in a company's decision about where to locate its manufacturing operations.

In the United States, we have a top corporate tax rate of 35 percent. When coupled with State corporate taxes, a U.S. corporation may face a marginal tax rate of 39 percent, which is the second-highest corporate tax rate in the world, behind Japan.

I want America to be the leader in many areas, including manufacturing, but having one of the highest corporate tax rates in the world is something that just does not work.

In 2004, Congress enacted a deduction for manufacturers that reduces their effective tax rate by about 3 percentage points. But we need to do more, much more. We need to bring the corporate tax rate down to a level in line with other OECD countries. We need to reform our tax system to make our U.S. companies, including manufacturers, more competitive with the rest of the world.

Closely related to manufacturing, of course, is capital investment. We have a number of tax incentives with respect to capital investment. Some of these incentives are relatively new, such as

bonus depreciation, but other incentives are quite old, such as the current accelerated depreciation rules that date back to 1986 and even earlier. Still other tax incentives seem to go in and out of the tax code, such as the Investment Tax Credit, which was first enacted in 1962 and was last in effect in 1985.

When dealing with tax incentives, the focus seems to be on whether the incentives are achieving their intended purposes. Do these tax incentives enhance economic growth? How much bang for the buck are we getting from the various tax incentives for capital investment? For example, one recent economic paper suggests that the investment tax credit may be a better incentive for capital investment than accelerated depreciation.

Sometimes tax incentives for capital investment are viewed as interchangeable with a corporate tax rate cut, yet they are really two separate issues. First, a corporate tax rate cut would not affect many small businesses that are conducted as partnerships, S corporations, or limited liability companies, et cetera. Second, a corporate tax rate cut affects both old and new corporate capital, while expensing and accelerated depreciation affect only new capital.

Finally, as we go about our business today, I think it is important for us to recall the damage that is done to the manufacturing sector not only by tax policy, but by over-regulation. We should not lose sight of underlying issues, such as environmental and labor policies that artificially drive up the cost of labor, distort resource allocations, and make America an unnecessarily costly place to do business.

Mr. Chairman, we have a great panel here. We have some very learned economists and a prominent accounting professor with us today, and I for one am looking forward to their testimony.

Thank you.

The CHAIRMAN. Thank you, Senator.

[The prepared statement of Senator Hatch appears in the appendix.]

The CHAIRMAN. I would now like to introduce our witnesses. First is Dr. Jane Gravelle. Dr. Gravelle is a Senior Specialist in Economic Policy in the Government and Finance Division of the Congressional Research Service. Thank you very much, Dr. Gravelle, for being here. You have testified many times. You are well-known and very highly regarded. Thank you very much.

Next is Dr. Ike Brannon. Dr. Brannon is the director of economic policy and congressional relations at the American Action Forum Policy Institute. Dr. Brannon, thank you very much for taking the time to appear.

The third witness is Dr. Robert Atkinson, founder and president of the Information Technology and Innovation Foundation. We look forward to hearing what you have to say.

Fourth is Dr. J.D. Foster, senior fellow in the economics of fiscal policy at The Heritage Foundation. Dr. Foster, thank you.

Finally, we have Dr. Michelle Hanlon. Dr. Hanlon is associate professor of accounting at MIT's Sloan School of Business.

We will begin with you, Dr. Gravelle. You know the drill here. Your statements will automatically be included in the record, and we would like you to summarize them. We have five witnesses this morning, so I encourage you in two respects. One, keep within your

5 minutes if you could, please, and second, just say what you think. Let 'er rip. Do not pull any punches, all right?

Dr. Gravelle?

**STATEMENT OF DR. JANE G. GRAVELLE, SENIOR SPECIALIST
IN ECONOMIC POLICY, CONGRESSIONAL RESEARCH SERVICE,
WASHINGTON, DC**

Dr. GRAVELLE. Thank you very much.

Although much attention has been focused on statutory tax rates compared to tax rates in other countries, tax burdens on investment are influenced by provisions that affect the tax base. In fact, effective tax rates in the United States are similar to those in the rest of the OECD.

Rules for measuring the tax base, as well as the rate, affect tax burdens. This is a central issue of any tax reform, including one that is revenue-neutral: the need to balance rate reductions and base broadening.

I review the most significant provisions associated with capital investment and with manufacturing: accelerated depreciation and the production activities deduction. Accelerated depreciation will normally cost about \$35 billion a year after eliminating the bonus depreciation effects. The production activities deduction costs about \$15 billion a year.

Accelerated depreciation could be liberalized by continuing some form of bonus depreciation, or it could be limited to finance a rate reduction or raise revenue. Bonus depreciation was intended as a temporary stimulus. Based on estimates of overall effective tax rates for equipment, currently at 26 percent, effective tax rates would fall to 15 percent for permanent 50-percent expensing, and all the tax rates I discuss are compared at the 35-percent statutory rate. They do not include the production activities deduction.

The cost of 50-percent bonus depreciation is estimated at around \$30 billion annually in the steady state, although this cost could be reduced if it were targeted more narrowly.

Most evidence suggests that investment incentives are actually not very effective in stimulating investment. Also, given that the evidence suggests domestic savings is relatively unresponsive to increases in returns, investment diverted into equipment would be withdrawn from other uses.

A reduction might attract investment from abroad, but the estimated effects of that inflow on capital income are actually small. My study estimated that a large change, lowering the rate to 25 percent, would increase output by only two tenths of 1 percent of GDP, and national income or national welfare by 2 one-hundredths of a percent. Now, these are small, but the corporate tax as a percent of GDP is also quite small, only about 2 percent.

Much of the discussion about corporate tax reform, however, proposes to use tax expenditures to finance rate reduction. Eliminating the tax expenditure for equipment would raise the tax rate on equipment from 26 percent to 36 percent, and the tax rate for manufacturing equipment from 24 percent to 36 percent. There is also a more limited CBO option that would raise the rate by about the same amount.

Some of the increased burden would be offset if the statutory tax rate were lowered; however, revenue raised in the budget horizon is almost twice the size of revenue in the steady state from depreciation. It is a timing provision.

Some of this revenue is for unincorporated business, so only about a 2 percentage-point reduction would be possible in a steady state, revenue-neutral corporate tax change. I have more details about options in my testimony. It would be about 1 percentage point with the CBO option.

The effective tax rate would rise, because corporate rate cuts provide a larger windfall. They affect existing capital as well as new investment. These calculations illustrate the trade-offs in using depreciation changes to offset rate reductions. A more neutral set of tax rates is obtained, and the headline statutory rate is reduced, but the burden on new investment is increased.

The production activities deduction, costing about \$15 billion with about 35 percent projected to go to unincorporated businesses, would allow about an 8 tenths of a percentage-point reduction in a revenue-neutral corporate tax change.

It has been criticized as distorting the treatment of different industries by granting differential tax rates, and by creating administrative problems. Corporate manufacturing receives only 44 percent of this benefit. This deduction is more likely to apply to multinationals because of the industry restrictions, and it may be more targeted to international concerns. We can never be certain about any policy.

It is doubtful, however, that this issue outweighs the drawbacks of the provision, making this change a good candidate for revenue raising. One option is to limit the benefit to corporate manufacturing, which will recoup more than half the revenue loss, and limit the number of firms affected by the complexity.

Thank you.

The CHAIRMAN. That was very interesting. Thank you very much.

[The prepared statement of Dr. Gravelle appears in the appendix.]

The CHAIRMAN. Dr. Brannon?

STATEMENT OF DR. IKE BRANNON, DIRECTOR OF ECONOMIC POLICY AND CONGRESSIONAL RELATIONS, AMERICAN ACTION FORUM, WASHINGTON, DC

Dr. BRANNON. Mr. Chairman, Senator Hatch, thank you very much for having me here. Let me try not to summarize just my testimony, but briefly try to opine on everybody else's thoughts here.

The American Action Forum, along with the ITIF Foundation, actually did a very similar panel on this back in August, so I think almost all of us on the panel have shared our thoughts in one form or another.

I think Dr. Gravelle's attitude in terms of how corporations make their investment decisions is that they really do not respond all that much to incentives. And certainly there is some strand of literature that suggests that that is correct.

I think Dr. Hanlon would say that they do respond to incentives, but they respond to entirely different incentives than economists

are comfortable talking about. They respond very much to trying to maximize, not the economic profit that economists are concerned about—and that is the profits that they share with their shareholders—but the profits that they report to the SEC, to their shareholders, and that affect their profits.

I think Dr. Atkinson would say that manufacturers and businesses respond wildly to tax incentives, or they are very responsive to tax incentives, and that, if we do tax incentives right, in terms of our research and experimentation credit and some kind of bonus depreciation, we will see significant bang for the buck in terms of increased investment and increased economic growth.

Three very different schools of thought, and each of them contains a little bit of certain truths to them. To me it seems that I am very uncomfortable in a situation where we say that people—firms, individuals, companies, whatever—do not respond to incentives. I think it is clear that if you lower the hurdle rate for investment, more investment will be done. It might be very little more, it might be a lot more, but more investment will be done.

I also think that there are significant spill-over effects to investment, depending on where the investment occurs. So I think, since the relevant question going forward is, if we are reforming the tax code, do we reform the tax code by getting rid of all investment incentives and going for the lowest rate possible, or do we go for the lowest rate possible given that we need to craft certain investment incentives? I would go for the latter. I think not having any specific investment incentives would be a shame.

And then the other question that Dr. Gravelle came to is that it is a very difficult political task that you have before you, if you are going to do something like add bonus depreciation, because if you do bonus depreciation or, say, full expensing, what you are doing is you are giving a reward solely to new capital, which is where we get the most bang for the buck, but then you are going to have a whole lot of businesses that made investments the previous year quite angry with you, as they should be.

There is going to be a natural inclination for politicians to respond to that and to try to create some kind of transition rules. If you create transition rules that cost money, you are going to have to have a higher rate. All of a sudden, benefits from doing some kind of corporate tax reform are going to be smaller and smaller and smaller.

So, to my mind, it is a very difficult political situation you have yourself in. I do not have the political answer, but I think the economic answer is that you want to provide, as best you can, incentives for manufacturing. To me the simple way to do that, the least arbitrary way to do that, is not to single out manufacturing, but to simply allow full and immediate expensing, allow companies to write off their investments right away.

I think the advantage to that is that it does not put Congress or the IRS in the position of deciding what is and is not a manufacturing company. The other thing to keep in mind is, when the IRS sets up depreciation schedules anyway, that is somewhat arbitrary, if you think about it. How long do computers really last? How long do certain machines last? There is a little bit of empirical analysis going on, but a lot of it is guess work. So there is one way to con-

strue that full expensing as simply being the most logical way to do things.

Then I just want to briefly respond to Senator Baucus's statement, which I largely agreed with. One of the things that is going on in manufacturing, I think, in the last 30 years, is that the definition of "who is a manufacturing worker" has radically changed.

I will give you one example. I am from a town called Mossville, IL, which is the home of a lot of Caterpillar factories. In fact, 90 percent of the people who live in Mossville work for Caterpillar. I have a friend whose goal, his whole life, was to take his father's job in Caterpillar as a sheet metal worker. Eventually he did that at the age of 38. He became a sheet metal worker for Caterpillar.

But the way he did that is, he ended up having to get two associates degrees, a degree in engineering, and he had to become Six Sigma certified. When he took over his father's job, he had to wear a tie, and he was in the office in front of a computer. That blue collar job had become a white collar job. So, transitions like that are actually wonderful success stories, and we need to recognize those. There have been a lot of changes to manufacturing in the last few years, and some of them have been good.

The CHAIRMAN. Thank you very much, Dr. Brannon.

[The prepared statement of Dr. Brannon appears in the appendix.]

The CHAIRMAN. Dr. Atkinson?

STATEMENT OF DR. ROBERT D. ATKINSON, PRESIDENT, INFORMATION TECHNOLOGY AND INNOVATION FOUNDATION, WASHINGTON, DC

Dr. ATKINSON. Thank you, Mr. Chairman and Senator Hatch. It is a pleasure to be here today.

I want to put this a little bit in context, as you both did in your opening remarks. In the last decade, the United States has lost 32 percent of its manufacturing employment. That is a rate of loss that was greater than the Great Depression. There is a popular, and commonly held view, that this was principally—in fact, only—due to superior productivity performance.

We have new research we will be releasing in 2 weeks which argues, as a number of other economists have, that the U.S. measurement system for manufacturing output is significantly flawed, and that, when measured properly, manufacturing output actually declined by 11 percent in the last decade. Again, never ever a decline like that in American history, except for the Great Depression.

This is in contrast to other countries, our major competitors like Germany, Japan, Sweden, who have all seen stable manufacturing output over the last decade. So our loss is not something normal, it is not something that is about superior performance. It is about loss of international competitiveness. And we see that in particular with manufacturing capital stock. This is the amount of capital that manufacturers have. You add it all up together, and, in every decade from the 1950s through to 2000, that stock increased at minimum by 25 percent per decade.

In this last decade, the 2000s, that capital stock increased by just 1.2 percent. So this is, again, an unprecedented slow growth in the amount of capital that our manufacturers have to be competitive.

One reason for that is that companies are increasingly investing overseas. In 2000, U.S. multinationals invested 33 cents overseas for every dollar they invested in America. In 2009, that had increased to 71 cents. So there is increased competition. The reason they are doing that is not because they are disloyal, it is because other countries have put in place very aggressive incentives for them to move facilities and investment overseas.

We see this in countries like Austria, Canada, France, Japan, Malaysia, Singapore, Taiwan, the U.K., which all have robust investment incentives to attract that kind of investment. We see it with a number of nations in the last 3 or 4 years, including China, France, Ireland, and the Netherlands, that have put in place what are called patent boxes.

The U.K., for example, is set to do this next year. They will be taxing corporate income that is related to patents, so anything related to a patent, you get income from it. That will be taxed in the U.K. at a rate of 10 percent instead of the normal rate, the statutory rate of 28 percent.

So these countries are putting in place all of these specific incentives. I would argue we have to catch up. Unfortunately, many economists are distrustful of these incentives, and they think they distort the marketplace, and therefore we should get rid of them. I think much of that is not based on real analysis, it is based more on the way they view the role of markets.

Now, a good example of that was a study by Larry Summers and Alan Auerbach, two well-known economists, in 1979 for the National Bureau of Economic Research. They analyzed the effect of the investment tax credit. In their model, they found that the investment tax credit led to more capital investment in the United States in machinery and equipment, and it led to a larger GDP than if the credit did not exist.

Therefore, you would expect that they would then suggest that Congress retain the investment tax credit. In fact, they said just the opposite; we should get rid of the investment tax credit because it is distorting capital allocation away from—get this—housing.

So, in their model, they wanted more houses and fewer machines. I actually think our problem over the last 15 years is we had too much housing and too few machines, because our tax code favored housing and did not favor investment.

When we get down to it, what we have to focus on is that we have to get more capital investment—real machines, software, computers, and other kinds of things—in our companies. One of the reasons we want to do that, and this is why I think the domestic production deduction is so important, is that we are facing increased competition from other countries.

Other countries are competing for the highest value-added production in the world. They want to get that in their country. Many of the models that economists use still are based on the idea that we are a closed economy where we do not really compete with other countries.

So, what do we need to do? I would suggest several things. One is retaining the domestic production deduction, section 199, if not expanding it, as the President has proposed. There is a widely held

view that this is a distorted deduction because it goes to companies that make coffee or something.

In fact, according to the IRS, 83 percent of the value of the deductions claimed under section 199 go essentially to traded sectors, sectors that are in international markets: mining, manufacturing, and information. So, yes, it could be tighter, but still, 83 percent is not bad as a way to focus on those kinds of sectors.

Second, I would encourage, as Dr. Brannon has, maintaining the accelerated depreciation and actually moving to either first-year expensing or an investment tax credit. Either one will help spur new capital investment.

A couple of out-of-the-box ideas, then I will stop. In the last decade, U.S. companies have cut the amount that they invest every year in training their workers by half. So companies just simply are investing less money training their workers every year than they used to, and that is a key source of competitive advantage for our economy.

The reason they are doing that is because workers are staying much shorter periods of time with any one employer. The amount of time an average worker stays in a company has fallen by about 45 percent. I would suggest that Congress should consider expanding the research and development tax credit into what could be called a knowledge tax credit, and companies could get an R&D credit for both conducting R&D as well as expenditures on workforce training. I would also encourage you to think about a patent box, as many of our other competitor nations have done.

Thank you very much.

The CHAIRMAN. Thank you, Dr. Atkinson.

[The prepared statement of Dr. Atkinson appears in the appendix.]

The CHAIRMAN. Dr. Foster?

STATEMENT OF DR. J.D. FOSTER, NORMAN B. TURE SENIOR FELLOW IN THE ECONOMICS OF FISCAL POLICY, THE HERITAGE FOUNDATION, WASHINGTON, DC

Dr. FOSTER. Thank you, Chairman Baucus, Ranking Member Hatch, members of the Finance Committee. Thank you for the honor and opportunity to testify today.

There is much the Federal Government could do to help the manufacturing sector today and the economy overall, a list that need not fall back on policy gimmicks. We would do well, for example, to take a long holiday from all the tax holidays. The Federal Government should adopt, in my view, a very simple guiding principle for deciding what to do for manufacturing and the economy overall. That principle is: do less harm.

There is very little new policy government can do at this stage to help the manufacturing sector recover, and a great deal of intended help that would harm, either by raising the budget deficit to no good effect, or by creating more uncertainty and less clarity, and thereby slowing the natural recovery process. Do less harm means getting spending under control and thereby cutting the budget deficit.

Americans are worried about spending and the deficit, and that worry by itself is holding us back. Do less harm means policy-

makers should stop threatening higher taxes on anyone. We can have debates about who should pay what, once we have returned to full employment.

In the meantime, the threat alone is debilitating to jobs. Do less harm means policymakers should stop meddling with the economy. There is almost no limit to the harm Washington can do to the economy in its efforts to do something for the economy.

The patient is in recovery, slowed by the incessant proddings and procedures of Washington's policy doctors. The patient—that is, the economy and the manufacturing sector in particular—does not need another procedure or new nostrum. Let it heal. Do less harm.

In this vein, businesses do not need new tax incentive trinkets to encourage them to invest today. To contribute to a more rapid recovery, a strong economy, including the manufacturing sector, businesses basically need two fundamental changes in tax policy: more tax certainty and fewer fundamental tax distortions.

The foremost threat to certainty today is the President's repeated insistence that certain individual income tax rates must go up. These rates are the rates paid by all successful profitable job-creating businesses, including smaller manufacturers that are not C corporations. A jobs policy of taxing job creators more is a paradox, to say the least.

The Federal income tax itself is rife with distortions, so the growing interest in revenue-neutral tax reform is most welcome. But businesses do not need more tax distortions, they need a tax code that imposes fewer distortions to the economic decision as to how much to invest, where to invest, what to produce, and how to finance their operations. In short, businesses need a neutral tax system, not a newly biased one.

President Obama is to be applauded for his past support for broad expensing of capital purchases. But, Mr. Chairman, expensing is not a tax incentive. Language matters. In this case, the language itself is distorting how we think about tax policy. Expensing and accelerated depreciation are not tax incentives, they are a policy that eliminates a clear tax bias against business investment and would help the manufacturing sector toward faster productivity growth in the long run.

Unfortunately, expensing's effectiveness has been substantially diminished under current circumstances, specifically extraordinarily low interest rates and the depth and duration of the recession. It is far less a stimulus policy than it is a long-term growth policy.

In contrast, if Congress offers special tax goodies to preferred industries, like the new wards of the State known as renewable energy, then to be sure those industries will provide the expected assurances as to what they will do with the tax goodies and all the good that will follow from them. Few turn down an apparently free lunch.

But there is no confidence in these assurances. On balance, the economy will not be strengthened, thereby the Nation's resources will be put to less productive uses, and yet another industry will become more attentive to Washington's goody bag than to their customers and workers.

In addition to moving toward a neutral tax base, business investment would accelerate over time if tax rates for both the C corporations and all other businesses were reduced substantially. Again, President Obama is to be applauded loudly for his framework for corporate tax reform featuring a 28-percent top corporate income tax rate. This framework may well prove a landmark event in American tax policy.

While there is much else in his framework that would do enormous harm to the economy, the critical centerpiece of the proposal, which should not be lost in these details, is a drive to lower the corporate income tax rate. The President's framework to reduce the corporate tax rate, while welcome, is nevertheless curious when considered alongside his proposal to increase significantly the tax rates paid by other businesses.

One might easily surmise, all protests to the contrary notwithstanding, that the President has an appropriately high regard for the economic importance of large corporations and curiously little or no real appreciation of the importance of smaller businesses to job creation and dynamism.

In light of the ongoing high unemployment, policymakers should be keenly focused on what they can do to help the economy recover, and the manufacturing sector in particular. But they must also recognize the limitations of new policy. Tax gimmicks are of value only in slaking politicians' natural desire to be seen as doing something, anything. Though it may require a difficult discipline to implement, government's guiding principle today should be simplicity itself: do less harm.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Dr. Foster, very much.

[The prepared statement of Dr. Foster appears in the appendix.]

The CHAIRMAN. Dr. Hanlon?

STATEMENT OF DR. MICHELLE HANLON, ASSOCIATE PROFESSOR OF ACCOUNTING, SLOAN SCHOOL OF MANAGEMENT, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE, MA

Dr. HANLON. Chairman Baucus, Ranking Member Hatch, and distinguished members of the committee, thank you for the opportunity to testify before you today.

The main point of my testimony is that the responsiveness to tax policies, including policies related to investment, can be affected by financial accounting implications of those policies. As you know, publicly traded companies are required to compute income under two separate sets of rules. They compute taxable income on their tax returns and report those to the tax authorities. They also compute financial accounting income under Generally Accepted Accounting Principles and report those to the SEC and external stakeholders.

Whether, and how, a public firm's response to a tax policy incentive will be reflected on their financial accounting statements is an important factor that they will consider. I would like to first offer some general examples of the importance of financial accounting to managers of publicly traded companies.

One example is found in a study of companies accused by the SEC of fraudulently overstating their accounting earnings. It turns out that these companies also overstated their income to the IRS and paid taxes on their inflated accounting earnings. This suggests that these companies were willing to pay substantial sums of cash taxes to report higher financial accounting income.

A second example is found in a recent survey of tax executives of publicly traded companies. Eighty-five percent of the tax executives said that top management at their company views the accounting effective tax rate as being at least as, or more important than, the actual cash taxes paid.

To illustrate the financial accounting effects of tax policy, my written testimony discusses three current tax policies related to investment. As you know, the U.S. has one of the highest statutory corporate tax rates in the world, with a top rate of 35 percent. Rather than reducing our corporate rates, our policies have instead included targeted tax provisions such as bonus depreciation in section 199 and attempts to reduce economic effective tax rates and promote investment.

In addition to a high corporate statutory tax rate, the U.S. has a worldwide tax system with deferral which has, in part, led to U.S. multinational corporations holding a great deal of cash overseas. Financial accounting has affected corporations' tax policy responses in each of these cases.

Because the details can become technical, quickly I will discuss in depth only one of these examples today: accelerated depreciation, which includes bonus depreciation. Accounting earnings are computed using the accrual method of accounting. This means, for example, that expenses are recorded in financial statements when incurred, regardless of when the cash is actually paid.

The same method of accounting applies to the accounting for income tax expense. In the case of depreciation, most companies use straight-line depreciation for book purposes and accelerated depreciation for tax purposes. Thus, the tax deduction for depreciation is larger than the expense for financial accounting in the early years of the assets' life.

However, this is only temporary in nature, because the same amount will be depreciated for financial accounting and for tax purposes over the life of the asset. The deduction is just faster for tax than it is for book.

To compute the income tax expense for financial accounting purposes in this case, the accounting rules require expensing not only the cash taxes actually paid, but accruing and expensing the future taxes that will be paid because a company used that tax shield early. Thus, accelerated or bonus depreciation does not reduce a firm's accounting income tax expense, it will not reduce their reported effective tax rate, and it does not increase reported accounting earnings relative to a world without accelerated depreciation for tax purposes.

When asked, corporate management will often reveal a preference for a rate cut over bonus depreciation for several reasons, one of which is that there is no reduction in income tax expense on the income statement, but there would be with a rate cut.

In addition, empirical evidence on the responsiveness to accelerated depreciation relative to the investment tax credit, which did reduce financial accounting income tax expense, reveals that the responsiveness to the credit was greater, holding the present value of the cash tax savings constant.

This evidence suggests that the accounting effect is important and serves to mitigate the responsiveness to accelerated depreciation, because there is no financial accounting benefit.

In conclusion, the main point of my testimony is that, what many consider to be cosmetic accounting effects actually play a role in the responsiveness to tax policy. These financial accounting implications can often mitigate the effectiveness of policies such as bonus depreciation for public firms.

In addition, as I discuss more fully in my written testimony, sometimes the accounting implications lead to other unintended consequences, such as exacerbating the tax incentives for U.S. multinationals to leave cash overseas.

In addition, at times concern over the accounting implications has caused tax policy to be enacted in a particular way, as was the case with section 199. In sum, it is important to recognize that both tax and financial accounting effects are included in the set of factors that public corporations consider in their decision-making process.

Thank you for inviting me to testify today. I look forward to your questions.

The CHAIRMAN. Thank you. That is very interesting.

[The prepared statement of Dr. Hanlon appears in the appendix.]

The CHAIRMAN. I would just like to ask the other witnesses—in fact, all five of you; it is just hard to ask all five in a short period of time—the degree to which accounting decisions trump tax decisions made by corporate executives, multinationals. I mean, is this minor? Is this significant? I will start with you, Dr. Gravelle.

Dr. GRAVELLE. I tend to be a little skeptical of evidence that is from a survey. I think also I would like to be clear what the trade-offs are. But, I think there is some reason—I have heard Michelle speak, and many other people, that these accounting measures do matter.

I mean, it is a simple enough matter to substitute a credit for bonus depreciation. You would need to do a different one for each class, because a flat investment credit is very distorting, and you are not going to be talking about anything in the magnitude of 10 percent, not with our low tax rates, without getting into negative taxes. So, you know, it is possible to design something.

The CHAIRMAN. Let me ask the others. Dr. Brannon?

Dr. BRANNON. I think it does matter. I have been reading Michelle's work for some time, and it is uncomfortable for an economist to admit that at times companies do something other than maximize their real or economic profits. I think there is definitely something to that.

The CHAIRMAN. Dr. Atkinson?

Dr. ATKINSON. I think that there is something to that. I do not think it is as big as some people say. Studies show that there is elasticity of response to tax incentives. One other key thing we should consider when we think about this is, there is considerable

evidence that there are externalities from investment, so companies rightly do not care about externalities. They do not care whether their investment helps other companies.

But there are clear externalities on the order of 1:1, so, with the benefits that a company gets from investment incentives, it does not get another one unit of benefits. Therefore, companies inherently will be less supportive of investment incentives than they might be if we considered these.

The CHAIRMAN. Dr. Foster?

Dr. FOSTER. Yes, Mr. Chairman. I think when a decider says something matters in his decision process, you have to presume that it matters in his decision. Corporate executives say tax accounting issues are relevant to the investment decisions they make. I think we have to take their statements at face value, that there is some truth to them. Even though it flies in the face of standard economic theory, the statement regarding the importance of accounting rules for investment decisions is consistent with other economic approaches; that is, there is a reasonable formulation under which the importance of tax accounting rules makes perfect sense.

There are, in fact, fairly good theoretical explanations for why tax accounting is also relevant to the decisions of large multinationals alongside the economic considerations, and these are basically that the CEO has a somewhat different time frame in mind, and a fundamentally different goal in mind—maximizing economic profit.

The CHAIRMAN. Let me ask this question. You have already spoken, Dr. Hanlon, so I think I know your answer. I wish we had a lot more time here.

To what degree do tax consequences affect a company's decision to manufacture in the U.S. or someplace else? There are a lot of factors. Taxes clearly are a big one. But there is political stability, transportation costs, labor force quality, wages. I mean, there are lots of factors. To what degree do the changes we are talking about here encourage manufacturing, and to what degree are there really lots of other factors that really matter?

Dr. GRAVELLE. There is actually a lot of evidence on the substitutability of capital across countries. It is large. It is large elasticity, as economists would say, but it certainly is limited in scope. Again, that is why I found a very small effect from changing the rate.

Again, let me remind you of that number: two tenths of 1 percent of GDP. So the evidence—we have a lot of empirical evidence that there is a limited mobility of capital, and there is also a limited response of investment, because you have to combine capital with labor and inventories and other things in order to produce, and all of those make the effect smaller.

The CHAIRMAN. Dr. Brannon, your thoughts?

Dr. BRANNON. Obviously, there are lots of things that go into it.

The CHAIRMAN. To what degree are taxes a factor?

Dr. BRANNON. I think it is a factor.

The CHAIRMAN. Compare the current regime, if we talk about some of the changes that were discussed, maybe broaden the base, lower the rate, et cetera.

Dr. BRANNON. If you lower the rates by 10 percent, I think you definitely see a boost in investment and manufacturing here. By what standard, I do not know.

The CHAIRMAN. That raises all the questions about, what are the distortions that that would cause, if you take away accelerated depreciation and 199 to pay for it, right?

Dr. BRANNON. I agree, yes.

The CHAIRMAN. All right.

Dr. Atkinson?

Dr. ATKINSON. The evidence is pretty clear that higher corporate taxes in the U.S. reduce investment, and they reduce foreign direct investment coming into the U.S., and that effect has grown over time. I think one of the problems when most economists study this is, they do not think about the fact that we are in a traded, globalized economy, so taxes matter because they determine where companies make investments.

The CHAIRMAN. Do we race to the bottom?

Dr. ATKINSON. I do not see it as a race to the bottom. I see it as a race that, if we do not compete in it, we will go to the bottom automatically. The reality is, countries are increasingly having a hard time taxing internationally mobile activities. That is just the reality. That is why the Europeans have moved to much more consumption-based taxes, and many countries have done that. We call that a race to the bottom. I just think it is the reality.

The CHAIRMAN. My time is expiring. It has expired. But what about consumption taxes? Is that part of the solution here?

Dr. ATKINSON. I think it should be. I think we should consider a border-adjustable value-added tax, or a business activity tax of some kind. The advantage of a consumption tax is, you could use it to lower corporate rates, and you can make it also border-adjustable.

The CHAIRMAN. Any other panelists agree? Raise your hand if you do. Anybody disagree?

Dr. GRAVELLE. I think you have to be very careful for distributional reasons in embracing a value-added tax without looking carefully at that issue.

The CHAIRMAN. Can that be accomplished?

Dr. GRAVELLE. If you want to raise tax rates somewhere else and give a rebate. But a value-added tax can never be progressive like an income tax at the top.

The CHAIRMAN. I understand. But my time has expired.

Senator Hatch?

Senator HATCH. Well, thank you, Mr. Chairman.

This question is for Dr. Hanlon. In your testimony you note that, simply because of the way the tax code and the financial accounting rules interact, lowering the U.S. corporate tax rate can cause a 1-time reduction in a company's reported earnings.

Now, this is potentially important because a hit to earnings would also mean a hit to earnings per share, which can affect the stock price. Now, I am very supportive of a corporate tax cut. Moreover, I would think that the capital markets are sophisticated enough to understand this in context. Am I right on that, or is this something we should be thinking about as we consider how to im-

plement a corporate tax rate cut, and, if so, what should we do about it?

Dr. HANLON. Yes, you are right that there is a subset of companies that has significant deferred tax assets on their balance sheet that would, if we implemented a corporate tax rate cut, have a hit to corporate earnings. That is basically because now those deferred tax assets are valued at that lower tax rate. That is essentially why that happens. That is only a 1-time hit to earnings. Hopefully you are right, the capital markets would figure out that this happens just due to a cut to the corporate tax rate.

In my opinion this should not stop the U.S. from reducing the corporate tax rate. I do not think that should stop us. Other jurisdictions, such as the United Kingdom and the State of Ohio, have implemented methods to gradually reduce the corporate tax rate over time, or different strategies, so it is less of an impact on those companies with significant deferred tax assets.

Senator HATCH. Right.

Dr. Gravelle, you noted that the domestic production deduction has been criticized as distorting the tax treatment of different industries by granting differential tax rates. It creates administrative and compliance problems, both in distinguishing domestic content and identifying eligible activities.

But is that not what President Obama's framework proposal for corporate tax reform does? That is, is the President not proposing to have the corporate tax rate on manufacturing lower than the corporate tax rate on other sectors of the economy?

Dr. GRAVELLE. Well, that is my understanding. In his outline he says 25 percent, I think, for manufacturing and something like 28 for everybody else. I do not know whether he is planning to do that through the domestic activities production, the existing one, or how. But, yes. Anytime you want to have a different rate for different industries, it is going to create administrative problems.

Senator HATCH. That does not make sense to me.

Let me go to you, Dr. Atkinson. In your written testimony you advocate that Congress should not be focused on reducing distortions in the tax law, but rather that Congress should be focused on spurring the effective creation of new goods and services, and on spurring increased activity. I have been pleased, along with the chairman, to be a strong supporter of the R&D tax credit. We would like to make that permanent, and for the very reasons that you cite.

The R&D credit increases R&D closer to optimal levels, in my opinion. That said, I wonder if you would put us on a slippery slope where all sorts of tax expenditures become justified. That is, there will always be some lobbying group that will justify some particular tax expenditure, and Congress does not have a great record in resisting such lobbying groups. So, give us your thoughts on that, will you?

Dr. ATKINSON. Well, thank you, Senator. Absolutely, there are many distortions in the tax code that are not pro-growth. I think some of those were mentioned here. I did not imply that we should be embracing all distortions, but rather that some distortions are pro-growth.

The Research and Experimentation tax credit has actually been called, by some economists, a distortion. I know you and Senator Baucus are huge supporters of it, as ITIF is. I do not see the R&E tax credit as a distortion, I see it as a way to correct a market failure, in that companies under-invest in R&D. I think the same is true with the investment tax credit. Again, there is a lot of evidence that companies have big spill-overs when they invest in new machinery.

With regard to the manufacturing or domestic production deduction, my only point there is that we have to recognize that there are sectors of our economy that face intense international competition, and they can and do easily move in response to that. There are other sectors of our economy that do not face any competition and will never move, and therefore we should be reflecting and thinking about that when we craft a tax code.

Senator HATCH. Thank you.

Dr. Brannon, in your written testimony you advocated for full expensing. That is, the immediate full deduction of capital goods. In justifying that, you noted that the current depreciation schedules are "complicated, arbitrary and often nonsensical." My question is this: if Congress could make them less arbitrary and more reflective of economic reality, would you still advocate that the cost of capital goods be immediately and fully deducted?

Or perhaps you find this question excessively hypothetical. Perhaps, somewhat inevitably, the depreciation schedules will always be arbitrary and complicated. Thus, we are better off going to complete and full expensing. Could you give us your thoughts on this?

Dr. BRANNON. Sure. So, like Rob, I think that the research and experimentation tax credit was a boon for the U.S. manufacturing sector. The problem is, it is a little antiquated, and it could be tightened, and it could be made a lot more effective.

Senator HATCH. We can make it a lot better.

Dr. BRANNON. It is very difficult, I think, with all the political exigencies that exist, to maybe make that what we really want. So it seems to me that, kind of to untie the Gordian knot, the most simple thing to do to really encourage investment in manufacturing, and investment across the board, would be to simply go to full expensing. So, if we did have some magic wand, and we could make depreciation schedules that magically matched up to what the reality is, I would still want to have manufacturing incentives or investment incentives.

Senator HATCH. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you. Thank you very much, Dr. Brannon. Our next in line is Senator Grassley.

**OPENING STATEMENT OF HON. CHUCK GRASSLEY,
A U.S. SENATOR FROM IOWA**

Senator GRASSLEY. I am going to ask for a response in writing because I have a statement prefacing my questions, and it is going to take too long to take away from my colleagues, so I would ask that, when I get to the end, I will tell you when the questions are coming.

As the tax reform debate continues, whether and how the tax code should incentivize capital investment in domestic manufacturing is obviously a hot topic, as it is here for this hearing. The tax code has tried to spur investment through accelerated cost recovery provisions, including the expensing provisions of section 179.

However, it is frustrating to see these provisions sometimes referred to as loopholes. Depreciation itself is not a loophole. For financial statement purposes, Generally Accepted Accounting Principles require that companies expense the cost of capital assets over their useful lives. Obviously, the goal of financial accounting is to properly match revenue and expenses so that third parties, including investors, have an accurate picture of a company's finances.

This goal conflicts with the goal of tax reporting, which is to minimize taxable income. Since depreciation deductions will always exist for financial accounting purposes, by default, a tax deduction should also always exist. The question to consider in the context of tax reform is whether that deduction should match financial accounting deductions, or whether that deduction should be accelerated, as it is currently. Given this, it is fair to say that the current tax code provisions for capital cost recovery, including accelerated depreciation, bonus depreciation, and even expensing, are not loopholes.

Last year I wrote to the President and asked him to define "loophole." I received a response from the Acting Assistant Treasury Secretary for Tax Purposes that stated the following: "We agree with you that tax expenditures are, in many cases, incentives that reflect intentional government policy. In this respect, they differ from pure tax loopholes, which are unintentional benefits derived by taxpayers who may have found a way to game the system."

Mr. Chairman, I would like to have consent to include my letter to the President and the Treasury Department response in the record.

The CHAIRMAN. Without objection.

[The letter and response appear in the appendix on p. 81.]

Senator GRASSLEY. You would think from this response that the President agrees that capital cost recovery provisions in the tax code are not loopholes. Yet the President, both in his recent budget proposal and his tax reform framework document, singles out the depreciation life of general aviation aircraft as a loophole, as just one example.

This type of approach to tax reform is not helpful. True tax reform requires us to consider the evidence that suggests that accelerated cost recovery provisions may not incentivize additional investment. This evidence should be balanced, however, with a consideration that small and medium-sized businesses may actually make investment decisions based upon cash flow.

Continuing to allow expensing would mean that a company might choose to spend dollars on capital investment sooner and defer payment of taxes. In addition, as Dr. Gravelle notes in her testimony, expensing also simplifies compliance for small business.

Separately, to the extent that accelerated depreciation is retained, we should consider what the most effective way to determine asset lives is. In the 1986 Tax Reform Act, Treasury was au-

thorized to determine tax asset lives. This authority was repealed 2 years later.

Over the last several years, we have seen an uptick in lobbying to change the tax code asset lives for assets in various industries. Aside from the President's focus on aircraft depreciation, there are temporary provisions regarding racetracks, restaurant improvements, and even agricultural equipment.

The listing of asset lives in the tax code stands in stark contrast to the financial accounting practices. There is no master list that dictates the useful life of an asset. Companies make judgment calls which are reviewed by independent auditors.

So, the question that I want to refer to you is this. This raises the question of, what is the most effective way to determine asset lives for tax purposes? Should Congress continue to be responsible for this, or would it make sense to reauthorize the Treasury Department, or possibly look at an independent panel of experts to periodically review asset lives?

Lastly, in addition, for financial accounting purposes, if the value of a tangible or intangible asset becomes impaired, the impairment loss is recognized when the asset is impaired. In contrast, for tax purposes the impairment loss generally is not recognized until the asset is disposed of or abandoned. So, lastly, does it make sense for the tax code to include the concept of impairment? As I said, I would appreciate answers in writing.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator.

Next, Senator Coburn.

Senator COBURN. Thank you. I appreciate so much the work that the Congressional Research Service does. Thank you for what you do.

I want to kind of go back to the underlying aspects of capital formation. If we did not have a tax code, what we would want is people making capital investments based on the greatest return of that capital. Does anybody disagree with that? I mean, that is what basically business does. If there is no tax implication, then they are going to make an investment based on the return of that capital investment, correct?

Now, we do not have it that way. We have, number one, comparative tax rates because we are in a global economy. What influences capital investment is the return net of tax, or through accelerated depreciation net of tax. Has anybody looked at what rate the corporate tax rate would have to be to have the minimal amount of influence, given the global environment that we have, to where we did not pick winners or losers, or we did not say we want to incentivize R&D?

Sure, we want to incentivize R&D, but we do not want to incentivize it any more than the individual who is in that area wants to make more money. So, has anybody looked at what the tax rate would need to be in this country to throw off that effect of taxes influencing capital investment? In other words, would it be zero? Would it need to be zero before we have the tax effect play no role? Dr. Gravelle?

Dr. GRAVELLE. Well, I think it would be very hard to make it be zero, because you have unincorporated businesses, and problems with separating capital.

Senator COBURN. Well, let us talk about C corporations for a minute, not S corporations and not LLCs.

Dr. GRAVELLE. So, if you set those rates at zero, then you would have big incentives to organize as incorporated businesses. So the only way you can be sure to get equal treatment for all investments is to have no taxes. So, short of that, what we need to do is try to make those taxes equal everywhere.

So, if you think about manufacturers, they benefit from some things, like accelerated depreciation, the production activities deduction, but they also are not as beneficially treated as owner-occupied housing, not as beneficially treated as intangibles, including marketing cost.

So I think you cannot say we have to get the tax rate really low. You have to think about trying to make it even everywhere. I think on the international side, you can either lower the tax rate here, or you can raise it on our firms. I mean, both of those will work to even out tax rates.

Senator COBURN. Dr. Brannon?

Dr. BRANNON. So, in 2007, I was a staffer at the Treasury Department at the time, and I was one of the authors of the 2007 Treasury study on corporate tax reforms. One of my tasks was to interview a whole mess of manufacturing firms, and other firms, and ask them, what tax rate would you be okay with if it came with eliminating all special investment incentives? And almost everyone gave the same answer: if it got down to 20 or 19 percent, we would not complain about everything else.

So I think Dr. Gravelle is right, you are always going to have some incentives. There are always going to be companies that will make decisions based on even a 10-percent tax rate. But I think a corporate tax rate below 20 percent, 20, 19 percent, I think you would see a lot of companies being okay with getting rid of a lot of these special incentives.

Dr. ATKINSON. I would agree with Dr. Brannon that it would be good to get that rate down to that level, and have incentives, but I think the notion that we can get equality—I think we are never going to get equality because we now live in a global economy, and every other country is going to have a different rate. They are going to have different incentives on different things.

Lastly, I would argue there is a lot of economic literature with regard to the optimal amount of corporate R&D that is being conducted in the United States, and much of it finds that corporations under-invest in R&D by at least a factor of one.

So, in other words, there should be double the amount of corporate R&D. To maximize societal welfare, you want to invest up to the return—the societal return, not the firm return. With R&D in particular, the reason we have an R&E tax credit is because companies do not get all the benefits. They spill over. Other companies use that knowledge, that innovation. So I think, Senator, in some areas it is important to have a differential in the tax code, because companies will not maximize societal economic welfare without it.

Dr. FOSTER. Senator, as Dr. Gravelle noted, you have to have a zero rate to have zero effect, and, if that is not practical, then the question becomes how best to look at tax distortions. To get to the spirit of your question, the answer is that taxes affect decisions at the margin, and so that is where you have to look.

So, if I am talking about a difference between a 10-percent rate and a 15-percent rate, I should expect a certain differential amount of economic damage, a certain amount of reduction in investment, which would be a very, very small amount relative to the difference in damage between a rate between 20 and 25. So, as the rate goes higher, the damage rises more than proportionally.

Well, where does that leave us? It leaves us with at least an attempt to get towards neutrality across countries in the distribution of the harm done to our economies.

The average statutory tax rate of the OECD, excluding the U.S., is about 25 percent. So that becomes a pretty good target, inclusive of Federal, State, and local taxes. Remember, State and local tax is another 4 percentage points on top of the Federal rate. So we need to get the Federal rate way down to get the combined rates below the OECD average, and that should be a minimum goal.

Senator COBURN. Dr. Hanlon?

Dr. HANLON. In general, I agree in principle with all these statements. Basically, the companies will maximize their after-tax return. In that sense, tax is not that special. They are going to maximize their returns, considering all their expenses. We just need a rate that makes them competitive in this global marketplace and a system with the fewest distortions.

Senator COBURN. Mr. Chairman, I would like for them to address in writing, if they would, the effect of our non-territorial tax system on both the global effect, and the investment in capital in this country at this time.

[The answers appear in the appendix.]

Senator COBURN. I would also note for Dr. Hanlon, when I graduated from Oklahoma State University I got the Arthur Andersen Award for the top accounting student. [Laughter.]

The CHAIRMAN. Why are you here? [Laughter.]

Senator COBURN. My wife asked me that question Sunday before I left. [Laughter.]

The CHAIRMAN. Senator Rockefeller?

Senator ROCKEFELLER. Actually, Dr. Coburn, that is very impressive. Congratulations.

I am interested generally in the behavior of corporations large and small. I want to start just with a statement. I think it was you, Dr. Brannon—it may have been you, Dr. Atkinson—who said that companies were simply not giving enough training to the people they already have. This is not tax policy.

For example, I am thinking of Toyota. When they are here, they send scads of the American workers over to Japan for a number of weeks, maybe a month or two, to learn the Toyota way of doing things. I would think that, forget the R&D tax credit for a moment, that corporations would want to train their people. I mean, why is it—to whomever made that statement—true? Why is that happening? Yes?

Dr. ATKINSON. Well, I made that comment. I think it is happening for two main reasons. One is that, according to the Bureau of Labor Statistics, the average worker tenure—in other words, the time they spend with a particular company—has shrunk by about 40 to 45 percent over the last—

Senator ROCKEFELLER. From what to what? How many years to how many?

Dr. ATKINSON. It was something—I am going to get it wrong. Something around 6 to 4. So, 6 years to 4 years. So, if I invest in training a worker at ITIF, it is just like buying a machine. I get annual returns from that training, but I do not get it all in the first year.

Let us just say the returns are over 8 years, but the worker leaves after 2. I have only gotten a quarter of those returns, and whoever that worker goes to work for gets the other portion of it. So, in that sense, it is similar to research and development. Training produces a positive externality.

The other reason companies have cut back on that is U.S. companies have become much more short-term in their focus. They are pressured by the markets to get very, very short-term returns. Training is not a short-term return, it is a stream of returns over the long run.

I would argue companies like Toyota, Japanese companies, German companies, are less pressured for short-term returns, which is why they invest more in training than American companies do. That is why I would suggest a tax provision might be a way to correct for that.

Senator ROCKEFELLER. All right.

Let us go to the tax credit itself, because it is interesting. What is it that actually makes a corporation do something which it otherwise was not going to do anyway? Obviously you arrive at that point through taxes and other things.

But the last figures, at least that I have, for 2005 show that about half of the R&D tax credit went to businesses which earned \$1 billion or more. It would seem to me that they would be less inclined to respond to that—I may be wrong—than, let us say, a smaller business, which makes up the larger part of the employment in this country.

Now, I agree I am not putting in the international factor in this question, but what would happen, for example, if you did put the R&D tax credit all up front? I mean, it costs about \$3 billion a year to do it, right, or \$30 billion over 10 years to do it? Three billion a year is not an enormous amount, but it would seem to me that that would make a really strong incentive to, particularly, mid-sized and smaller companies that were not going to be buying that machinery anyway, or whatever that investment would be. It makes sense to me. It makes sense to me.

Now, maybe Chairman Baucus is blanching at the \$30 billion, but I am just trying to think of the effect on companies. I would think that would be very helpful. Any of you?

Dr. ATKINSON. Senator, when you said—I am a little unclear what your change would be. You said—

Senator ROCKEFELLER. That you do not do it over 10 years, you do it right up front.

Dr. ATKINSON. In terms of, they can take it all at once?

Senator ROCKEFELLER. Yes.

Dr. ATKINSON. Well, I think—

Senator ROCKEFELLER. I mean, if they purchase something, machinery or whatever.

Dr. ATKINSON. Oh, on machinery? I would agree with that, that if we let companies expense machinery all up front they will invest more in it, and that we will have a more productive and higher-wage economy. Yes, I would agree with that.

Senator ROCKEFELLER. Well then, quickly, the bottom line is totally crucial, but for GE, for example, or a small mining machinery company in West Virginia or something, what makes them do something? It is not just tax policy.

People start up, and they have a ferocious desire to contribute to something, or they are very smart. Yes, sometimes they get these tax credits, and then they develop their product, and then they sell it off to somebody else so they can produce it often overseas. That is not such a good idea.

But it is just—I do not understand corporate thinking to move from this level to this level. Do you have to do it through adjusting the tax code, or is it sometimes just not very visionary leadership, or are they just accustomed to getting it for the last 30 years, whatever it is, so that they just are in that mood, waiting to receive? My question is opaque, but meaningful to me.

Dr. ATKINSON. I guess, just very quickly, the research shows fairly convincingly—from economists, at least—that the research and development tax credit or R&E tax credit actually does spur an additional amount of corporate R&D, including in big companies and small companies. So I agree with you, Senator, there are multiple factors as to why there are problems with U.S. competitiveness, and the tax code is only one of those, but I do think it plays some role.

Dr. GRAVELLE. I understand you to be talking about investment in capital equipment as well, right?

Senator ROCKEFELLER. Right.

Dr. GRAVELLE. The problem is, if you wanted to turn accelerated depreciation into an investment credit, you could do it. Some of these young new firms that you are talking about are not going to benefit from any of it because they might not have tax liability.

A credit, you could make refundable if you wanted to. It is flexible that way. You would have to figure out the discount right, so there is nothing easy about it. But it is certainly possible to convert any subsidy, bonus depreciation, anything, into a credit—a present-value credit, I mean. According to Michelle's research, that might work better. I am not sure. I like to believe that corporations are profit-maximizing, otherwise I feel very uncertain about my profession. I hope that is what they are doing.

Senator ROCKEFELLER. But I do not want you to feel uncertain about your profession.

I have gone over my time. Thank you, Mr. Chairman.

Senator HATCH. Senator Cantwell?

Senator CANTWELL. Thank you, Mr. Chairman, and thank you to all the panelists. Dr. Atkinson, thank you for being here this morning.

I feel like one thing I learned being in the private sector is that you can design products and features and you can say, this is what we want to attack, and this is what we want to do. But, if you have not properly assessed the environment in which that product development is happening, then you may miss the fundamentals of what you are trying to achieve.

It seems to me that your testimony today has hit on the fundamentals of what we are looking at here in the tax code debate, not about this tax versus that tax, or longevity, or what have you, but what environment are we in.

You clearly outline that we are in an Information Age environment where innovation can flow to anywhere it wants, and that the tax codes and policies of these various nations are attracting more on the manufacturing side than we in the United States. In fact, we are losing on the manufacturing side. Thank you for your innovative ideas on the patent box and what you just said about the R&D tax credit as it applies to training.

So my question is, how can we put a model to the outcome of those policies that you are suggesting in the context of getting people to better understand what is at stake? I know you had one ratio in there, on some nations a 1:3 ratio, or 1.5:3 ratio on changing the tax code. But could we say on this tax credit, as it relates to putting manufacturing under R&D, here would be the yield so that we could better move forward on these policies?

Dr. ATKINSON. Is your question sort of, what kinds of real outcomes should we be striving for and be able to measure?

Senator CANTWELL. It is very frustrating to live in a—in Washington State, we know that we need 20,000 aerospace jobs in the next 10 years, plain and simple. We could probably come up with a whole host of other jobs, so to me it is very clear.

It is frustrating to know that, and to then come here and say, well, why can we not get more on job training, knowing that we have lost some of the edge in manufacturing? So what output could you put to this R&D tax credit expansion to job training that would give my colleagues some confidence to move forward on that kind of idea?

Dr. ATKINSON. Well, I think what we could try to have, as a goal, is to restore corporate business training in workers, as a share of the economy, back to where it was a decade ago, and try to get that done within 5 years. To me, if we could do that, we would be a much more competitive Nation, so companies like Boeing, Intel, and a whole lot of other companies, who are already training their workers, would be able to do more, and would do more, and we would become more competitive.

I think the same thing is true with regard to R&D. U.S. companies have expanded their corporate R&D over twice as fast overseas as they have here domestically, and in part it is because our R&D credit, frankly, is not very generous anymore. We are 23rd now in the world. So we have not kept up, and I think if we did we would see real measurable outcomes.

Senator CANTWELL. So on the training, get it back up to the level of investment, is that what you are saying?

Dr. ATKINSON. Yes, up to the level of investment. The investment has actually dropped over the last 10 years, and I think a goal for

our Nation could be to get it back to where it was 10 years ago, so that companies are just putting more money into getting their workers higher skills.

Senator CANTWELL. When you look at this phenomenon, and you are saying an employee is spending less time at a company, what do you think that phenomenon reflects?

Dr. ATKINSON. Oh, I think it reflects two things. I think it reflects, on the one hand, workers who just have, because of the way the economy has evolved, less of their own loyalty—they want to move along. And at the same time I think it reflects companies having less loyalty to their workers. That is just the way the economy has evolved.

Companies, 2 decades ago, were very, very recalcitrant to lay off workers because they did not want to lose those skills. If you compare that to Germany, for example, German companies tend to retain workers because they have put all this money into their workers in training, and they do not want to lose them, so they tend to retain them more. U.S. companies do not do that, again, partly because of short-term financial pressures.

Senator CANTWELL. But do you think that the R&D credit for training would shore up both the security of the employee and the employer's investment in that employee?

Dr. ATKINSON. Absolutely. I think it would do two things. The company now would have more at stake, if you will, more investment in that person. They would be less likely to let them go unless they really had to.

But the second thing it would do is, even if the company had to let workers go—and that happens all the time for business reasons—the worker themselves would have better skills, stronger skills, and it would be easier for them to go and get another job at a comparable wage.

Senator CANTWELL. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator.

Senator Wyden?

Senator WYDEN. Thank you very much, Mr. Chairman.

Let me ask this question of you, Dr. Gravelle, because, with your textbooks and the writing you have done, you constantly keep coming back to a concept that seems to me to make a lot of sense, and that is to simplify the system and try to reduce some of the gaming that goes on with it.

I want to ask you about deferral to start with. I mean, here we have this tax code that in effect creates an incentive for an American company to do business overseas. Because of that, and the concern about it, we try to kind of fix it by, in effect, inserting tax breaks like section 199 that seek to encourage American companies to base their operations in the United States.

Would it not make more sense to kind of junk all of this and figure out a way to come up with a sensible policy with respect to business? And I will not get you into the discussion about what the rate actually ought to be.

I will editorialize and say it has to be a competitive rate, but, just from the standpoint of simplicity, would it not make more sense to get rid of all this that in effect incentivizes deferral and

tries to compensate for it with section 199, junk that and just come up with a sensible and simple kind of process with one rate, adding my editorial judgment that it was competitive?

Dr. GRAVELLE. Well, I think if you just look at the outflow of capital, probably the best way to try to keep capital from flowing out of the United States is sort of a double-whammy, as you say: increasing the taxation of the foreign-source income of our own companies.

The President has proposed a minimum tax. You have provisions in the Wyden-Coats bill that will do that. Lowering the tax rate, that would shift the—right now we favor investment abroad compared to investment in the United States, within our own tax code and with our own multinationals.

So you would have to make sure that companies could not invert, and do things like that, but I think we have the tools to deal with all of that. So that is the kind of obvious way to encourage capital to stay in the United States without losing revenue.

Senator WYDEN. Well, thank you for your answer. You have done good work. We constantly refer to your books, which for all practical purposes are the texts in this area. But in terms of the concept—I mean, Chairman Baucus, Chairman Camp—as we get into all this, we are going to have a host of questions. But the fact that you have singled out simplicity is hugely important, and I really commend you for your work in this area.

I think it is highlighted by this issue with respect to deferral, and then trying to figure out, after we have created this incentive to go overseas, we are trying to play catch-up ball with section 199 to try to keep our jobs here. So, I thank you for it.

Dr. Foster, you and I have talked about these issues a lot over the years, and you too have done good work. I want to ask you about the question that I think goes to the heart of this debate, that we are going to have with respect to tax reform, and that is trying to do this piecemeal.

I continue to believe that we have to figure out a way to do the business code and the individual code at the same time. Because so many are concerned about trying to make their way in this broken, dysfunctional system, we just try to one day do the estate tax and one day do corporate tax, and one day this and one day that, and I think it just adds more complexity and more dysfunction to the system, and we have to get away from dealing with this piecemeal.

You have spoken and written on these kinds of issues in the past. What is your thought with respect to the upcoming tax reform effort and trying to do it in a comprehensive way, and that that really is the key to getting it done right?

Dr. FOSTER. Senator, I think the current tax code is profound evidence of the truth of what you said about doing it piecemeal. We have been doing piecemeal reforms now for a great many years, and what we have today is the result, and I do not think any of us are very satisfied with that result.

So the question then is, how big of a bite into the tax code do you have to take to make real, sensible progress? Do you do the whole thing all at once, a truly profound and massive effort? That would probably be ideal, because an income tax is itself an inte-

grated organic system. We would hope to have a coherent system when we were done with reform. The importance of coherence is underscored by the tremendously complex economy that is being influenced by the code today, and would be by the new code.

It is very hard to break off large chunks of the tax system, reform them in isolation, and produce anything sensible, and it is certainly very difficult to do it in the very small pieces that we have traditionally done. We can correct one small problem, and maybe we succeed, but we have probably created other problems elsewhere we did not know about until we enacted the new law and found the problems we have created.

Senator WYDEN. I very much share your view.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator.

Senator Carper?

Senator CARPER. Thanks. Thanks, Mr. Chairman.

To all the witnesses, welcome. It is good to see all of you today. Thanks for your input.

The first question. I often say that the role of government is to create a nurturing environment for job creation and job preservation. Our job is not to row the boat, our job is to steer the boat and make sure that we have that nurturing environment. I think the jobs in the 21st century are probably going to go to those who do the best job of creating a world-class workforce, and world-class infrastructure, broadly defined, and also certainty with respect to the tax code.

With that in mind, I would just like to ask you all to consider the difference between manufacturing output and manufacturing jobs. Over the past 3 decades, manufacturing output, as you know, has increased rather considerably, but manufacturing employment has declined rather considerably. Obviously, it is because we are more productive than we used to be.

But the recovery from the recent recession has not changed this trend significantly, although I am encouraged that we are starting to see emergence and creation of new manufacturing jobs in this country. But the manufacturing sector has grown, I think, about 17 percent since the depth of the recession, but employment in that sector has increased, I am told, by about 1 percent.

The most commonly cited reason, of course, is productivity. The U.S. has seen an increase in manufacturing productivity. Manufacturing output per hour has increased almost continuously since records have been kept, and that is probably a good thing, but then so are high-paying jobs, high-quality manufacturing jobs, a good thing.

So my question for—let me just pick on Dr. Gravelle and Dr. Atkinson and Dr. Brannon and ask, is there a way to resolve this apparent tension between productivity and manufacturing and growth? Is there a role for tax policy? If so, what shape should tax reform take? Again, let us just start with Dr. Gravelle, Dr. Atkinson, and then Dr. Brannon.

Dr. GRAVELLE. Well, I think that, first of all, the slow growth in jobs, again, if we have fewer jobs because we are more productive, then that is great. I mean, we used to have a large fraction of the

workforce in agriculture, and we do not have that anymore. So that in itself is not bad.

There is also a tendency, when people lose jobs, to not recover them. It is called hysteresis. There is a lot of discussion about that. I think that we need to look at trying to make our tax code simple and efficient, and that is really all we can do. We cannot move a mountain. You said, steer the boat versus row the boat. Well, the big work is rowing the boat, so it is very hard to do a great deal with taxes. But again, we need to make them simple, to make them efficient, to make them neutral, and to steer them towards any spill-over effects that you want to subsidize.

Senator CARPER. All right.

Dr. Atkinson?

Dr. ATKINSON. Yes, Senator Carper. I, like you, for a long, long time believed that most of the job loss in U.S. manufacturing came from productivity, and that is a very easy thing to say because the official top-level government numbers from the Bureau of Economic Analysis suggest that. Those numbers are wrong, I would assert, as we are releasing a report in 2 weeks showing as much.

If you know, there are what are called North American Industry Classification System (NAICS) codes. Chemicals is a NAICS code, computers is a NAICS code. Thirteen of those 19 NAICS codes saw absolute declines in output in the last decade, from 2000 to 2010. In other words, 13 of 19, which employ 55 percent of manufacturing workers, are producing less than they were.

We estimate, as I said earlier, that the actual output of U.S. manufacturing, when measured properly, did not go up 15.5 percent, as the Federal Government says, it actually fell by 11 percent. Now, again, that is a debatable point, but that is what we believe.

So, when you compare our productivity in manufacturing to other nations, we actually have very low productivity growth when you look at these numbers this way. We are behind the Germans, we are behind the Japanese, we are behind the Swedes. I think actually that is why I think the tax provisions that we are talking about here today could be so important. We need to get American companies to invest more in new machinery, more in equipment.

As I stated earlier, this is the first decade in American history where we have seen virtually no growth in manufacturing capital stock. How can American companies be more productive when the capital that they have is less than what it was a decade ago? I think the tax provisions, like accelerated depreciation or first-year expensing or an ITC, can play an important role there.

Senator CARPER. All right. Thanks.

Dr. Brannon, would you just briefly respond to the same question, please?

Dr. BRANNON. I think one thing to consider that goes a little bit beyond tax policy is, one of the reasons we have increased productivity so much in the United States is we have a very competitive retail market. There have been a lot of studies—in fact, some done by Democrats—suggesting that what has been driving productivity is that we have a wide-open retail market, that Wal-Mart, Target, and their presence have really pushed productivity in the retail

market, and that has pushed productivity down into the wholesale market.

This distinguishes us from most other countries, where a lot of the retail sector and a lot of the manufacturing sector is somewhat cosseted. So, certainly I think there is a tax aspect—we have talked a lot about it—but I think it is important to remember that, even if we are worried about specific jobs, the last thing we want to do is offer protection to specific industries.

Senator CARPER. All right. Thanks.

I have another question. I am going to submit a question in writing to Dr. Hanlon and Dr. Foster. If you all would just take the time to respond to me, I would be most grateful. Thank you very, very much. Nice to see you all.

The CHAIRMAN. Thank you, Senator. Did you want to ask that question? Go ahead.

Senator CARPER. If I could, that would be great. Thanks.

Members of this committee heard a great deal about whether the U.S. should adopt a territorial corporate tax system to replace the current worldwide system. Those who advocate a territorial system point out that it would make U.S. multinational manufacturers more competitive with foreign companies. I have to admit that I am interested in examining this approach. I think several of us on the committee are, Democrats and Republicans.

However, as you know, the critics of this approach and opponents argue that a territorial tax system would encourage companies to send jobs overseas to manufacture products that are shipped back to the U.S.

I would just like to ask Dr. Hanlon and Dr. Gravelle to just respond. What is your response to these criticisms? Is there a way to thread the needle and design international tax reform so that we gain the benefit of a territorial system but avoid any incentives for manufacturers to relocate domestic production overseas, which we do not want to do? Thank you.

Thanks, Mr. Chairman.

[The answers appear in the appendix on pp. 101 and 114.]

The CHAIRMAN. I have a question. I was confused. Dr. Atkinson, you said, if I understood you correctly, that the assumption of U.S. productivity gains explains a lot of either job loss or lack of returning jobs. Yet, Dr. Brannon, if I heard correctly, you said, at least in the retail sector, there have been great increases in productivity, which is a benefit to the United States. I mean, do you both agree, one is retail, one is manufacturing, or is there conflict?

Dr. ATKINSON. I agree with Dr. Brannon that retail productivity has been a strength of the U.S. compared to many other nations, and precisely for those reasons. We have more competitive marketplaces there. The mismeasurement of our productivity, in my view, is mostly concentrated in our manufacturing sector, so I would think our retail productivity is better measured.

The CHAIRMAN. The basic question I have is, well, where do we draw the line here? How much to lower rates, how much to broaden the base to cut back some of this, some of these preferences? On the other hand, the panel here seems to say we should focus more on manufacturing. Other countries have more manufacturing incentives, perhaps, than we.

I have a lot of sympathy with what Dr. Foster said, namely: simplicity. The basic underpinning of his statement is, keep it simple and do not change it very much, get rid of this yo-yo effect, let companies do their thing, et cetera. So we will start on my left, right here. Kind of, how do we get at this? Give us some guidelines. Give us a path here to where we draw the line if we want, clearly, growth and jobs. We do want an incentive for manufacturing in the United States. What do we do here?

Dr. GRAVELLE. Well, I am not sure how much we gain by changing a depreciation system that has served us well, that people have been used to more or less, to get rid of accelerated depreciation in exchange for a 2 percentage-point rate reduction. I am not sure that is going to be beneficial to investment.

There are some advantages of cutting the corporate rate, but the bottom line is, there is not a lot of scope for doing this unless you are going to lose money.

The CHAIRMAN. Right.

Dr. GRAVELLE. I mean, I estimated that, if you repealed every tax expenditure, you could cut the tax rate by about 5.5 percentage points.

The CHAIRMAN. Right. I have seen those numbers.

Dr. GRAVELLE. That is just the numbers. You cannot get away from that.

The CHAIRMAN. Unless you added debt expense.

Dr. GRAVELLE. You can do some other things.

The CHAIRMAN. Right.

Dr. GRAVELLE. Restrict interest deductibility.

The CHAIRMAN. Right.

Dr. GRAVELLE. Some other things like that. But there are just real limits to what we can do.

The CHAIRMAN. All right.

Dr. Brannon?

Dr. BRANNON. I think I am with Dr. Gravelle in the sense that, if you are constrained by wanting to do some kind of corporate tax reform that is revenue-neutral, you cannot go down all that far. The 2007 Treasury report that we worked on thought that if you got rid of everything, maybe you could get down to 27 or 28 percent. If you want to keep something like bonus depreciation, or maybe full expensing, you cannot even go that far. So I think it is a very real question: are you willing to sacrifice certain revenues to get down to a lower rate?

The CHAIRMAN. Dr. Atkinson?

Dr. ATKINSON. I think that I agree with the two other speakers. I think that our challenges to do this, in a revenue-neutral way, limit what we can do. I would argue we cannot do it in a revenue-neutral way because other countries are not doing that. There is a lot of debate about what our real effective corporate tax rate is.

The evidence we looked at suggests that it is higher than the middle of the pack of countries. It is not in the middle. We are closer to the top. So, I would argue the way to skin that cat, if you will, is to acknowledge that we have to do this in a non-revenue-neutral way, and have lower rates and incentives at the same time.

The CHAIRMAN. Dr. Foster?

Dr. FOSTER. Mr. Chairman, there are two basic sources of tax distortions we have to address in tax reform. One is getting the tax base wrong, and the second is high tax rates. To some extent we can clean up the base, eliminate some of the tax distortions. But even if we go as far as Dr. Gravelle has suggested, it only gets us about 5 percentage-points of reduction.

On the other hand, we could talk about non-revenue-neutral corporate tax reform. But unless the Congress is in a position to talk about a major tax cut for the overall economy, that means somebody else aside from corporations has to pay more tax. There is a good chance that that additional tax will fall on capital, in which case, much of the economic gains that you had hoped for on the corporate side of reform by reducing the cost of capital—the metric that governs our ability to invest in new plant and equipment—would be lost on the individual side of reform. The basic issue is, without looking at the whole picture, as Senator—I forgot his name at the moment.

The CHAIRMAN. Wyden.

Dr. FOSTER. Wyden. Thank you. I kept thinking of his first name and not his second. My apologies, Senator Wyden.

As Senator Wyden said, unless we look at the whole system, it is very hard to achieve sensible reforms. But even in that whole-picture approach, to whom do you want to shift the liability? It is hard to fix very much of the corporate tax system without it being a revenue loser, and yet, if it is a revenue loser, who gets to pay more?

The CHAIRMAN. All right.

Dr. Hanlon, you are wrap-up here. You get to sum it all up.

Dr. HANLON. I agree with all the other panelists. I think making this revenue-neutral is the hard part about it. But I think it is very important to make our companies competitive with their international competition that are from other countries, and I think international reform is very important.

I think almost any system would be better than the one we have right now. So I think, do not let comprehensive reform stop you from doing anything. I think it is very important to get our corporations on a more competitive ground.

The CHAIRMAN. Thank you.

Senator Rockefeller?

Senator ROCKEFELLER. Just a thought. We have not talked about it this morning, but one of the things that interests me so much around this marvelous place that we work in, in this marvelous atmosphere, is that, if you talk about fairness when it applies to individual tax rates, you are immediately accused of class warfare.

Just speaking completely for myself, but with completely intense feelings about it, it is not just the Warren Buffett syndrome. It is with the whole concept of everybody playing their part, everybody has to do something which is uncomfortable to them, that we have grown, almost, in this Congress—and many Congresses—so traumatized by the idea of raising tax rates of people who are not paying virtually anything, that it is called class warfare.

Just as one member who has been sitting next to the chairman of the Finance Committee here for a long, long time, it has nothing to do with that, in my mind. In fact, it is nothing of a partisan

issue, in my mind. It is in the minds of those people who work here and vote here, but it is very strange, I would think. I would just like a quick comment from maybe two or three of you. What is so “class warfare” about trying to introduce more fairness into the taxes that people pay?

Dr. ATKINSON. Well, I can start by saying I fully agree with you, Senator. I think that higher taxes on the individual side—I disagree with Dr. Foster. I would be more than happy to see a comprehensive tax reform that raises taxes on individuals, and particularly high-income individuals, and lowers them on the corporate side.

Rich people are not going to move to Mexico, or they are not going to move to Taiwan. Companies will do that because they are looking to maximize returns. So, I think the idea somehow that we cannot raise taxes on individuals and it is anti-growth, I think that would be a mistake. I do think it is much more important to get this right on the corporate side.

Senator ROCKEFELLER. I agree. But my question stands. Anybody else?

Dr. GRAVELLE. Well, I will take a stab at it, although class warfare is dangerous ground here. But I think the one thing that we do know is that inequality in this country has been increasing for at least 25, 30 years and that the higher-income people have had big increases in their income, and the bottom of the income distribution has been pretty much flat. So I think you need to sort of think about that when you are thinking about what kind of role taxes can play in it.

The other thing is, the corporate and individual taxes are tied together. You cut the corporate tax too much, and you are going to set in motion a lot of people with a subchapter S or these limited liability corporations.

Since the early 1980s, when 20 percent of business income was unincorporated, now it is 50 percent, from the Treasury study in 2007, so you have to be careful about that. The final thing I would say is, when I look at the long-run budget challenges—and I wrote a paper about this at CRS—it is very hard to imagine dealing with those challenges without eventually increasing taxes somewhere. It is just very hard to imagine that. So you have to go where the money is. Most of the money is in the individual tax, and most of it is in the higher-income individuals.

Senator ROCKEFELLER. Was it \$300 billion of taxes are not paid each year? Is that both people and corporations?

Dr. GRAVELLE. Most of the taxes that are not paid are by small businesses, actually. They apparently do not pay about half of their taxes. We have already done the credit card reporting. We might be able to do some reporting to increase that. But when you are exchanging money with cash, when you do not have a record, then it is very easy to avoid taxes. That is where the biggest part of the tax gap is. It is very little with wages, very little with corporations.

However, I think there is a lot of international profit-shifting, probably billions and billions, \$60 billion, \$70 billion. U.S. companies had more profit in Bermuda than 6 times the GDP of Bermuda in a study I looked at. So that would be another place to look for money.

Senator ROCKEFELLER. I guess I will just end, Mr. Chairman, by saying that, for forever, I have been in favor of conscription, that people—all people—should take their lot, their chance in their local draft board, as being fair. That is like taxation, but it is in what people have to do, or what people do not have to do.

To me, that is fair. To me, this business of making income taxes more equal, more fair is simply about fairness. It is not about politics. That is what it turns into around here, but that does not make the concept of fairness wrong.

Thank you.

The CHAIRMAN. Thank you all very, very much.

What is the best way to get that Bermuda money?

Dr. GRAVELLE. The money abroad?

The CHAIRMAN. Yes.

Dr. GRAVELLE. Well, I mean, the easiest way to do it is to not go to a territorial tax, but either to go to a current taxation with a limited cross-crediting of the foreign taxes, as in the Wyden-Coats bill, a minimum tax, something that will keep these companies from shifting all of their income into zero tax rate countries like Bermuda, the Cayman Islands, and the BVIs, where there is no activity going on.

I mean, another is a look-back method for intangibles. Another is allocation of deductions. There are a lot of ideas out there that you could pursue to do that, but it is a free-for-all right now, it looks like to me.

The CHAIRMAN. What is your preferred route?

Dr. GRAVELLE. I think that both economic analysis and collecting this money says that a worldwide tax, without deferral, and with a per-country foreign tax credit limit, also separating royalties into separate baskets that would impose our taxes on the rest of the world, I think we could do that. I think we can prevent—the only concerns about that are U.S. firms might want to invert, and we have been very successful in keeping them from doing that.

The CHAIRMAN. I was going to ask that question. So the down side of your recommendation is what?

Dr. GRAVELLE. I do not really see a down side.

The CHAIRMAN. But what are the other consequences?

Dr. GRAVELLE. Well, we will have less operations abroad, and more in the United States. I mean, as an economist I cannot subscribe to the notion of international competitiveness. That is a meaningless concept for a country.

So, I do not see much of a down side, except we might have to police firms a little better. That is classic economic theory. It has been going on for 50 years, that capital export neutrality, they call it. Taxing U.S. firms at home, and abroad, at the same rates, is the way to achieve efficiency.

The CHAIRMAN. Does anybody want to comment on that?

Dr. BRANNON. I think the flip side of that is capital import neutrality. If you are Pepsi Cola, and you are operating in Eastern Europe, which they are, quite successfully, and you increase their taxes so much that their effective tax rate for operating in Poland is much higher than any other company, what are they going to do? Pepsi Cola is not going to export Pepsi and potato chips from the United States into Europe.

What they are going to do is, they are going to sell, and they are going to get out of there. I think we need to understand that a lot of companies have U.S. operations overseas to compete in foreign markets, and to suggest blithely that worldwide taxation will take care of a lot of issues, simply assumes that that is not the case, that all U.S. companies operate overseas solely for tax reasons, or to keep employment down in the U.S.

The CHAIRMAN. Dr. Atkinson?

Dr. ATKINSON. I would agree 100 percent with Dr. Brannon. I think the only way to really deal with this question is to bring our effective rate down much lower, so the delta between their rates and our rates is lower.

The idea, as Dr. Gravelle said, that somehow we can impose our tax code on the world, those days, if they were ever there, they are long, long gone. We cannot, we are not, and we never will be able to. If anything, they are imposing their tax rates on us, and we have to respond to it.

The CHAIRMAN. Dr. Foster?

Dr. FOSTER. Mr. Chairman, if we were to adopt the system Dr. Gravelle suggests, we would not have to worry about the complexities of the international tax code any more, because we would have virtually no multinational corporations left after a very few years.

Recall Mercedes-Benz buying Chrysler, Inbev buying Budweiser? This would be repeated for every multinational corporation in the country, for the very simple reason that we will have imposed a very punitive tax system on the foreign earnings of these companies. All these companies have to do, to avoid that burden, is a simple tax arbitrage transaction: be bought by a foreign company. Every single one of them would be.

The CHAIRMAN. Dr. Hanlon?

Dr. HANLON. I agree. I think that system would be far too harsh, and it would put a lot of our companies out of business, and at a grave competitive disadvantage.

On the other hand, I mean, I agree there are some abuses that we need to shore up the enforcement on: the foreign tax credit, for example; the splitter legislation that has been done I think is good. But, on the other hand, I think that system just would be far too harsh and would make it very hard on our companies.

The CHAIRMAN. All right. Thank you very much.

I intend to pursue tax reform this year, as will others. It is clearly necessary to do, for all the reasons we discussed. It is going to be politically difficult this year, but, nevertheless, we have to try.

I encourage all of you, with me and with many, many others, just keep trying. Keep doing your analyses, your studies, your papers, your ideas; keep talking out. Be provocative, creative, and so forth, because we just have to figure out some solution to this terrible mess we are in. But this has been helpful. There will be many other hearings like it. But, thank you very much.

Senator Rockefeller, thank you very much for what you do. I encourage you: keep going.

Senator ROCKEFELLER. As do I.

This is completely out of the park, but it is something that haunts me. And I may be wrong in my haunting. "Too big to fail" ended up with nine banks getting \$125 billion of cash injection. All

of them had assets, and they were given that because they could then shield smaller banks elsewhere.

The understanding throughout the conversation, but not in the text, evidently, was that they would use that to help with the housing and mortgage crisis. That was understood by all. The results, from what I understand, are that they spent not one dime on housing mortgage problems, but that they kept it all and used it for compensation. Am I correct?

Dr. GRAVELLE. Well, it was too much money to use it for compensation of executives, so I think that it was—first of all, my understanding is a lot of those banks really did not feel like they needed the bail-out. They kind of went along with it. It is very hard to go from a big institution down to all these many, many mortgages, some of them very risky to take on.

I just think it is very hard to reach through a central system to get down to all of those. So, I am probably not as critical. I think it was important to save the financial system, or I think the economy would have had possible—

Senator ROCKEFELLER. And it did that.

Dr. GRAVELLE [continuing]. Disaster.

Senator ROCKEFELLER. It did that.

Dr. GRAVELLE. I thought that those policies were probably needed to save us from something far worse.

Senator ROCKEFELLER. All right. Thank you.

The CHAIRMAN. Thanks, everybody. I appreciate it very much.

The hearing is adjourned.

[Whereupon, at 11:50 a.m., the hearing was concluded.]

A P P E N D I X

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

Robert D. Atkinson

President and Founder

Information Technology and Innovation Foundation (ITIF)

Hearing on Tax Reform Options:

Incentives for Capital Investment and Manufacturing

Before the Senate Finance Committee

United States Senate

March 6, 2012

Chairman Baucus, Senator Hatch, and members of the Committee, I appreciate the opportunity to appear before you to discuss the role of tax incentives in capital investment and manufacturing.

I am the president and founder of the Information Technology and Innovation Foundation (ITIF). ITIF is a nonpartisan research and educational institute whose mission is to formulate and promote public policies to advance technological innovation, productivity and competitiveness.

This is a timely and important hearing, for American global economic competitiveness is declining, especially in manufacturing but also in high technology, costing jobs and impeding economic growth. Corporate tax reform can play an important role in reversing this decline. Yet for many tax policy experts, effective corporate tax reform means simplifying the code by cutting critical incentives, such as the domestic production deduction, the R&E tax credit and accelerated depreciation, and using the savings to reduce statutory rates. For these experts the ideal tax code should be neutral among activities and industries. But this view mistakenly views all activities and industries as having the same economic impact on the U.S. economy.

Any tax reform that reduces or eliminates key incentives for investing in capital equipment and traded sectors like manufacturing will reduce growth and competitiveness, not boost them. In fact, three of the most “costly” tax incentives (section 199 deduction for domestic production, R&E tax credit and accelerated depreciation) are the most useful provisions of the tax code in terms of spurring investment and ensuring that traded-sector establishments do not further lose their competitive edge. Any reform that broadens the base and eliminates these incentives would likely raise effective tax rate on traded sectors (e.g., industries that sell a not insignificant share of their output in global markets—often in key growth sectors such as biotech, aerospace and IT), while lowering the effective tax rate. This is the opposite of what tax policy should do because it would make these traded sector engines of growth less cost competitive than their overseas competitors, resulting in fewer U.S. jobs. In contrast, lower taxes on non-traded sectors would not result in additional jobs in these sectors. Finally, by definition revenue-neutral corporate tax base broadening would do nothing to lower the overall effective corporate rate, which is high relative to other nations, and would thereby fail to address a key U.S. competitiveness challenge.

Congress has an opportunity to reform the corporate tax code to explicitly promote the competitiveness of business establishments in America by expanding, not cutting, incentives for investing in America, including the domestic production deduction, the R&E tax credit, and accelerated depreciation. Ideally, Congress would also establish new incentives, such as an investment tax credit for new machinery, equipment and software investment (replacing accelerated depreciation) and a “patent box” incentive, as a number of European nations have recently put in place that taxes corporate income from innovation-based products at a lower rate.¹

This is not to say that corporate tax reform should not reduce or eliminate special deductions, exemptions and credits that cannot be justified on a productivity, innovation or competitiveness basis. Indeed, a reconstituted corporate tax code which eliminates incentives that do not spur growth could have some positive, albeit likely modest, impacts on growth. But if a dogged faith in simplicity ends up reducing and even eliminating incentives that spur productivity, innovation and competitiveness, reform will lead to less economic growth, not more. So the choice should not be between a corporate tax code riddled with particular exemptions and credits and a completely neutral code. Rather the code should

¹ Robert D Atkinson and Scott Andes, “Patent Boxes: Innovation in Tax Policy and Tax Policy for Innovation”, (technical report, Information Technology and Innovation Foundation (ITIF), Washington, D.C., October 2009), <http://www.itif.org/files/2011-patent-box.pdf>.

reduce ineffective exemptions and incentives while expanding effective ones focused on innovation and growth-enhancing activities characterized by significant spillovers or other market failures, all the while lowering the effective, and statutory, corporate rates.

The Nature of the U.S. Manufacturing and Technology Production Challenge

America is facing a competitiveness crisis, especially in manufacturing. We see this most evidently in the unprecedented rate of manufacturing job loss over the last decade. U.S. non-farm employment expanded by 19 percent in the 1980s and 20 percent in 1990s. During the same periods, manufacturing employment fell only slightly, by seven percent and one percent respectively. But between mid-2000 and November 2011, total employment was unchanged while manufacturing jobs fell by one-third (a loss of 5.5 million manufacturing jobs).² (see figures 1 and 2) And according to the OECD, from 1997 to 2010 the United States had the second largest share of manufacturing job loss (controlling for adult population growth) of any of the ten nations examined. (see figure 3) This is all the more troubling since a manufacturing job has the highest employment multiplier of any sector, meaning that the loss of these manufacturing jobs led to significant job loss in the rest of the economy.³

Yet remarkably few if any economists have made the connection between the anemic overall job performance in the last decade (and the current poor job recovery) and largest drop in manufacturing employment in American history (a rate higher than during the Great Depression). ITIF believes that this steep loss of international competitiveness, resulting in the loss of millions of manufacturing jobs and weaker growth in technology-based services than otherwise would be the case, is the principal cause of the nation's economic woes. Without a robust and healthy traded sector, which includes most of manufacturing and some services, it will be impossible for the U.S. economy to grow at a robust rate and be fully healthy.

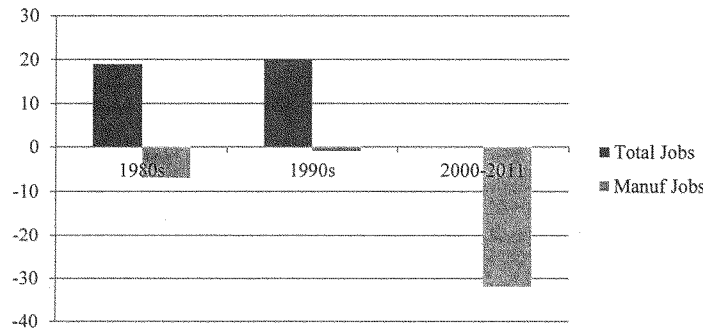


Figure 1: Percent U.S. Employment Change (Source: U.S. Bureau of Labor Statistics)

2. U.S. Bureau of Labor Statistics.
 3. Stephen J. Ezell and Robert D. Atkinson, *The Case for a National Manufacturing Strategy* (Washington, D.C.: ITIF, 2011), p. 29, <http://www.itif.org/files/2011-national-manufacturing-strategy.pdf>.

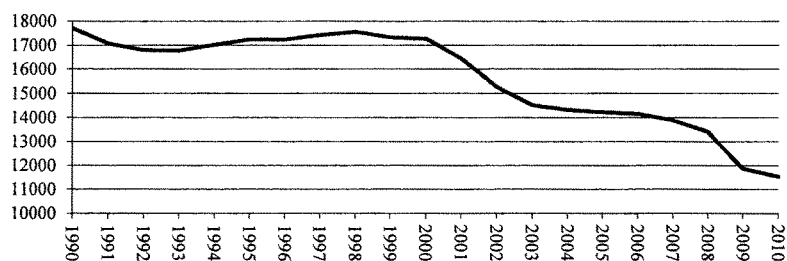


Figure 2: U.S. Manufacturing Employment Change (millions) (Source: Bureau of Labor and Statistics)

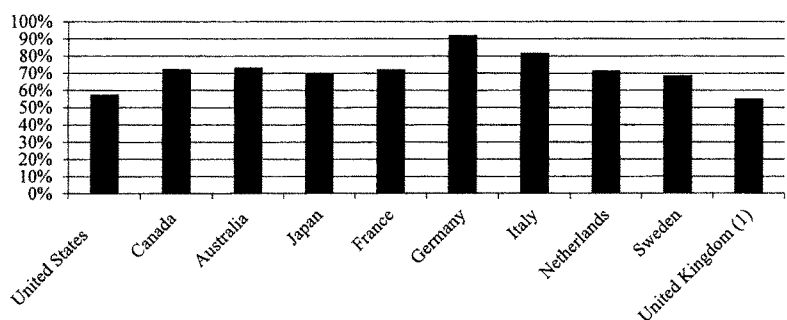


Figure 3: Manufacturing Job Change as a Share of Adult Population Growth, 1997 to 2010 (Source: Bureau of Labor and Statistics)

The widely held view is that the United States is still a manufacturing powerhouse but simply needs fewer workers to produce the same or more output. But that is not the complete story. In fact, when measured properly, manufacturing output has actually declined in the last decade, the first time this has happened since the National Income Accounts were established after WWII. According to the U.S. Bureau of Economic Analysis from 2000 to 2010, 13 of the 19 aggregate-level U.S. manufacturing sectors, employing 55 percent of manufacturing workers, shrank in real value-added output.⁴ And while official government data show that manufacturing output increased 15.5 percent in the 2000s, this number is significantly overstated as it rests on a misreading of national output data that overstates output of NAICS 324, the petroleum and coal products industry, and NAICS 334, the computers and electronics industry.⁵ This over-estimation of the output growth of these two sectors masks decline across the whole of U.S. manufacturing. If the output had been measured correctly, the United States would have experienced an absolute decline in manufacturing output over the past decade of approximately 11 percent.⁶

This suggests that the conventional wisdom that U.S. manufacturing job loss is simply a result of productivity-driven restructuring (akin to how U.S. agriculture lost jobs but is still healthy) is wrong, or at least not the whole story. Rather, the loss of U.S. manufacturing jobs is in part a function of actual

4. Bureau of Economic Analysis, Gross Domestic Product by Industry Accounts (real value-added by industry, value-added by industry)

5. See Susan Houseman et al., "Offshoring and the State of American Manufacturing," (working paper, Upjohn Institute, 2010), <http://www.upjohninstitute.org/publications/wp/10-166.pdf>. Houseman et al. argues that the acceleration of imports from developing countries has imparted a significant bias to the official statistics. They contend that price declines associated with the shift to low-cost foreign suppliers generally are not captured in input cost and import price indexes.

6. See Robert D. Atkinson, "American Manufacturing: What's the Real Story?" (technical report, ITIF, forthcoming March 2012).

loss of output, caused in turn by the declining international competitiveness position of manufacturing establishments in America.⁷ In fact, ITIF postulates that only one other nation in history—the United Kingdom in the 1960s and 1970s—has experienced as precipitous a loss of manufacturing output.⁸ However, to date alarm bells have been largely silent, with few economists making the connection between “The Great Recession,” the anemic jobs recovery and the decline in manufacturing.⁹ Yet this loss of manufacturing has been steady and robust headwind into which the U.S. economy has had to tack, so robust that the economy has made little progress in over a decade.

One reason for this is the decline in investment by manufacturers in the United States. While manufacturers’ capital stock grew in every decade from 1950 to 2000 (increasing by 25.9 percent in the 1990s), it actually fell by 1.2 percent from 2000 to 2010.¹⁰ (see figure 4) In other words, manufacturers in the United States have less capital stock today than a decade ago. One key reason is that companies began to invest faster overseas. In 2000, U.S. multinational manufacturers invested 33 cents overseas for every dollar invested domestically. By 2009, this ratio had increased to 71 cents overseas for every dollar invested here. Even more striking, when looked at as a share of GNP, U.S. multinational’s overseas capital expenditure increased by 9 percent between 2000 and 2009, while their domestic expenditure decreased by nearly 50 percent.¹¹ This means that when a U.S. manufacturer is decided where to invest in plants and equipment, it is more likely than ever to choose to invest in a foreign country. One important reason for this, as described below, is that other nations are providing more generous tax incentives for investment and lower effective corporate rates.

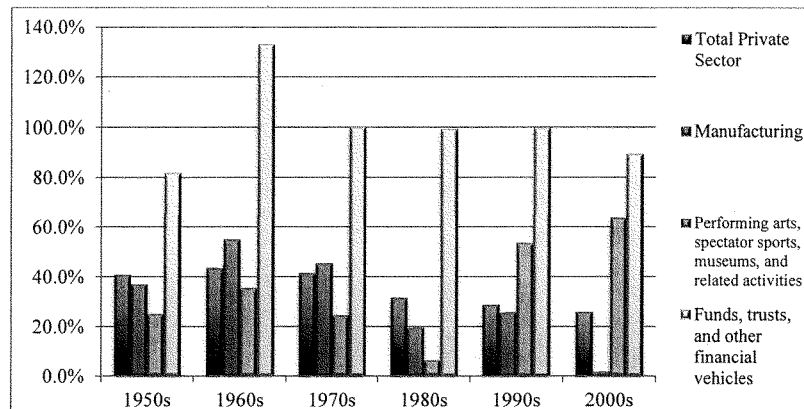


Figure 4: Comparison of Percentage Change in Net Stock of Fixed Assets by Decade (Source: Bureau of Economic Analysis, Fixed Assets Accounts)

7. I use the term “establishments in America” because some of these are foreign owned and also because some U.S. manufacturers may be thriving even if they are shutting establishments (e.g., factories) in the United States while opening them overseas.
8. See Robert D. Atkinson and Stephen Ezell, *Innovation Economics: The Race for Global Advantage*, (Yale University Press, forthcoming, September 2012).
9. Some have indeed pointed this out. In 2009 several economists wrote an article for National Bureau of Economic Research article which stated, “We argue that this pattern (the increase in the current account deficit by the United States matched by increase in current account surpluses in other nations, especially China) precipitated the housing bubble in the United States.” Ravi Jagannathan, Mudit Kapoor and Ernst Schaumburg, “Why Are We in a Recession? The Financial Crisis Is a Symptom Not the Disease!” (working paper 15404, National Bureau of Economic Research (NBER), Cambridge, MA; October 2009), <http://www.eclac.cl/noticias/paginas/3/35143/w15404.pdf>.
10. U.S. Bureau of Economic Analysis, Fixed Assets Accounts Tables (chain-type quantity indexes for net stock of private fixed assets by industry; accessed October 6, 2011), http://www.bea.gov/iTable/index_FA.cfm.
11. Author’s analysis, Bureau of Economic Analysis, Direct Investment and Multinational Companies (http://www.bea.gov/iTable/index_MNC.cfm); Bureau of Economic Analysis, National Income and Product Accounts.

Some will argue that while we may be losing manufacturing that the United States is still strong in innovation and that this will power our future competitiveness. But this ignores two key issues. First, much of manufacturing is high-tech and powered by innovation – think computers, semiconductors, pharmaceuticals, medical devices, aviation, and instruments. Losing production in these industries means losing the upstream R&D and design jobs. In fact, the United States has recorded a deficit in advanced technology products trade every year since 2002.¹² And the United States ran an \$81 billion advanced technology products trade deficit in 2010, the largest in its history, and from January 2002 to December 2010, it totaled a \$427 billion deficit in advanced technology products.¹³

Second, it's not as if the United States continues to lead in innovation. As ITIF found in its report *The Atlantic Century II*, the United States ranks 43rd of 44 nations or regions in the rate of progress on 16 innovation-based competitiveness indicators (such as the growth of corporate and government R&D, venture capital, new businesses, productivity, etc.).¹⁴ Other nations are not standing still when it comes to the race for global innovation advantage.

Other Nations Are Expanding Their Tax Incentives in Response to Heightened Global Competition

Today, virtually all nations face intense global competition for economic advantage. In response, most nations have established robust competitiveness policies, including putting in place more competitive corporate tax codes. In some cases, this has involved reducing statutory rates. Devereux, Lockwood, and Redoano find that corporate tax rates for OECD nations have declined from nearly 50 percent in the early 1980s to less than 35 percent in 2001, and that international tax competition was the principle driver of those reductions.¹⁵ By 2011, the non-U.S. OECD rate had declined even more, to just 25.1 percent.¹⁶

We hear much about how while the U.S. statutory corporate rate may be second highest in the world that effective rate is more competitive. But out of 37 nations examined in the ITIF report *"The Atlantic Century"* and using World Bank data we found that the United States was 35th highest in terms of overall effective corporate tax rate.¹⁷ Likewise, a recent National Bureau of Economic Research working paper found that of 20 nations and regions, the United States had the second highest effective corporate tax rate (with Japan the highest).¹⁸ Moreover, of ten nations with data going back to 1989, only the United States saw an *increase* in its effective corporate tax rate. The other nine, including nations like Canada, France, Switzerland, and the United Kingdom, all saw reductions.

Much of this reduction in statutory and effective rates was in response to competition from other nations. Devereux, Lockwood, and Redoano find that a one percentage point decline in the weighted average statutory corporate tax rate in other nations tends to reduce the corporate tax rate in the home country by about 0.7 percentage points.¹⁹ Some decry this trend as a "race to the bottom" and want to respond by essentially refusing to race. But the reality is that it is a race and failure of the United States to lower its effective corporate tax rate will mean continuing to lose the race.

12. U.S. Census Bureau, "Trade in Goods with Advanced Technology Products," (Imports, Exports, and Trade Balance, accessed February 20, 2011), <http://www.census.gov/foreign-trade/balance/c0007.html>.

13. *Ibid.*

14. Robert D. Atkinson and Scott Andes, *The Atlantic Century II: Benchmarking EU & U.S. Innovation and Competitiveness* (Washington, D.C.: ITIF, 2011), p. 19, <http://www.itif.org/files/2011-atlantic-century.pdf>.

15. Michael Devereux, Ben Lockwood and Michela Redoano, "Horizontal and Vertical Indirect Tax Competition: Theory and Some Evidence from the USA," *Journal of Public Economics* 91 (2007): 451-479.

16. Peter R. Merrill, "Corporate Tax Policy for the 21st Century," *National Tax Journal*, December 2010, 63 (4, part 1).

17. Robert Atkinson and Scott Andes, *The Atlantic Century: Benchmarking U.S. and EU Innovation and Competitiveness*, (Washington, D.C.: ITIF, 2011), <http://www.itif.org/files/2011-atlantic-century.pdf>

18. Kevin S. Markle and Douglas A. Shackelford, "Cross-Country Comparisons of Corporate Income Taxes," (working paper, NBER, Cambridge, MA: February 2011).

19. Devereux, Lockwood and Redoano, "Horizontal and Vertical Indirect Tax Competition: Theory and Some Evidence from the USA."

Many nations have also put in place or expanded tax incentives designed to spur investment, including in plant and equipment. For example, Taiwan's Statute for Upgrading Industries, established in 1991, provides a package of corporate tax incentives including accelerated depreciation and tax credits for investments in R&D, automation, worker training, pollution controls, and investments in newly emerging important and strategic industries. Companies can also take a credit of up to 20 percent of funds invested in hardware, software, and/or technology that can promote an enterprise's "digital information efficiency." While the tax credit for investing in automation cost the government NT\$7.8 billion (\$268 million U.S.) it spurred growth which led to an increase in overall tax revenues of NT\$13.3 billion (\$458 million U.S.).²⁰

Many other nations also have corporate tax incentives for investment. These include:

- Austria: firms can receive a tax credit of 6 percent on the costs of education and training their workforce.²¹
- Malaysia: companies can depreciate general plant and equipment over six years, with heavy machinery over 4 years, and computer and IT equipment even faster.²²
- UK: firms can expense investment for plant and machinery up to £100,000 in the first year. And other investments can be depreciated relatively quickly (equal to 20 percent per year).
- Singapore: firms can expense in the first year all computers and prescribed automation equipment, robots and energy efficiency equipment.²³ In addition, companies in manufacturing and engineering services industries may receive investment allowances for projects in addition to depreciation allowances.
- Japan: companies can benefit from a modestly accelerated depreciation scheme (consisting of "increased initial depreciation" and "accelerated depreciation").²⁴
- France: allows 50 percent of the capital investments for research buildings to be written off in the first year.
- Canada: purchases of computers are eligible for a 55-per-cent declining-balance capital cost allocation rate in the first year. Manufacturing equipment is also eligible for accelerated depreciation.²⁵

In addition to these kinds of capital investment incentives, a growing number of nations have put in place tax incentives to spur the commercialization of R&D, not just the conduct of R&D. These "patent box" or "innovation box" incentives allow corporate income from the sale of patented products (or in some countries from innovation-based products) to be taxed at a significantly lower rate than other income. Eight nations—Belgium, China, France, Ireland, Luxembourg, the Netherlands, Spain, and Switzerland—have established patent boxes, and the UK is set to implement its patent box policy in 2013 with a tax rate of 10 percent on income generated from patented products, compared to the standard rate of 28 percent. France's patent box reduces corporate income tax from 34 percent to 15 percent on

20. Wen-Jung Lien et al., "The Economic Impact of Taiwan's Investment Tax Credits and its direction of Adjustment," *International Journal of Technology Management* 49, no. 1-3 (2010): 140-154.

21. "Tax Aspects of Industrial Investment in Austria," (study, Austrian Business Agency, March 2011), http://www.investinaustria.at/uploads/ABA_Tax_Aspects_Austria_2011_10699_EN.pdf.

22. "International Tax and Business Guide, Malaysia," (Deloitte, 2010).

23. Deloitte (taxation and investment guides and country highlights, accessed October 3, 2011), <http://www.deloitte.com/taxguides>.

24. Thomas Dalggaard, Japan's Corporate Income Tax—Overview and Challenges", (working paper, International Monetary Fund, March 2008), p. 5, <http://www.imf.org/external/pubs/ft/wp/2008/wp0870.pdf>.

25. Canadian Department of Finance, (description of corporate income tax provisions, accessed October 3, 2011), <http://fin.gc.ca/taxexp-depfscl/2010/taxexp1004-eng.asp#tocnotes-05>.

qualifying income.²⁶ In China, income from innovation-based products is taxed at between 0 and 12.5 percent. Ireland developed the first patent box in 1973, but other nations have adopted patent boxes quite recently, since 2005.

Also, while the focus of this hearing is on incentives related to production, it's important to note that compared to other nations, the U.S. research and experimentation credit is less linked to production. For example, many nations allow buildings and equipment to be used in R&D to qualify for the incentive, while the United States does not. Likewise, more nations explicitly allow process R&D (R&D to develop better ways of making things) to qualify for the tax incentives. U.S. tax policy is at best vague about whether process R&D qualifies, with the IRS reportedly regularly denying firms' claims for process R&D.²⁷

Finally, it is worth mentioning that in addition to lower rates and greater incentives, many nations also provide tax holidays to particular firms making investments in their nation.²⁸ In India, semiconductor firms can deduct all their profits for the first ten years. In Vietnam select foreign investments located in the Ho Chi Minh City high-tech economic zone pay no corporate taxes for the first four years of operation and enjoy a 50 percent tax break the following nine years, after which the corporate rate is only 10 percent, compared with the normal 28 percent corporate rate.²⁹ It is ironic that a country with a city named after the iconic communist leader Ho Chi Minh is more aggressive at attracting global capital investments than the United States. Likewise, Korea offers its major high-tech companies virtually tax free status- and interest-free loans to keep their investments in country.

One reason for these statutory rate declines and expansions of investment incentives is that countries are increasingly using their corporate tax code to create more attractive locations for internationally mobile investment. Lower *effective* rates spur greater inward foreign direct investment (and reduced outflows) and this effect has grown over time. Altshuler finds that the elasticity of foreign direct investment to corporate tax rates has increased from 1.5 to 3 from 1984 to 1992, indicating that a one percentage point reduction in the host country tax rate raises foreign direct investment by three percentage points.³⁰ A decade later, the effect was even larger at 3.7.³¹

Why Do Many Economists Oppose Production Incentives in the Tax Code?

For most economists from the "neo-classical school" the ideal tax code is one that raises the necessary amount of revenue in the least distorting way. For them, the incentives described above, even though they lead to higher rates of economic growth, are "distortions" that should be eliminated. These views are often framed as if they were some kind of iron law of economics on the order of the second law of thermodynamics:

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26. Robert D. Atkinson and Scott M. Andes, "Patent Boxes. Innovation in Tax Policy and Tax Policy for Innovation," (technical report, ITIF, Washington, D.C., 2011), <http://www.itif.org/files/2011-patent-box-final.pdf>.
 27. Robert D. Atkinson, "Expanding the R&E Tax Credit to Drive Innovation, Competitiveness and Prosperity," (technical report, ITIF, Washington, D.C., July 2007), <http://www.itif.org/publications/expanding-re-tax-credit-drive-innovation-competitiveness-and-prosperity>.
 28. Alexander Klemm, "Causes, Benefits, and Risks of Business Tax Incentives", (working paper, International Monetary Fund, January 2009), <http://www.imf.org/external/pubs/ft/wp/2009/wp0921.pdf>.
 29. Margie Manson, "Intel to invest \$1 billion in Vietnam as country strives to raise high-tech profile," *USA Today*, November 18, 2006, http://www.usatoday.com/tech/news/2006-11-18-vietnam_x.htm.
 30. Rosanna Altshuler, Harry Grubert, and T. Scott Newlon, "Has U.S. Investment Abroad Become More Sensitive to Tax Rates?," *International Taxation and Multinational Activity*, ed James Hines (Chicago, IL: University of Chicago Press, 2004).
 31. Ruud de Mooij and Sjoef Ederveen, "Taxation and Foreign Direct Investment: A Synthesis of Empirical Research," *International Tax and Public Finance* 10, no. 6 (2003): 673-93. Likewise, Hufbauer and Grieco estimate that a 5 percentage point increase in corporate taxation depresses inward FDI by about 15 percent; Gary Clyde Hufbauer and Ariel Asa, *U.S. Taxation of Foreign Income*, (Washington, D.C.: Peterson Institute for International Economics, 2007), <http://www.iie.com/publications/briefs/hufbauer4051.pdf>

- The Brookings Institution's William Gale: "The *sine qua non* of meaningful tax reform is to clean out and rationalize the exclusions, exemptions, deductions, and credits in the tax system."³²
- The Congressional Research Service's Jane Gravelle: "Economic analysis suggests that capital is allocated efficiently and the economy is more productive, absent some market failure or other existing distortion, if all capital income is taxed at the same rate."³³
- The United States Treasury Department: "These [tax incentives] distortions waste economic resources and lower the standard of living produced by the U.S. economy."³⁴
- The International Monetary Fund: "The classic argument against the use of incentives is that they distort economic activity, by causing the after-tax pattern of returns to diverge from the before-tax pattern and thereby leading to an allocation of resources that differs from the efficient equilibrium the market is assumed to generate."³⁵
- The President's Recovery Commission: "Because certain assets and investments are tax favored, tax considerations drive overinvestment in those assets at the expense of more economically productive investments."³⁶

Why do so many neo-classical economists hold the view that incentives are bad and that a neutral tax code that taxes all firms, industries and activities alike maximizes economic welfare? To be clear, it is not the result of empirical evidence, which is mixed at best and contrary to this view at worst. Rather, they hold this view because one overarching principle guides their thinking and shapes their advice: maximize "allocative efficiency." Allocative efficiency is the market condition whereby resources are allocated in a way that maximizes the net benefit attained through their use; and the quantity of goods produced is that which is most beneficial to society. A market that allocates efficiently is one in which scarce goods and services are consumed on the basis of the prices consumers are willing to pay for them and scarce goods and services are produced on the basis of marginal costs equaling the prices charged for them.³⁷

From the standpoint of a neoclassical economist, therefore, it would be a cardinal sin to propose a policy that would alter the "natural" allocation of factors of production—that is, capital, labor, and goods and services—produced by market price signals determined by individuals and firms making free choices not influenced by regulations, taxes, market power, or other "distortions." But as innovation economists Philippe Aghion, Paul David, and Dominique Foray note, "The empirical foundations for such sweeping statements remain remarkably fragile."³⁸ Nonetheless, for most neoclassical economists virtually all tax incentives are "distortions" that reduce allocation efficiency and so by definition must be opposed.

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32. "National Journal Expert Blogs: Economy, William Gale's response to "Tax Reform Handcuffs," *NationalJournal.com*, May 4, 2009, <http://economy.nationaljournal.com/2009/05/tax-reform-handcuffs.php>.
33. Jane Gravelle, "What Can Private Investment Incentives Accomplish? The Case," *National Tax Journal* 46, no. 3 (1993): 277.
34. Approaches to Improve the Competitiveness of the U.S. Business Tax System for the 21st Century (Office of Tax Policy, U.S. Department of the Treasury, December 20, 2007).
35. David Holland and Richard J. Vann, "Income Tax Incentives for Investment," *Tax Law Design and Drafting* 2 (1998), <http://www.imf.org/external/pubs/ft/1998/tlaw/eng/ch23.pdf>.
36. President's Economic Recovery Advisory Board, *Report on Tax Reform Options*, p. 65.
37. The standard view is expressed by Devereux when he states "production is allocated efficiently if it's not possible to reallocate resources between activities in a way that would increase total output." Alan Auerbach, Michael Devereux, and Helen Simpson, "Taxing Corporate Income," (working paper series 14494, NBER, 2008).
38. Philippe Aghion, Paul A. David and Dominique Foray, "Linking Policy Research and Practice in 'STIG Systems': Many Obstacles, but Some Ways Forward" (working paper, College of Management Technology, École Polytechnique Fédérale De Lausanne, Switzerland, 2007), p. 13, <http://cdm-it.epfl.ch/repec/cmi-wpaper/cmi-workingpaper-2007-002.pdf>.

In fact, because of market failures, such as “externalities,” a pre-tax market that is allocatively efficient can be less productive and innovative than one that is “distorted” by the right kinds of tax incentives for investing in the drivers of productivity and innovation. But even when neoclassical economists find that a particular tax incentive is welfare enhancing, they will often oppose it because it violates the superior principle of allocation efficiency. A case in point is the seminal 1979 article authored by neoclassical economists Larry Summers and Alan Auerbach. They modeled the economic impact of an investment tax credit and found that it resulted in more equipment investment compared to a more simple tax code without the credit.³⁹ Moreover, compared to no credit, having a credit led to GDP being higher than it otherwise would have been. But notwithstanding their finding, Summers and Auerbach counseled Congress to eliminate the investment tax credit (which it did seven years later in the 1986 Tax Reform Act). Their reason? The ITC resulted in non-market-based allocation of capital and crowded out “non-favored investment.” In this case the non-favored investment was housing. As they wrote, “The credit will bid up interest rates... discouraging purchase of non-favored capital goods, principally structures.” So according to their model, eliminating the investment tax credit was good because doing so meant more spending on housing and less investment on machinery and equipment, which for them represented the “right” amount of investment in each category.

For neoclassical economists a tax code that “distorts” decisions is to be avoided at all costs because presumably “distortions” lead to allocation inefficiency and a smaller economy.⁴⁰ However, as Aleb ab Iorwerth, an economist with the Canadian Department of Finance, writes, “there is no presumption that distortions are necessarily welfare-reducing. Distortions that favor the contributors to long-run growth will be welfare-enhancing.”⁴¹ So the real question for policymakers is not whether to get rid of all incentives in favor of a “neutral” tax code, but to identify the incentives that are welfare enhancing and expand those and the ones that are welfare reducing and eliminate those.

This kind of analysis and approach would be quite consistent with what could be termed “innovation economics.”⁴² According to this view the overarching goal of economic policy generally, and tax policy specifically, is not to facilitate the efficient allocation of scarce goods and services by reducing distortions, but rather to spur the effective creation of new goods and services and increased productivity.⁴³ In this sense, innovation economics holds that market forces alone often do not produce optimal outcomes and that public policies, including tax policy, to correct for these failures can enhance societal welfare. Followers of an innovation economics approach, including ITIF, believe that with respect to the inputs to technical change, externalities and other market failures are far more widespread than is conventionally viewed by neoclassical economists who normally do not study innovation processes in any level of depth. There are in fact considerable spillovers from business investments in research, new equipment and workforce training as well as other market failures that limit innovation and productivity. In this sense, the quest for tax code simplicity would lead to less productivity and innovation, and fewer jobs.

Finally, while many companies support investment incentives, many do not. There are a variety of reasons for this. Some companies prefer more simplicity in order to reduce tax compliance costs. Others oppose the idea of the government tying tax relief to any particular behavior on their part. But it’s

39 Alan J. Auerbach and Lawrence H. Summers, “The Investment Tax Credit: An Evaluation” (working paper, National Bureau of Economic Research, Cambridge, MA, 1979), <http://www.nber.org/papers/w0404>.

40. Albeit, some neo-classical economists will acknowledge that a tax provision can be used to correct a market imperfection, most commonly an externality, but most view such market failures as occurring only rarely, and even then, most believe that acknowledging market failures opens up a Pandora’s box of all kinds of tax provisions, some useful, but most not.

41 Aleb ab Iorwerth, “Canada’s Low Business R&D Intensity: the Role of Industry Composition,” (Working Paper 2005-03, Department of Finance Canada, Canada, 2003), p. 11, www.fin.gc.ca/wp/2005-03-eng.asp.

42 See www.innovationeconomics.org.

43. Robert D. Atkinson and David B. Audretsch, “Economic Doctrines and Policy Differences: Has the Washington Policy Debate Been Asking the Wrong Questions,” (technical report, ITIF, Washington, D.C., September 2008), www.itif.org/files/EconomicDoctrine.pdf.

important to understand that one of the reasons for investment incentives, as discussed next, is to address positive externalities that accrue to society beyond the benefits to the firm. Few firms care about externalities, since by definition externalities do not affect them. But Congress should care about externalities and should design a corporate tax code that addresses both direct firm benefit and societal externalities.

The Case for Incentives for Capital Investment and Manufacturing

There are two main economic rationales for designing a tax code that favors traded technology industries (like manufacturing and software) and capital investment in machinery, equipment and software. The first relates to market failures, including spillovers of the benefits to firms not making the investments. The second relates to the role of targeted tax incentives in supporting the international competitiveness of America's traded sectors, and by extension the health of the overall U.S. economy.

Spillovers and Risk: Notwithstanding their predilection for a "neutral" tax code, some neoclassical economists are willing to support tax incentives for corporate R&D. This is in large part because there is a well-developed body of economic theory and empirical research demonstrating that companies do not capture anywhere near all the benefits from the research they conduct.⁴⁴ These "spillovers" are defined as benefits that accrue to the economy in excess of the benefits to the firm making the investment receives.

But notwithstanding what some economists assert there also appear to be significant spillovers from investing in physical assets, especially capital equipment and software, and also from supporting traded sectors like manufacturing. Economic research suggests that companies only get about half of the total societal return from their investment in new capital equipment. One of the earliest studies finding this was performed by Lawrence Summers and Brad DeLong.⁴⁵ While this study has since been criticized by some, other studies have found similar results. Jonathan Temple finds externalities from capital investment.⁴⁶ Bart Van Ark finds that the spillovers from investment in new capital equipment are larger than the size of the benefits accrued by the investing firm.⁴⁷ Lauren Hitt finds that the spillovers from firms' investments in IT are "significant and almost as large in size as the effects of their own IT investment."⁴⁸ In other words, firms capture on average only about half the total societal benefits from their investments in IT, suggesting that the current level of IT investment is significantly less than societally optimal. Xavier Sala-i Martin finds that both equipment and non-equipment investment are strongly and positively related to growth, but that equipment investment has about four times the effect on growth as non-equipment investment (*e.g.*, buildings).⁴⁹

There are a number of reasons why firms are not able to capture all the benefits from their investments in capital equipment. One is that investments in new machinery give workers knowledge about these new investments and they in turn transmit this information to their next employer, leading them to also

44. Robert D. Atkinson, "The Research and Experimentation Tax Credit: A Critical Policy Tool for Boosting Research and Enhancing U.S. Economic Competitiveness", (technical report, ITIF, Washington, D.C., September 2006), <http://www.itif.org/publications/research-and-experimentation-tax-credit-critical-policy-tool-boosting-research-and-enha>.

45. Bradford DeLong and Lawrence Summers, "Equipment Investment and Economic Growth: How Strong is the Nexus?", *Brookings Papers on Economic Activity*, vol. 23 (Washington, D.C.: Brookings Institution, 1992).

46. Jonathan Temple and Hans-Joachim Voth, "Human capital, equipment investment, and industrialization," *European Economic Review* 42(7) (1998), 1343-62.

47. Bart Van Ark, "Measuring the New Economy, An International Comparative Perspective", *Review of Income and Wealth* 48 (2002): 1-14.

48. Lorin M. Hitt and Prasanna Tambe, "Measuring Spillovers from Information Technology Investments," *Proceedings of the 27th International Conference on Information Systems*, Milwaukee, WI, 2006: 1793.

49. Xavier Sala-i-Martin, "15 Years of New Growth Economics. What Have We Learnt?" Keynote address to the fifth annual conference of the Central Bank of Chile The Challenges of Economic Growth, Santiago, Chile, November 29-30, 2001.

invest in new machinery. Indeed, users of new equipment learn what modifications need to be made and then transfer this experience to other firms through a host of means, including inter-firm labor movement, trade shows and professional association meetings. In addition, some equipment, especially information technology, has network effects where the benefits to other firms from a firm adopting the technology are significant. As Hitt notes, "firm-level investments in communications technologies can create benefits for business partners. Alternatively, investments in information technologies can produce knowledge that can spill over between firms."

This is not to say that all kinds of corporate capital investment have all of these characteristics. When a company buys office furniture or a car or builds a new building it is more likely to reap the full benefit from it. To the extent that this investment creates jobs it is in the suppliers (the makers of the furniture, car or the building) and these are not spillovers since the equivalent number of jobs would have been created elsewhere in the economy from other spending. But when a firm buys new equipment or software it is not likely to capture all the benefits since other firms are able to boost their own productivity because of it.

There are also spillovers to investments companies make to develop innovative products, including patented products, even though the theory of patents is that firms should have ample incentive to take advantage of such innovations in the marketplace and that profits made from patented technologies have little spillover associated with them. But even after patenting and successfully commercializing an innovation, firms are still unlikely to capture all the benefits in the form of profits in part because firms can learn from the patented innovations and commercialize related innovations. Apple's recent iPad offers a good example. The iPad is protected by patents both in the United States and Europe, and Apple undertook an aggressive marketing and product design strategy to distinguish the iPad as a unique product. All of which are elements of commercialization that allow Apple to gain the maximum returns from the company's innovation. However, there are dozens of other companies selling similar tablet computers (in fact, the 2011 Consumer Electronics Show in Las Vegas saw eighty new tablet computers introduced by a variety of vendors), suggesting that Apple was not able to capture anywhere near all the returns from its innovation.⁵⁰

Increased Global Competitiveness

In a relatively closed economy with little mobile capital, a high effective corporate tax rate may have the effect of reducing overall investment but it will do little to affect the location of investment between nations. This situation essentially described the U.S. economy until the late 1970s. But since then, competition for internationally mobile investment has significantly increased, spurred by reduced trade and capital barriers and technological innovations enabling global supply chains (e.g. containers, software to manage logistics, etc.).

In response to this increased competition for globally mobile economic activity, not only have an increasing number of nations lowered their effective corporate tax rates, many have done so in ways that target incentives toward globally mobile sectors or activities (e.g., an R&D laboratory, a semiconductor plant, or software establishment). If taxes on firms in globally traded sectors are raised, firms will act rationally by moving or expanding production to nations that tax them less.⁵¹ From a tax competition

50. Iyaz Akhtar, "8 Companies that Shouldn't Make a Tablet," *PC Magazine*, January 20, 2011, <http://www.pcmag.com/article2/0,2817,2375995,00.asp>.

51. Regional economists distinguish between two kinds of economic sectors: traded and non-traded. The output of the former is largely sold to people (or firms) who live outside the region where it is produced, while the latter is sold largely to people who live in the region. Few people travel outside their community to get a haircut. In contrast, few people buy a car that is produced in their community, unless they live in a place like Detroit. In this sense, barber services are not traded while automobile production is

perspective, there is little reason to reduce the corporate tax rate on firms in non-traded sectors like retail trade or construction because they are largely geographically tied to the areas where their customers are located. But firms in globally traded sectors have a large and increasing number of global options with respect to location. Lowering the effective tax rates these firms pay would help the United States become more globally competitive.

Such policies, despite what some neoclassical economists may say about their distortive effects, are in fact responding to a significant market failure and can be highly efficient. As the Mirrlees review from the London-based Institute for Fiscal Studies noted, in principle, it would be efficient to tax mobile activities at a lower rate than relatively immobile ones: "This would allow a higher rate of corporation tax to be supported on less mobile (location-specific) economic profits, while using a lower rate to reduce the deterrence to mobile income."⁵²

As such, an effective corporate tax system treats globally-traded activity differently than less mobile activity. And to the extent that incentives, such as the domestic production deduction, have a larger impact on traded sectors, they are pro-growth. Moreover, in this sense, ensuring that the United States' traded sector is competitive is a benefit that accrues to society as well as to the firms getting the tax benefits. This is because there are significant externalities from having a more competitive traded sector. By definition, if there were no economic competition between nations, firms would not lose manufacturing jobs (or traded sector jobs generally) because of foreign competition. But in a highly globalized economy competition between nations can lead to some nations losing competitive advantage. And unless the currency falls to make up for this, (which does not happen in the United States since the dollar is the reserve currency and other nations manipulate their currency) the nation will lose economic activity that is most at risk. This loss of jobs and output in turn will have negative effects as the multiplier effect from these losses ripple through the overall economy.

This process of declining competitive advantage helps explain the recent financial crises and Great Recession. The unprecedented loss of U.S. manufacturing both facilitated the rapid inflows of capital looking for a home (by increasing the trade deficit) and reduced investment opportunities in real wealth-creating activities, which together contributed significantly to the housing bubble and subsequent financial crisis. As Jagannathan, Kapoor, and Schaumburg wrote in a 2009 *National Bureau of Economic Research* article, "this pattern (the increase in the current account deficit by the United States matched by increase in current account surpluses in other nations, especially China) precipitated the housing bubble in the United States."⁵³ To the extent that investment incentives, such as an investment tax credit for new machinery and equipment and a more robust domestic production deduction were in place since the late 1990s, not only would have manufacturing job and output loss been less, but the severity of the recession would have likely been less and the current recovery stronger.

What Should Congress Do?

As you consider corporate tax reform, it is important to distinguish between tax incentives that are pro-growth and those that are not. Not all tax "distortions" are harmful to growth. In fact, some are solidly pro-growth and if efforts to reform the corporate tax code eliminate these incentives in the effort to achieve rate reduction, U.S. economic growth and competitiveness will suffer. Thus effective corporate tax reform means retaining and even expanding pro-growth incentives. As such, at minimum I urge the Committee to support retaining the two key existing production-oriented incentives: accelerated

52. Rachel Griffith and Helen Miller, "Patent Boxes: An innovative way to race to the bottom?" *Vox*, 30, (June 2011), <http://www.voxeu.org/index.php?q=node/6706>.

53. Jagannathan, Kapoor and Schaumburg, "Why Are We in a Recession? The Financial Crisis Is a Symptom Not the Disease!"

depreciation and the domestic production deduction (and the R&E credit), but also to create new incentives for producing in America.

1) Retain the Domestic Production Deduction and Accelerated Depreciation

The President's Recovery Commission report on tax reform proposed as one option for finding revenues to offset the costs of rate reduction eliminating the Domestic Production Deduction (section 199) which was put in place to replace the Foreign Sales Corporation (FSC) law that was ruled illegal by the WTO in 2000. Among the advantages they listed of elimination was that it would allow the overall corporate rate to be lowered by 1 percentage point. But they estimated that repeal would lead manufacturers to pay an effective tax rate 3 percentage points higher for a net increase of 2 percentage points.⁵⁴ Yet in the discussion of disadvantages of this option there was no discussion of the impact on the competitive position of this key traded sector. In fact, the report disparaged the deduction for applying to production of hamburgers in restaurants.

But this tax deduction, while not perfect, is in fact, largely targeted to traded sectors. This is why the Obama Administration proposed increasing the section 199 deduction. About 83 percent of the value of the deductions claimed under this provision are claimed by traded sectors (e.g., manufacturing, information, mining) while hamburgers (e.g., food service and accommodations) take just 0.2 percent of the total amount of the deduction. Eliminating this deduction would raise the effective tax rate on manufacturers and other exporting sectors, thereby at the margin leading to reduced exports, greater imports, fewer jobs in these sectors, and lower overall growth. Moreover, as least one study has found that 199 increases the incentive to invest domestically.⁵⁵

Some argue that section 199 is too complicated and unfairly "picks winners". But it is important to recall why it was put in place in the first place: to respond to the forced repeal of FSC-ETI, which itself was put in place in part to respond to the fact that virtually all of America's economic competitors have in place border-adjustable value-added taxes in part to offset reductions in their effective corporate tax rates. Absent some tax policy targeted at traded firm — either 199 or a border-adjustable VAT — U.S. traded sector establishments will be disadvantaged in global competition. Many neo-classical economists claim that this doesn't matter because currency markets naturally adjust for these price differences. In textbook theory they do. In the real world they do not because not only is the U.S. dollar the global reserve currency, but U.S. policy makers defend a strong dollar while other nations, such as China and Japan, manipulate their currencies for competitive advantage.

Eliminating the accelerated depreciation of machinery and equipment and replacing it with straight line economic depreciation would also effectively raise taxes on businesses by \$109 billion over five years.⁵⁶ Even if this were offset by an equal reduction in statutory rates (of 3 percentage points),⁵⁷ it would reduce investment in capital equipment since it would raise the after tax cost of capital investment, in turn reducing productivity growth. Accelerated depreciation (as well as expensing and an investment tax credit) also has an advantage over statutory rate reduction in that its benefits accrue largely to new investment, whereas tax rate reduction provides a tax benefit to the return earned on both new and old capital.

54. President's Economic Recovery Advisory Board, *Report on Tax Reform Options*, p. 65.

55. Jennifer Blouin, Linda Krull, Casey Schwab, "The Effect of the Domestic Manufacturing Deduction on Corporate Payout Behavior," (working paper, SSRN, November 2007), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1092222.

56. Analytical Perspectives (table 17, Office of Management and Budget, accessed October 6, 2011), http://www.whitehouse.gov/omb/budget/Analytical_Perspectives/.

57. President's Economic Recovery Advisory Board, *Report on Tax Reform Options*, p. 78.

2) Institute an Investment Tax Credit on Purchases of New Capital Equipment

An effective growth and competitiveness policy needs to be based in part on lower prices for equipment, machinery and software since they drive productivity and competitiveness. Accelerated depreciation and expensing do this, but a more effective incentive would be a permanent tax credit on investment in new capital equipment (e.g., machinery, equipment and software). Some argue that because of the difference between book-tax earnings and accounting earnings that expensing and accelerated depreciation do not have as much of an incentive effect on companies as would an investment tax credit.⁵⁸ Given the decline in capital equipment investment by U.S. manufacturers in the last decade, the non-competitiveness of the U.S. corporate tax code, and the significant decline in U.S. manufacturing output and jobs (and corresponding chronic trade deficits), an investment tax credit can be an important tool in restoring American economic competitiveness.

While approximately twenty states have implemented an average 6 percent ITC to boost capital investment, a federal ITC has not been in place since the U.S. tax code was altered in 1986. In that year, Congress eliminated the investment tax credit and reformed depreciation tax write-offs to create the Modified Accelerated Cost Recovery System (MACRS).

An investment tax credit will reduce the after-tax price of investment, raising the level of domestic investment and the productivity of workers. This is why economic research has shown that an investment tax credit does spur more investment in new machinery, equipment and software. As noted above, Summers and Auerbach found that an investment tax credit will spur investment in equipment.⁵⁹ Likewise, in an article titled "The Determinants of Investment," current Federal Reserve Bank Chair Ben Bernanke found that "a one percentage point increase in the investment tax credit raises net equipment investment 1.9 percent... in the first year."⁶⁰

As such I encourage the Committee to consider establishing an investment tax credit modeled on the Alternative Simplified R&D Credit (ASC). The ASC provides a credit of 14 percent on R&D expenditures above 50 percent of the average firm expenditures of the last three years. An Investment Tax Credit could provide a credit (at a lower rate) on all capital expenditures made above 75 percent of the base (the base would be the average expenditures on qualifying capital equipment over the last three years).⁶¹

3) Transform the R&D Tax Credit into a Knowledge Tax Credit by Making Workforce Development Expenditures Eligible

The competitiveness of American industry depends in part on the skills of American workers. Given the rapid increase in skill levels abroad, it is clear that the skills of American workers must be strengthened both pre-market—through better high school curricula, more effective technical college training, and higher college matriculation and completion rates—but also through on-the-job training. Training and on-going education are critical components of robust productivity growth and rising worker incomes. And a key way workers get skills is through training provided on the job by employers. In spite of the fact that training and on-going education of workers are critical components of robust productivity growth, U.S. companies are investing about half the amount in training today as a share of GDP

58. J. Edgerton, "Investment, Accounting, and the Salience of the Corporate Income Tax" (working paper, Federal Reserve Board, 2011), <http://areas.kenan-flagler.unc.edu/Accounting/TaxCenter/taxsym2010/Documents/Edgerton-BookTax.pdf>.

59. Alan J. Auerbach and Lawrence H. Summers, "The Investment Tax Credit: An Evaluation" (working paper, NBER, Cambridge, MA, 1979), www.nber.org/papers/w0404.

60. Ben S. Bernanke, "The Determinants of Investment: Another Look," *The American Economic Review* (1983), <http://www.jstor.org/pss/1816817>.

61. Using the 75 percent base level allows a robust incentive for purchases of new equipment to be in place while limiting its fiscal impact.

compared to a decade ago, in part because the payoffs increasingly flow to other firms as workers switch jobs more frequently and because companies are under increasing pressures for short-term profits.⁶²

Therefore, to spur greater workforce training while at the same time lowering the effective corporate tax rate, I would encourage the Committee to consider expanding R&E credit to allow expenditures on employee training to be qualified expenditures. To ensure that companies use this credit to focus on the skills of the majority of their workers, and not just managers, firms taking advantage of the credit would need to abide by rules similar to those for pension program distribution, which limit focus on highly compensated employees.

4) Institute a "Patent Box" Policy

As discussed above, in the last few years, a number of nations have established "patent box" policies that tax income from the sale patented products or in some cases other IP-based sales at a lower rate than the normal corporate tax rate.⁶³ Not only do these patent box regimes increase the competitive advantage these nations have in growing, retaining and attracting knowledge-based economic activities, they put the U.S. innovation economy at an even greater competitive disadvantage than it already is. Congress should consider establishing a patent box incentive either tied to revenue from patented products or more broadly to innovation-based products.

Linking the patent box rate to production in the United States would likely have an important impact on supporting domestic manufacturing. The lower rate could be pro-rated based on the share of total R&D and production which is performed in the United States. For example, if 60 percent of the value of the R&D and production costs is located in the United States, 60 percent of the profits would be subject to the lower patent box rate. This would provide flexibility as well as a strong incentive to produce R&D and product in the United States.

Paying for Expanded Incentives and Rate Reductions

In an era of budget deficits and a massive federal debt, calling for increasing corporate tax incentives and lowering the effective (and statutory) corporate tax rate may seem fiscally irresponsible. But ultimately America has little choice. Unless the value of the dollar falls significantly, especially against Asian currencies, it will be difficult for the United States to maintain its global competitiveness and the good paying jobs that come with it. But because the dollar is the de facto global reserve currency and because so many countries manipulate their currency for competitive advantage, such a decline is not likely anytime soon. Therefore, it is critical to develop a more competitive tax code, especially with respect to globally traded sectors and activities. Corporate tax reform that is revenue neutral will mean that the United States will continue to lose competitive advantage in the global economy. This will mean slower economic growth.

Reducing taxes, particularly on more mobile capital does not necessarily have to lead to reduced government revenues and a higher deficit. In fact, studies find no relationship between declines in corporate tax rates and public spending.⁶⁴ There are two reasons for this. First, lower corporate taxes can generate more growth, making up at least some of the lost tax revenues. Clausen finds that the

62. ITIF analysis based on data from Andrew Paradise, "2008 State of the Industry Report," (report, American Society for Training and Development, Washington, D.C., 2008).

63. Robert D. Atkinson and Scott M. Andes, "Patent Boxes, Innovation in Tax Policy and Tax Policy for Innovation."

64. Devereux, Lockwood, and Redoano find that there is no relation. Likewise, Slemrod finds the same result, that "across countries there is no association of the expenditure-GDP ratio with the corporate statutory rate. Joel B. Slemrod "Are Corporate Tax Rates, or Countries, Converging," *Journal of Public Economics* 88, no. 6 (2004), 1169-1186.

combined revenue-maximizing corporate income tax rate is 33 percent, lower than the combined U.S. federal-state rate of around 39 percent.⁶⁵ One reason is that higher tax rates lead to less investment (and thereby lower tax revenues) and also more income shifting.

The second reason is that many nations with lower corporate taxes raise more revenues from less mobile sources. They do this because as Beck and Chaves find, "increases in relative tax rates on capital income encourage net FDI outflow whereas increases in labor income tax rates (e.g., income taxes) have the opposite effect. Increases in relative consumption tax rates have insignificant impacts."⁶⁶

As a result, most nations use sources of revenues such as value-added taxes and taxes on fossil fuel-based energy to replace lost corporate tax revenues from reduced effective corporate tax rates. Many nations use value-added taxes (VAT) to offset reductions in effective corporate tax rates. In 1989, there were 48 countries, primarily located in Western Europe and Latin America that had adopted a VAT. By 2007, there were 143 such countries.⁶⁷ One advantage of the United States adopting a VAT is that it is border adjustable, meaning that exports are not taxed whereas imports are, thus reducing the U.S. competitive advantage.

I would encourage the Committee to also consider instituting a modest tax on CO₂ emissions and to use the revenues to lower the effective corporate tax rate. A \$15/ton CO₂ tax levied economy-wide and on upstream combustible energy sources (e.g. coal, oil, natural gas, etc.)⁶⁸ would raise \$90 billion annually, which could fund not only the expanded incentives here (and an expanded R&D credit), but also from statutory rate reduction. We estimate that if the tax revenues were used to pay for expanded corporate tax incentives of the kind described above U.S. manufacturers as a group would actually pay lower taxes.⁶⁹

Conclusion

If America is to win the race for global economic advantage the debate over domestic tax policy needs to shift from one of revenue enhancement and tax simplification to one of global competitiveness. Most countries have already done that. However, over the last twenty years the U.S. tax code has become less, not more competitive with other nations. Retaining, expanding and adding new corporate tax incentives for production, training, capital equipment investment, and innovation would create a tax code that more effectively drives innovation, competitiveness, and good jobs. By expanding key incentives, while lowering the effective rate, the tax code would become a more powerful incentive for firms to produce within the United States.

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65. K.A. Clausing, "Taxing Corporations in OECD Countries: A Cross-Country Analysis of Revenues," (draft working paper, November 2004).
 66. Stacie Beck and Alexis Chaves, "The Impacts of Various Taxes on Foreign Direct Investment," (working paper, University of Delaware, Alfred Lerner College of Business & Economics, Newark, DE, 2011).
<http://www.lerner.udel.edu/sites/default/files/imce/economics/WorkingPapers/2011/LJW2011-18.pdf>.
 67. John Norregaard and Tehmina S. Khan, "Tax Policy: Recent Trends and Coming Challenges," (working paper, International Monetary Fund, December 2007), <http://www.imf.org/external/pubs/ft/wp/2007/wp07274.pdf>.
 68. Non-combustible energy sources, such as those sequestered in feedstock, would be exempt.
 69. Matthew Stepp and Robert D. Atkinson, "An Innovation Carbon Price: Spurring Clean Energy Innovation while Advancing U.S. Competitiveness," (technical report, ITIF, Washington, D C., March 2011), <http://www.itif.org/files/2011-innovation-carbon-price.pdf>.

Senate Finance Committee Hearing
“Tax Reform Options: Incentives for Capital Investment and Manufacturing”
March 12, 2012
Questions for Dr. Robert Atkinson

Questions from Senator Orrin Hatch

1. Dr. Atkinson, in your written testimony, you mentioned making the tax code “a more explicit driver of productivity, innovation and competitiveness.” My question is – can we ever expect taxes to be drivers of productivity, innovation and competitiveness? Perhaps the best hope we can reasonably have is that tax has minimal harm to productivity, innovation and competitiveness?

Senator Hatch, thank you for your question. While ultimately it is individuals and organizations that drive productivity, they are enabled or hindered by public policy. For example, it is much easier for entrepreneurs and organization to innovate and become more productive when the federal government adequately funds scientific research and enables high-skill immigration. Likewise with tax policy. A case in point is the R&E tax credit. By reducing the effective tax rate for companies that invest in research, the credit not only rewards companies that invest in R&D (thereby reducing their effective tax rate and enabling them to invest in even more R&D), but it spurs companies to invest in even more R&D better matching private with societal rates of return. The same is true with investment in capital equipment, which is one of the major drivers of increased productivity. So as a thought experiment, assume that the corporate tax code collects X billion dollars a year. Under scenario 1 it does it by having a rate of Y with no preferences for capital investment. Under scenario 2 it does it by having a rate of Y plus Z (a higher rate) but also first year expensing for new capital equipment expenditures. Under both scenarios corporations as a group pay the same amount of taxes. But under scenario 2 they invest more in capital equipment because the effective after-tax cost of equipment is less. Under scenario 2 the companies are more productive (because increased capital stock drives increased productivity) and the American economy is more prosperous. The reason for the latter is that

2. Dr. Atkinson, in your written testimony, you mentioned that other “countries are increasingly using their corporate tax code to create more attractive locations for internationally mobile investment.” This suggests to me that these other countries are reducing the effective tax rate – either marginal rate or average rate – on internationally mobile investment. Is that right? Also, do we see other countries increasing their effective tax rates on immobile investment? That is, do we see other countries increasing their taxes on investment that is fixed in location and/or fixed in supply?

We see several things. First, many other nations are reducing their statutory corporate tax rates with the understanding that this will also help make mobile investment (either investment that would then come into their nation or that now will be less likely to leave). But some nations are also focusing on particular kinds of tax incentives because they believe that these are more likely to be taken by firms in internationally traded, more mobile industries. For example, France recently instituted an R&E tax credit approximately six times more generous than the U.S. R&E credit, in part because of their desire to spur more R&D but also because they wanted to significantly lower the effective tax rate on technology-based enterprises locating or expanding in France. And yes we do see other nations increasing their taxes on less mobile activities. In many cases this involves cutting corporate taxes and increases sales or value-added taxes, taxes that accrue to purchases of goods and services in the nation.

Question from Senator Chuck Grassley

1. The listing of asset lives in the tax code stands in stark contrast to financial accounting practices. There is no master list that dictates the useful life of an asset. Companies make judgment calls which are reviewed by independent auditors. This raises the question of what is the most effective way to determine asset lives for tax purposes. Should Congress continue to be responsible for this? Or would it make sense to reauthorize the Treasury Department or possibly look to an independent panel of experts to periodically review asset lives? In addition, for financial reporting purposes, if the value of a tangible or intangible asset becomes impaired, the impairment loss is recognized when the asset is impaired. In contrast, for tax purposes, impairment losses generally are not recognized until the asset is disposed or abandoned. Does it make sense for the tax code to include the concept of impairment?

Senator Grassley, thank you for your question. In the absence of moving to immediate first year expensing, clearly having accurate asset life determinations is an important part of tax policy. It is also a relatively technical question that Congress is not ideally set up to determine. I believe it may make sense to reauthorize Treasury to take on this role. Congress' role, in my view is to advise Treasury on this and make it clear that Treasury's job is not to set asset lives to maximize revenue collection but to accurately have them match real asset lives or perhaps to even err on the side of slightly shorter asset life when in doubt.

Question from Senator Tom Coburn

1. Please explain the effects that not having a territorial tax system has on businesses and their capital investments.

Senator Coburn, thank you for your question. The United States is one of only a few nations with a territorial tax system, charging taxes on U.S. companies regardless of where that income is earned. However, under current law, affiliates of U.S. corporations can defer taxes owed the U.S. government until they repatriate the money to the United States. The effects of a territorial system have at least two effects that go can act in opposite directions.

On the one hand, because in theory U.S. multinational corporations cannot avoid higher U.S. taxes by locating in a lower tax location, there is less ability of tax policy to influence their location and disadvantage the United States economy. If U.S. companies face lower taxes on production overseas than they do in the United States, they have an incentive to move production to low tax nations and then ship the products (or services) back to the United States. Ending deferral and keeping territoriality, the argument goes, would level the playing field and stop “subsidizing” the export of jobs. According to this view, investments overseas by U.S. firms are substitutes for investments by U.S. firms in the United States.

But it is not this simple. If U.S. affiliates are in a lower tax nation and sell much of what they produce there to nations other than the United States, then requiring these enterprises to pay the higher U.S. tax rate will make them less competitive with firms from other nations that are subject only to the lower national rate. Since these competitor firms enjoy lower costs they are likely to export more, including to the United States, taking market share away from U.S. firms (either producing domestically or in other nations). In this case, making foreign affiliates of U.S. firms pay the higher U.S. rate may not result in more production in the United States, but rather the same number of imports, but with more coming from foreign firms. In addition, by reducing deferral, U.S. firms would be disadvantaged in buying foreign firms located in foreign nations with lower corporate taxes than the United States, compared to firms facing the lower taxes while foreign firms would have an advantage to buy U.S. affiliates located overseas.

Even if there is no substitution effect and no competitive disadvantage to U.S. firms, it’s not clear that limiting deferral actually leads to increased investment in the United States. Desai, Foley, and Hines argue that there is a complementarity between high and low tax nations and that “reduced costs of using tax havens are likely to stimulate investment in high-tax countries. These results stand in contrast to the assumptions in much of the tax competition literature and the beliefs of many concerned policymakers.”¹ Likewise Devereux argues that “from a national perspective it is optimal to exempt outbound investment from tax.”²

Their logic (and empirical model) is based on the notion that low tax nations permit foreign investors to avoid some of the tax burdens imposed by domestic authorities, thereby maintaining foreign investment levels in high tax nations. A related reason is that deferral leads firms to keep larger amounts of cash outside the home nation, limiting reinvestment of that money in activities domestically.³ One study found that deferral leads firms to hold almost double the amount of cash offshore of firms that do not face deferral. In this case territoriality would lead to more

money being repatriated back to the United States with at least some of it being reinvested in productive assets.

Another way to understand this is to consider the assumption about how new investment is financed. If one dollar of new foreign investment crowds out one dollar of domestic investment, then taxing foreign source income at the same rate and ending deferral makes more sense. Companies have a limited amount of money and will use the money to invest either at home or abroad. However, if both kinds of investment are financed at the margin by global capital markets, then this result does not hold. And given the rise of global capital markets, at least a portion of multinational investments overseas are complements and not substitutes.

Finally, basing taxation on the corporate location of the company could lead companies to relocate to other nations that do not apply territorial tax systems so that they would pay higher U.S. taxes on U.S. income and lower taxes on income from lower tax nations. Deveraux argues that “in such a setting, there is no rationale for the government hosting the parent company to tax its worldwide income.”⁴

Thus, at best it appears that ending or limiting deferral could have mixed results, perhaps spurring some activity to locate or remain in the United States but also reducing jobs in the United States by U.S. headquartered companies that serve global operations (*e.g.*, R&D, management, sales, marketing, etc). As Clausing notes, ending deferral would “exacerbate concerns regarding the international competitiveness of U.S. based multinational firms, as U.S. firms would face a tax disadvantage relative to firms based in other countries when operating in low tax markets.”⁵

So which of these results is better for the United States? Is what’s good for GM still good for the U.S.? It does appear that the United States is better off with strong U.S. multinationals and even better with strong U.S. multinationals that also invest robustly in the United States, especially in high value-added employment. Rather than limit deferral to try to achieve the latter goal, a more effective step to achieve both goals would be to reduce the statutory and effective U.S. corporate tax rates. Lower effective tax rates in the United States, especially if part of the effective rate reduction came from expanded investment incentives (like first year expensing of capital investment) would reduce the tax rate differentials between the United States and other nations, thereby reducing the need for U.S. companies to hold foreign source income overseas while at the same time encouraging U.S. and foreign companies to invest more in the U.S. than in formerly lower-tax nations. In this sense territoriality, if it were to be implemented, needs to be accompanied by lower effective corporate tax rates.

Notes:

¹ Fritz Foley, Mihir Desai and James Hines, "The Demand for Tax Havens," *Journal of Public Economics* 90 (2006): 513-31.

² Alan Auerbach, Michael Devereux, and Helen Simpson, "Taxing Corporate Income," *NBER Working Paper Series No 14494* (2008).

³ Fritz Foley, Jay Hartzell, Sheridan Titman, and Garry Twite, "Why Do Firms Hold So Much Cash? A Tax-Based Explanation," *Journal of Financial Economics* 86 (3) (December 2007): 579-607.

⁴ Auerbach, Devereux, and Simpson, op. cit., 2008.

⁵ Kimberly A. Clausing, "The Role of U.S. Tax Policy in Offshoring," Reed College, Department of Economics, Portland, OR, June 2005: 27 <www.brookings.edu/es/commentary/journals/tradeforum/2005btf_clausing.pdf>.



**Hearing Statement of Senator Max Baucus (D-Mont.)
Regarding Tax Reform and Incentives for Capital Investment and Manufacturing**
As prepared for delivery

Warren Buffett once said, "It's never paid to bet against America."

From Montana's lumber, to Michigan's automobiles, to California's semi-conductors, American products have always been world-class. And U.S. manufacturing remains critical to the long-term strength of the American economy. Make no mistake, "Made in the USA" still matters.

The reasons are simple: manufacturing creates jobs and manufacturing pays good wages. The average wage at a manufacturing company is twenty percent higher than those in the wider economy. These wages give Americans the purchasing power to help their families and the entire economy.

Manufacturing also spurs innovation, and the industry generates related jobs for engineers, scientists, designers, shippers and many others. In fact, though manufacturers accounted for only 11 percent of GDP in 2008, they contributed 68 percent of U.S. corporate spending on research and development. And in 2010, manufacturing employed 35 percent of all engineers in this country. If we want these jobs to stay in the United States, we need manufacturing to stay here.

U.S. manufacturing is essential to America's economic stability. It's critical to U.S. innovation, to our national security and intellectual property. And it's central to our balance of trade. So manufacturing is key to our competitiveness in the world and our economic growth.

Despite its importance, manufacturing is a declining percentage of our economy. After World War II, manufacturing made up more than a quarter of our economy's total output. Today, it makes up just a tenth. We need to stem this downward trend, and we should consider the best ways to do so through tax reform.

There are numerous incentives in the tax code to encourage manufacturing, and there are many provisions to boost capital investment in the U.S generally. Manufacturers claim more than a quarter of the capital investment incentives. We need to ensure these tax incentives are effective. We need to make sure we're getting the most bang-for-the-buck.

These incentives include accelerated depreciation and expensing provisions. Accelerated depreciation is currently the largest business tax expenditure. In some cases, bonus depreciation and Section 179 allow companies to fully write off the cost of equipment in the year placed in service. The tax code also

provides special depreciation schedules for everything from race horses and NASCAR racetracks to corporate jets.

America's depreciation rules are some of the most generous among developed nations. Only Greece, Italy and Portugal are more favorable. Faster depreciation, however, helps to offset the United States' higher statutory corporate tax rate. As we work to make our corporate tax rate more competitive, we must carefully examine changes to our current depreciation system and strike the right balance.

Today we will ask whether these policies are working to encourage broad-based economic growth and job creation. Do they spur investment in the U.S. economy? And are they more effective than a rate reduction with the same cost?

We will also discuss the deduction for domestic production activities, which was enacted in 2004. This provision reduces the effective tax rate on manufacturing activity by three percentage points. But unfortunately even with this provision, manufacturing has declined.

There is no single cause for the struggles of U.S. manufacturing in recent years. Some argue that low labor costs and the availability of technically-skilled employees have pushed manufacturing overseas. Others say technological improvements and increases in productivity may have reduced the need for workers in the U.S.

But we can't give up on American manufacturers. We need to determine whether the current incentives adequately address the existing challenges or whether there are simpler, more effective ways to encourage manufacturing investment in the US.

So let us find the best and most efficient ways to boost American manufacturing. Let us ensure our tax code is helping businesses create jobs here at home. Let us keep the "Made in the USA" label strong.

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Statement of Ike Brannon¹
To the Senate Finance Committee
On “Tax Reform Options: Incentives for
Capital Investment and Manufacturing”
March 6, 2012

Chairman Baucus, Senator Hatch, and members of the Committee: I thank you for the privilege of appearing before you today. I believe that today’s topic is an incredibly timely and salient one, given that tax reform has become more prominent in the press—and more urgent with every passing day.

One thing that distresses me about the current *zeitgeist* is the implicit notion that what holds true for tax reform on the personal side also works on the corporate side. I subscribe to the notion—as I assume everyone else on this panel does—that the tax code has become too complicated, with too many deductions, exclusions, credits, and other favored tax treatment for a wide variety of activities, and that the economy would benefit greatly from an aggressive pruning.

However, the overarching goal of any tax reform should be to maximize economic growth, first and foremost. The provisions we eliminate, the transition rules we impose, and the investment incentives we keep in the tax code should all be done with this in mind. And the answer as to how we treat depreciation, research and investment incentives, and other investment incentives needs to be carefully considered before we proceed.

Corporate tax reform is way overdue

We need a tax policy that provides incentives for businesses and entrepreneurs to locate in America and spend at a faster rate on innovation, workers, repairs, and new plants and equipment. As it stands, the US corporate tax code is uncompetitive in an increasingly global economy, and overly complex.

The corporate income tax harms our international competitiveness in two important ways. First, the corporate tax is far too high. The United States has the second highest corporate tax rate in the OECD. Both the US statutory rate of 35 percent and the effective tax rate experienced by US companies are among the highest of our developed competitors.² Around the world the US corporate tax rate is exceeded only in a handful of countries, all of which are developing countries that have major extractive industries with significant foreign investment.

¹ Director of Economic Studies and Director of Congressional Relations, American Action Forum. This testimony represents my own viewpoint and not necessarily that of the Forum.

² Some defend the high corporate tax rate by arguing that the effective corporate tax rate is much lower. This misses an important point. Every country’s effective tax rate is also lower than its statutory rate. A recent study by two economists at the University of Calgary (http://www.cato.org/pubs/tbb/tbb_64.pdf) concludes that the marginal tax rate in the U.S on new investment is 34.6 percent, higher than any other country in the OECD. A study by PwC puts the US average book effective tax rate above the average of the largest 58 countries and above the average of the EU nations.

Second, the United States remains the only developed country to tax corporations based on their worldwide earnings. Our competitors follow a territorial approach in which, say, a German corporation pays taxes to Germany only on its earnings in Germany, to the U.S. only on its earnings here, and so forth. If we were to adopt the territorial approach, we would place our firms on a level playing field with their competitors.³

Proponents of the worldwide approach argue that because it doesn't let American firms enjoy lower taxes when they invest abroad, it gives them no incentive to send jobs overseas. Imagine two Ohio firms, they say: one invests \$100 million in Ohio, the other \$100 million in Brazil. The worldwide approach treats the profits on these two investments equally, giving the company that invests in Brazil no advantage over its competitor.

But this line of reasoning ignores three points. First, because firms all over the world will pay lower taxes than the two Ohio companies, the likeliest outcome of the scenario is that both firms will have trouble competing effectively with global rivals. Second, when American multinational firms invest and expand employment abroad, they tend also to invest and expand employment in the United States. In the end, healthy, competitive firms grow and expand, while uncompetitive firms do not, meaning that our goal should be to make sure that American companies don't end up overtaxed, uncompetitive, and eventually out of business.

And finally, because the U.S. is the lone holdout using a worldwide approach, it is at a disadvantage as the location for the headquarters of large, global firms. As the U.S. loses the headquarters, it will lose as well the employment, research and manufacturing that is typically located nearby. A chief tax officer for a fortune 500 company quipped that their company was headquartered in the US solely because of a "historical accident."⁴ The number of *Fortune* Magazine Global 500 companies headquartered in the United States has fallen more than twenty percent since 2005.⁵

Forcing Pepsi to pay much higher taxes on its profits in Eastern Europe will not result in the U.S. increasing its exports of soda and potato chips: it will mean the diminution of Pepsi's overseas operations, with a concomitant reduction in employment here. And this is the big difference between proponents of a territorial tax system and those—like the Administration and Dr. Gravelle—who favor a move towards a worldwide tax system: Do U.S. corporations operate abroad in order to avoid expensive labor costs here or in order to service and compete in those markets abroad? An honest analysis would concede that some of both is at work, but I submit that in a global economy that is growing more integrated every day—and where tens of millions of households in developing countries are joining the ranks of the middle class every year—the main driver in the expansion of U.S. companies abroad is the profitable opportunities presented by these growing markets.

³ Of course, we have what is essentially a hybrid system in how we tax foreign-sourced profits as we allow companies to defer paying US taxes until that money is returned to the US, but this compromise brings with it another set of problems.

⁴ "Approaches to Improve the Competitiveness of the U.S. Business Tax System for the 21st Century." Office of Tax policy, U.S. Department of the Treasury, 20 December 2007.

⁵ *Fortune Magazine Global 500 Annual Index*, 2011.

While the high corporate tax rate and worldwide taxation of earnings hurts US competitiveness, the tax code's myriad tax breaks, deductions, and credits mean that our tax rate needs to be kept higher to collect the necessary amount of revenue. And its complexity comes at a price: The U.S. corporate tax system costs businesses an estimated \$40 billion per year in compliance costs, according to a Treasury Department Study.⁶

In its current form, the corporate tax code has no defenders. An ideal tax code would, as the philosopher Jean-Baptiste Colbert described so elegantly three centuries ago, pluck the goose so as to get the largest amount of feathers for the smallest possible amount of hissing. Our corporate tax system raises revenue at a significant cost to economic growth.

There had been a noticeable convergence on several key issues of corporate tax reform

Before the Administration's release of *The President's Framework for Business Tax Relief* I had been optimistic (perhaps unrealistically so) that there was some space to complete corporate tax reform in 2012. I was heartened by the fact that both tax-writing committees had dedicated so much time and energy to studying the intricacies of the corporate tax code, and the Ways and Means *Discussion Draft* on corporate tax reform presented what I saw as a good starting point for debate: it took a step towards the White House position in its proposal to tax all income held overseas as a part of any transition to a territorial regime as well as its insistence at the adoption of other base-erosion rules. It also pointedly (and encouragingly) left several other potentially contentious provisions purposefully alone, which I saw as another good sign.

The depth and variety of hearings in the Senate Finance Committee—as well as the comments proffered by the various members during the course of these hearings—led me to believe that this committee is serious about achieving corporate tax reform immediately as well.

However, the President's Framework does not bode well for an immediate solution. In it, the administration has essentially reversed course on the taxation of foreign-sourced income, proposed higher taxes on “pass-throughs” and other small business entities that do nothing for economic growth—or equity, for that matter—and pays only lip service to the idea of reform while subsequently proposing new tax breaks for favored industries. It is this last item to which I will devote the rest of this testimony.

⁶ Cited in: “Approaches to Improve the Competitiveness of the U.S. Business Tax System for the 21st Century.” Office of Tax policy, U.S. Department of the Treasury, 20 December 2007.

Do Investment Incentives Belong in the Tax Code?

While both parties agree that corporate tax reform should involve a form of rate reduction and base broadening, several questions remain for resolving the details:

- a. Exactly how low do we take the tax rate (do we have to insist on revenue-neutral reform?),
- b. Which tax provisions do we jettison to pay for the lower rate, and, most importantly,
- c. Which provisions should we keep?

In particular, the question *du jour* is whether we should keep incentives for investment, such as the research and experimentation (R&E) credit and bonus depreciation, and retain a higher rate overall, or else eliminate these deductions and take the rate down further. As a trained economist I am going to use my professional prerogative to prevaricate. The answer is that it depends on the political constraints that would govern any transition to a new tax regime.

It is important to realize that both the R&E tax credit and bonus depreciation are costly. Removing these provisions alone would allow the tax rate to fall by 3-5 percentage points, I estimate, based on the analysis done by the Treasury Department for their 2007 report on corporate tax reform, with which I assisted.

Removing these provisions would also significantly simplify the code. For example, while the R&E tax credit may encourage investment, what exactly constitutes “research and experimentation” is ambiguous, and interpretations can be overly inclusive. Removing the R&E credit may also level the playing field across sectors since some industries can take advantage of the credit more easily than others.

The tax code should be designed to maximize economic growth. Therefore, while simplification is desired, provisions that incentivize growth should not be removed for the sake of simplification alone. Corporations doing business in the US will retain their tax lawyers and attempt to parse the law so as to minimize their obligations to the government as much as possible. Nothing we do can change this, so we should not sacrifice other interests in a quest to make life easier for corporate tax departments.

And one can argue—and many do—that the benefits to eliminating all tax expenditures to finance the lowest corporate tax rate does, in the long run, buy us the maximum “bang for the buck” when it comes to economic growth. The difference between this and keeping in place provisions to encourage research and investment is that the former increases the returns to past and future investment while the latter does so solely for new investment. While increasing the returns to investment that has already occurred may not be productive (since it does not generate *new* investment) it does penalize companies playing by the tax rules in place at a particular time. A company that has a much lower tax bill associated with new investments in 2014 than in 2013 will delay investments until 2014 unless we figure out a fair and sensible way to transition to such a system. In the past such tax changes have often been accompanied by various phase-ins that lessen the differences in tax costs between two periods, which then reduces the tax benefits. If such a “transition period” would be a constraint that our duly elected Congress would feel

obligated to include in any tax reform, then it may very well make more sense from a growth perspective to go with the lowest rates possible and eschew investment incentives.

However, I am not sure that the fact that some—but by no means all—companies argue for such a “flat” tax reform means that this is the preferable one from a societal perspective. Corporations that have indicated they are all in favor of lower rates—and are willing to see the government jettison all deductions to get there—advocate this way in no small part because it will help their accounting profits, i.e. those contained in financial statements, which in turn affect stock prices and bonuses. Accounting profits and profits reported for tax purposes (which approximate what economists refer to as “economic” profits) are not always aligned, and therefore corporate calls to eliminate all deductions may not generate the maximum economic growth possible. They may in fact also be advocating for such a tax reform to minimize their **tax bill**—which is different than their profits reported for shareholders and the financial markets—but regardless of what metric they are trying to maximize, that may not be relevant for policy.

The fiduciary responsibility of a company’s management is to advocate for whatever tax policy would benefit their bottom line the most. The idea that companies are wedded to some philosophical tax approach, and that we should recognize this preference and acquiesce to it *regardless of what it means for economic growth*, is misplaced.

Also, the tradeoff that corporations think they have in front of them may not, in fact, be politically doable. For instance, a recent Duke/CFO Survey asked firms if they would sacrifice all existing tax exemptions in return for a reduction in the *overall* corporate rate to 25%,⁹ and a significant share answered in the affirmative. However, it is unclear as to whether the corporate CIO’s and Chief Tax officers fully understood the question posed. For example, Edward Rapp, Chief Financial Officer of Caterpillar, has advocated for a *combined* 25% federal and state tax rate, which would necessitate a corporate rate on the order of 20 percent, a proposition that is not on the table.¹⁰ A 25 percent federal rate would still mean a combined rate of nearly 30 percent, making the United States the nation with the 8th highest rate. I do not believe our current budget and political constraints would permit a 20 percent federal corporate tax rate if it would mean that the corporate tax would produce less revenue, which I believe would be the case in the relevant budget window.

Imposing a “flat” corporate tax rate bereft of deductions means that all industries would each pay about the same tax rate on their profits. However, it is not clear that we want our finance sector to face the same rate as our IT, biotech and manufacturing sectors. Everyone in this room can doubtless look at the tables of effective tax rates by industry and rail against the senselessness of one particular industry being below that of another industry, but to insist that we arrive at a tax code that does not provide any particular incentives to invest (and necessarily favor certain sectors) is not necessarily the path to higher growth.

One way reduce the corporate tax rate, simplify the tax code, and continue to encourage capital investment and associated economic growth would be to jettison the R&E credit and any bonus

⁹ Duke CFO Magazine Global Business Outlook Survey- Third Quarter, 2011

¹⁰ Zajac, Andrew: “Slashing U.S. Tax Rates a Must: Caterpillar CFO.” *CFOWorld*, 22 September, 2011.

depreciation—and all other corporate tax expenditures—but allow for the full and immediate expensing of capital goods.

I do not believe that full expensing of capital goods represents a tax expenditure: The tax code has to make some choice as to the pace at which firms can depreciate capital investments. I submit that the most rational and *simple* way to do this is to simply do away with the complicated, arbitrary, and often nonsensical depreciation schedules that frequently have little basis in reality, and instead to allow firms to expense capital investment at once. Furthermore, full expensing of capital goods will itself encourage research and development, reducing the need for a separate R&E tax credit.

Over the past 30 years the corporate tax has only raised about 10 percent of total receipts. If reform sacrifices some revenue, it will likely be mostly offset by efficiency gains, and outweighed by increases in economic growth.

Nobel Laureate Robert Lucas remarked in an interview that reducing or eliminating the corporate income tax was “the largest genuinely free lunch I had seen,” and estimated that the U.S. capital stock would be up to 50 percent larger with a more enlightened approach to taxing capital, and bring with it higher productivity, wages, and employment.¹²

Conclusion

Economic growth should have primacy in any debate over corporate tax reform. Most of the deductions, exemptions, and expenditures in the tax code do relatively little to incentivize growth given their cost, and our economy—and government coffers—would be better off if they were eliminated and the savings were used to “buy” a lower corporate tax rate.

The one possible caveat to that is that if it is politically feasible, the full and immediate expensing of capital equipment would remove a major source of arbitrariness from the tax code, which would increase investment and also be consistent with the desire to make the corporate tax code more neutral.

Americans—from homeowners to small businesspeople to the millions of unemployed—are in desperate need of faster and prolonged economic growth. Congress should therefore move away from ephemeral and ineffective short term stimulus proposals and evaluate tax proposals based on whether they’re likely to trigger and support that growth. Tax policy can play a key role in spurring an economic recovery—but not without sustained reform of the corporate tax system.

I look forward to answering your questions.

¹² See Lucas, Robert: “Supply Side Economics: An Analytical Review.” *Oxford Economic Papers*, April 1990, p. 293-316. And Levy, David: “Interview with Robert Lucas.” *The Region*, June 1993.



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CONGRESSIONAL TESTIMONY

Testimony Before the

Committee on Finance

United States Senate

March 6, 2012

J. D. Foster, Ph.D.

**Norman B. Ture Senior Fellow in the Economics of Fiscal
Policy**

The Heritage Foundation

Chairman Baucus, Ranking Member Hatch, Members of the Senate Finance Committee, thank you for the opportunity to testify today. My name is J. D. Foster. I am the Norman B. Ture Senior Fellow in the Economics of Fiscal Policy at The Heritage Foundation. The views I express in this testimony are my own and should not be construed as representing any official position of The Heritage Foundation.

The risks to the economy remain great, and so too does the need to focus on jobs and economic growth. Last year, the economy grew at a pedestrian 1.7 percent, according to the latest estimates. Most private forecasts for 2012 are only slightly more optimistic. Even the Administration's otherwise remarkably rosy budget forecast shows only 2.7 percent growth for 2012.

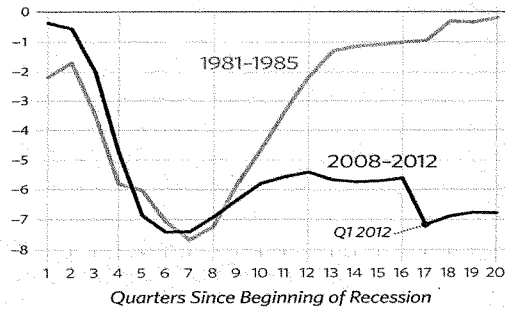
Approaching three years after the end of the Great Recession, the economy should be accelerating smartly. It isn't. We have a couple decent quarters of growth, followed by worries of renewed recession. Speculation, argumentation, theorizing, and models are now irrelevant on this point. The President's stimulus policies failed. What recovery we now experience is demonstrably not attributable to his stimulus policies, but to the natural strengths of the United States economy operating despite, not with help from, the President's policies.

The unique weakness in the current recovery becomes most apparent when compared to the last recession of similar magnitude which began in 1981. As the chart below shows, the recent and earlier recessions were similarly deep and painful, yet the economy bounced back sharply the last time, and has not done so under President Obama.

An Economy with Little Bounce

Economic output relative to potential GDP is anemic, a stark contrast to the growth demonstrated in the 1981-1985 recovery.

Output Relative to Potential GDP



Source: Heritage Foundation calculations based on data from the Congressional Budget Office.

I take no pleasure in pointing out this inescapable reality, nor in the fact that I predicted this policy failure three years ago. I would much rather have been wrong and for millions of my fellow citizens to be gainfully employed in all those jobs the President promised to create.

The federal government employed an impressive array of fiscal stimulants to the U.S. economy to soften the recession's blow and accelerate recovery. President George W. Bush started the effort with a mostly ineffectual \$113 billion stimulus based on tax rebate checks and 50 percent expensing for business equipment investment. The economy didn't notice. President Barack Obama picked up the pace with his big stimulus bill and a succession of lesser efforts totaling in excess of a trillion dollars, featuring such creative ideas as the cash for clunkers program, the first-time home buyer's credit, the payroll tax holiday, and others.

Two years after the recovery began, the economy is stumbling along, and the unemployment rate remains well above 8 percent and threatens to climb once again. Like new jobs, real hope is in short supply. As some have argued, one might conclude from these facts that the problem with these stimulants on balance was that they were not aggressive enough. That is a tough argument to sell when the budget deficit jumped by almost \$1 trillion, or about 7 percentage points as a share of GDP from 2008 to 2009. If Keynesian stimulus theory held any validity, the economy should be racing forward today, propelled by this onrush of debt. Instead, all we have is the debt.

Sadly, in the aggregate these policies were doomed to fail. They were similarly doomed to failure in their particulars. Rarely has a clunker of a plan been better labeled than "cash for clunkers." As expected, the first-time home buyers' credit made matters worse as it primarily shifted the timing of housing purchases while temporarily scrambling the process of price discovery essential to recovery. Both policies proved, once again, that incentives really do matter. But they also proved the benefits from artificial incentives applied temporarily are similarly fleeting.

Even the payroll tax holiday was of no effect because the tax does not fall on employers but on workers. The holiday temporarily increased workers' after-tax wages, which helped family finances and may have temporarily increased the supply of labor, but it did nothing to employers' costs and so did nothing for the demand for workers.

The point of this is not the painful recitation of failed policies, but to argue that the economy can recover and prosper only in a healthier economic environment in which government's role is shrinking and clarifying, not expanding and confusing through policy gimmicks that rarely help and more often hurt the recovery. This is how one should approach both the issue of tax incentives for business investment or otherwise and similar policy gimmicks outside the realm of tax policy considered as economic stimulus.

Tax Neutrality versus Tax Incentives for Business

Businesses do not need new tax incentive trinkets to encourage them to invest today. To contribute to a more rapid recovery, businesses need two fundamental changes in tax policy: tax certainty and a reduction in fundamental tax disincentives. The foremost threat to tax certainty

today is the President's repeated insistence that individual income tax rates go up. These are the rates paid by all businesses that are not C chapter corporations.

Some will argue these rates fall on only a very small percentage of small businesses. While this is correct, one can scarcely imagine a less relevant statistic. A great many individuals report income on the side, income that means they are included in the ranks of "small businesses." What is relevant to the economy is the small business that actually engages in substantial trade or business and that hires workers. According to a recent study by the Obama Treasury Department¹, businesses that pay their taxes through the individual income tax and employ workers earn 90 percent of the income targeted by President Obama for higher taxes. President Obama's tax hike proposals could not target America's job creators—small businesses—for higher taxes more effectively with a GPS guidance system.

The federal income tax code is rife with distortions, so the growing interest in revenue-neutral tax reform is most welcome. Businesses do not need more tax distortions; they need a tax code that reduces the tax distortions to their economic decisions as to how much to invest, where to invest, what to produce, and how to finance their operations. In short, businesses need a neutral tax system, not a newly biased tax system.

Positive Forces for Growth – Expensing and Lower Tax Rates

President Obama is to be applauded for his support for broad expensing of capital purchases. This policy eliminates a clear tax bias against business investment and would help the economy in the long run. Unfortunately, expensing's effectiveness has been substantially diminished under current circumstances, specifically the current low levels of interest rates and the depth and duration of the recession.

Relative to the alternatives, expensing increases the present value of capital cost recovery. Very low interest rates reduce the time value of money, and so reduce expensing's economic benefit. However, as interest rates return to more normal levels in the coming years, and then continue to rise under pressures from the enormous increase in U.S. public debt, the importance of expensing will return in full.

Expensing's benefits have also been minimized by the depth and duration of the recession, and the pervasive unease of investors about the future. Substantial excess capacity and a lack of optimism about the future leave many businesses investing only as much as they have to, rather than as much as they could in more hopeful times. The well-advertised mountain of cash reserves on which America's corporations sit today testifies to the truth of this statement.

In contrast to fundamental changes like expensing, if Congress offers special tax goodies to preferred industries like the new wards of the state known as the renewable energy industry, then

¹ See Matthew Knittel, Susan Nelson, Jason DeBacker, John Kitcher, James Pearce, and Richard Prisinzano, "Methodology to Identify Small Businesses and their Owners," *Technical Paper* No. 4, U.S. Department of the Treasury, Office of Tax Analysis, August 2011, at <http://www.treasury.gov/resource-center/tax-policy/tax-analysis/Documents/OTA-T2011-04-Small-Business-Methodology-Aug-8-2011.pdf>.

to be sure those industries will provide the expected assurances as to what they will do with the tax relief and all the good that will follow from it. Few turn down an apparently free lunch.

Put no confidence in these assurances. On balance, the economy will not be strengthened thereby, the nation's resources of labor and capital will be put to less productive uses, and yet another industry will become more attentive to Washington's goodybag than to their customers and workers.

Reforms that would simplify the tax system while reducing the biases against economic growth center on reducing the tax biases against personal saving and investment and involve reducing effective marginal tax rates. The tax code is far less punitive in terms of personal saving today than it was a couple of decades ago, but there is still far to go. Moreover, the issue is as much a matter of saving to ensure a degree of economic security while working and in retirement as it is a matter of increasing the amount of domestic saving available to finance domestic investment.

In addition to moving toward a neutral tax base, business investment would accelerate over time if tax rates for both C corporations and all other businesses were reduced substantially. Again, President Obama is to be applauded loudly for his framework for corporate tax reform featuring a 28 percent top corporate income tax rate. This may well prove a landmark event in the history of American tax policy. While there was much else in his framework that would do enormous harm to the economy, the centerpiece of the proposal, which should not be lost in these details, is a drive to lower the corporate income tax rate.

Lower statutory tax rates are important because they would lower the hurdle rate on investment, or cost of capital. Businesses would increase their investment, despite today's dismal economy and high levels of excess capacity, because lower rates would signal a sea change for the better in Washington thinking about corporate tax policy.

The President's framework to reduce the corporate tax rate, while welcome, is nevertheless curious when considered alongside his proposal to increase significantly the tax rates paid by all other businesses. One might easily surmise that the President has a high regard for the importance of large companies, and little or no real appreciation of the importance of small businesses to job creation and economic dynamism.

A common refrain today is that tax reform should "broaden the base and lower the rates." This is close but not quite correct. One could, for example, have a very broad base by taxing every dollar of business receipts and every dollar of individual income. This massive tax base would permit a very low tax rate, but it also would substitute one set of distortions for another and likely produce a nasty recession and a weaker economy in the long run. Broadening the tax base is fine as long as the goal is not simply a broad tax base but a neutral tax base where, again, neutrality means the definition of what is taxed creates neither artificial incentives nor disincentives. This is essentially where the President's corporate tax reform framework runs off the tracks. His framework broadens the base to the point of overstating taxable income and thus losing much of the benefit he would obtain from lower rates.

Finally, with respect to tax policies that would help the economy, one must acknowledge something of a conflict between the goals of tax certainty and pro-growth revenue-neutral tax reform designed to achieve a neutral tax base and lower rates. Perfect tax certainty precludes any tax changes, including positive changes from tax reform. No one can say, once started, where tax reform will end. For policymakers and economists, this is a source of concern. It is much worse for businesses facing difficult decisions. Given the current weakened state of the economy, any ill-defined move toward tax reform would increase the uncertainty in the economy, adding substantially to the economy's headwinds.

To Help the Economy Today, Do Less Harm

There is much more the federal government could do to help the economy today, a list that need not fall back on policy gimmicks. To understand which policies might be helpful today and which would be harmful, it is important to assess why the economy is not yet recovering. The fundamentals of our economy remain sound. The natural productive tendencies of America's workers, investors, and entrepreneurs remain undiminished. The economy is poised to grow. Why, then, does it still hold back?

There are, of course, the unusual headwinds, such as the ongoing weakness in the domestic housing sector, with prices still falling and stagnant new construction, but the economy faces and overcomes such headwinds even in the best of times. Headwinds there are, to be sure, but they do not explain the economy's lethargy.

The economy suffers from two categories of troubles. The first are structural, which today primarily reflect a housing sector still in deep disequilibrium in many areas of the country. There is very little substantively that government can do to restore housing markets, and heaven knows Congress and the President have tried just about everything.

And that is part of the problem: Government's well-intentioned meddling has delayed and distorted the essential requirement for normalization—price discovery. On balance, these policies have set back the housing recovery by months, perhaps a year or more. There is an important lesson here.

The second category of trouble is what might be termed environmental—not the natural environment, but the economic environment. Missing from most economics textbooks are the true animating forces of prosperity. Most relevant for our discussion is, alternatively, a shortage of confidence or an excess of bad uncertainty.

Those who could make the decisions and take the actions that would grow the economy lack the confidence to do so. Even today, the economy abounds in opportunities for growth, but turning potential into reality requires action, and action requires confidence—confidence in the future, confidence in the specific effects in government policy, and confidence that government can properly carry out its basic functions, like agreeing to a budget. America suffers a confidence shortage, and Washington is overwhelmingly the cause.

Confidence, in turn, is lacking because of an excess of uncertainty: uncertainty about the future, but also uncertainty about the effects of government policies—tax policies, regulatory policies, monetary policies, and trade policies.

Uncertainty is natural, of course. The future is always uncertain. But there is good uncertainty and bad uncertainty, much as there is good cholesterol and bad cholesterol. Good uncertainty, for example, presents opportunities for profit. Bad uncertainty arises largely when investors and entrepreneurs have very real questions about the potentially harmful consequences of government policy.

Tax policy provides a good example of bad uncertainty. The President's repeated insistence on raising taxes on high-income workers and investors slows the economy even without the policy being enacted. It does so by raising the uncertainty about the tax consequences of various actions. It does not stop all such actions, but it stops some, and therein lies the difference between stagnation and real prosperity.

Moreover, the President's insistence is a "twofer" in terms of bad uncertainty. The specific is that taxpayers don't know what their tax liability will be. The general is that suggesting raising taxes on anyone in the face of high and possibly rising unemployment suggests a gross lack of understanding about how an economy works. That's a source of bad uncertainty that afflicts the entire economy, not just those threatened with higher taxes. In this environment, Congress need not enact bad policy to weaken the economy. Threats are enough to do real damage.

The federal government should adopt a very simple guiding principle for deciding what to do next. That principle is to do less harm. There is very little in terms of concrete actions government can do at this stage that would help and a great deal of intended help that would harm, either by raising the deficit to no good effect or by creating more uncertainty and slowing the economy's natural healing process.

Do less harm means getting spending under control and thereby cutting the budget deficit. Americans are worried about spending and the deficit. That worry, by itself, is holding us back.

Do less harm means that policymakers should stop threatening higher taxes. We can have debates about who should pay what when we're at full employment. In the meantime, this threat is debilitating.

Do less harm means stop the onslaught of new regulations. The pending regulatory consequences of Dodd-Frank and Obamacare weigh heavily on the economy because even the threat of new regulations creates bad uncertainty for those affected, freezing them in place. Again, we can work through these regulations when Americans are back to work.

Do less harm means that policymakers should stop meddling with the economy. There is almost no limit to the harm Washington can do *to* the economy in its efforts to do something *for* the economy. The patient is in recovery, slowed by the incessant proddings and procedures of Washington's policy doctors. The patient doesn't need another procedure or a new nostrum. Let it heal. Do less harm.

Keynesian Alchemy

What policies meet this criterion? Under the circumstances, very few. Consider, for example, the policy of increasing the budget deficit to spur the economy. The argument is fairly simple: The economy is underperforming, demand is too low, the government deficit is part of aggregate demand, so just increase the deficit. It's an equation. How can it be wrong?

The answer, of course, is that the economy is more complicated than this simple equation. Government borrows the money, so every deficit dollar spent by the government is a dollar less that is available to the private sector. The answer, in other words, is that the macroeconomic model ignores financial intermediation, which is the bread and butter of financial markets.

Proponents will counter by saying that people are saving more, and corporations are sitting on mounds of cash. True, but it changes nothing. All this saving is not lying dormant in some vault or stuffed in some mattress. Ironically, even if it were, irresponsible deficit spending would surely not draw it out. On the contrary, this saving is deposited with the financial system, which then takes the resources from those who do not currently need them and makes them available to those who do need them. In terms of aggregate flows, this process works just as well today in recession as it does at full employment.

Thus, Keynesian demand-side stimulus does not help. It is fiscal alchemy. And by adding to the deficit and thus fears about the future, it surely adds to the economy's headwinds.

Infrastructure

Increased infrastructure spending, as the President and others have advocated, is an example of a double folly. To be clear, the issue here is not whether the nation needs more or less infrastructure spending. I am not expressing an opinion on that one way or another.

The issue is whether it acts as a short-term stimulus. It does not. First, assuming the additional spending was financed by additional borrowing, the policy runs afoul of the Keynesian fallacy. To be sure, once a project is underway, one can point to the people working, but just as surely, the borrowing that made that project possible reduced employment elsewhere.

The second folly is just as plain. Infrastructure spending on projects is capital-intensive and stretches over years. It cannot, even if enacted, swiftly affect employment in the next year plus.

Payroll Tax Holiday

The irony of a payroll tax holiday to create jobs is that reducing payroll taxes would increase employment when the economy is at full employment, yet it cannot accelerate hiring in periods of high unemployment. The key to this irony is incidence—who bears the tax.

The payroll tax is borne by workers. It subtracts from their total compensation, leaving them less after-tax wage income. This is equally true of the “employer's share” because, of course, the

employer has no share. The tax is all paid by the worker, but the worker unfortunately is aware of only half the tax, so extending the tax relief to the invisible part of the tax would not improve the outcome. Nor are weak labor markets the environment in which workers would gain a new ability to force employers to bear part of the tax.

Thus, a reduction in the payroll tax rate does not reduce the employer's costs, but rather raises the worker's after-tax wage. During periods of full employment, this means an additional supply of workers to be absorbed into the economy, thereby raising output. During periods of high unemployment, the increase in labor supply resulting from a payroll tax cut, temporary or otherwise, results in an increase in the number of unemployed workers. Thus, a policy intended to reduce the ranks of the unemployed is likely to produce an increase in the unemployment rate.

Repatriation Tax Holiday

Another policy under consideration that does not create jobs is a repatriation tax holiday. The issue here is not whether tax cuts are good or bad *per se*, but whether this particular tax cut would increase domestic employment and domestic jobs. Again, the answer is that it would not.

A repatriation tax holiday would result in a sizable influx of corporate profits from abroad. Tax policy does matter. Companies have responded and would again to this extent. But no new jobs would result. The key to understanding why this policy and its undoubted influx of capital would not increase investment and jobs at home lies in the following question: Are these repatriating companies capital-constrained today?

No, with perhaps one or two exceptions, they are not. These large multinational companies have enormous sums of accumulated earnings parked in the financial markets already, and those few, if any, that might need additional financing have ready access to the capital markets at remarkably low prices. Thus, they can meet all of their financing needs out of available domestic resources. Adding to those resources will not increase the extent of their investment opportunities. Parallel to the payroll tax holiday that would increase the supply of workers without increasing the number of jobs available, the repatriation tax holiday would increase the supply of saving without increasing the range or amount of investments to which the saving could be applied.

Having seen their primary argument wither, repatriation holiday proponents have pivoted, acknowledging that companies will mostly pay out the extra cash in the form of dividends and share buybacks. But, they argue, this would put more "money in people's pockets" which would spur consumption and thus the economy. This, of course, is just a Keynesian demand-side echo policy.

Worse, it ignores the fact that what has occurred is simply a portfolio shift on behalf of the shareholders. If a shareholder wanted more cash and less investment, he or she could simply sell shares. Faced with extra cash that was previously invested, overwhelmingly shareholders are simply going to reinvest the dividends, perhaps even in the same company. This is most striking in the context of pensions and other institutional investors. What would a pension do with the additional cash flow, but reinvest it? Ultimately, the repatriation tax holiday has nothing to do

with domestic jobs, and all to do with a retroactive tax cut for profitable companies to improve the appearance of their balance sheets.

Unemployment Benefits

Yet another ineffective or even counterproductive policy for increasing employment is extension of unemployment benefits. This policy may be defended on humanitarian grounds, but not as economic stimulus because it, too, runs afoul of the Keynesian fallacy. The extension of benefits will certainly increase the purchasing power and purchases of the recipients, but the borrowing needed to fund these benefits will, with equal certainty, reduce other areas of private spending.

Further, to the extent that the resulting increased budget deficit adds to the depth of the bad uncertainty, it adds to this important economic headwind. And the research on the issue strongly suggests, as recent papers by both The Heritage Foundation and the Brookings Institution have made clear, that extending unemployment benefits actually raises the unemployment rate.

Conclusion

In light of the ongoing high unemployment, policymakers should be keenly focused on what they can do to help the economy recover, but they must also recognize the limitations of policy initiatives. Tax gimmicks are of value only in slaking politicians' natural desire to be seen as doing something. Even fundamental tax reforms can be problematic if they are not well-defined from the outset. Though it may require a difficult discipline to implement, government's guiding principle today should be: Do less harm.

Senate Finance Committee Hearing
“Tax Reform Options: Incentives for Capital Investment and Manufacturing”
March 12, 2012
Questions for Dr. J.D. Foster

Questions from Senator Orrin Hatch

1. You say that uncertainty in the tax code is a drag on the economy. I agree with you. But what do you suggest congress do about that? As long as we have elections, isn't it always possible that a new congress will change the tax law? I ask this question primarily of Dr. Foster, but I welcome other witnesses weighing in, if they would like.

Answer: The short answer is to desist from the unfortunate and expanding policy of temporary tax policy. Make current policy permanent. Take an extended holiday from tax holidays.

Of course, some amount of tax uncertainty is inevitable. For as long as this nation exists there will always be new tax proposals and another enacted tax bill changing the tax laws. And even if the law was constant, it is constantly changing through new regulations, and letter rulings and court rulings clarifying the law and regulations.

Nor is this necessarily bad. Economies evolve. Our understanding of the effects of tax law evolves. The normative principles that inform tax policy evolve. The tax code must evolve in concert with all of these.

In small doses, the economic drag from tax uncertainty, while present, is essentially inconsequential. Change in the tax law should not be casual, however, and the more fundamental the change, the more substantive ought to be the motivation for the change. As a matter of simple fairness, taxpayers make plans relying in part on their understanding of the tax consequences. Subsequent changes in tax law then can alter the economics of those plans, sometimes bestowing unwarranted windfalls, sometimes retroactive tax hikes; the one as bad as the other.

Further, the more frequent the changes, the greater the likelihood Congress may make a change in the near future not even currently contemplated, thereby increasing the risks associated with a given investment or commitment. As the ambient tax uncertainty increases, so, too, does the depressive effect on normal risk-taking.

While some uncertainty surrounding tax policy is inevitable, the uncertainty associated with the tax code today is inexcusable. The list of so-called tax extenders which once ran to half a page now covers many pages. Major components such as individual income tax rates, the child credit,

and education provisions affecting millions of taxpayers in very fundamental ways are now set to expire at the end of the year, as is the massive payroll tax holiday. Altogether, in dollar terms almost \$500 billion worth of current tax law is set to expire at the end of 2012.

Tax uncertainty of this magnitude is a substantial drag on the economy, as are many of the specific threatened tax hikes. The economy will eventually overcome this uncertainty, but what was gained for the nation in allowing the uncertainty to build and persist? Slower job growth and lower wages. Hardly outcomes Congress should seek.

Congress should make all these provisions permanent to eliminate the uncertainty, and then join the President and the nation in a debate over fundamental tax reform as change is long overdue. Tax reform, too, will create uncertainties, which can only be allayed in part by following and explaining fundamental principles guiding the effort to which all can adhere. To offset the price of the resulting deleterious uncertainty, Congress cannot afford to compromise on those elements of reform central to a stronger economy – first and foremost, lower rates and a neutral tax base.

Question from Senator Chuck Grassley

1. The listing of asset lives in the tax code stands in stark contrast to financial accounting practices. There is no master list that dictates the useful life of an asset. Companies make judgment calls which are reviewed by independent auditors. This raises the question of what is the most effective way to determine asset lives for tax purposes. Should Congress continue to be responsible for this? Or would it make sense to reauthorize the Treasury Department or possibly look to an independent panel of experts to periodically review asset lives? In addition, for financial reporting purposes, if the value of a tangible or intangible asset becomes impaired, the impairment loss is recognized when the asset is impaired. In contrast, for tax purposes, impairment losses generally are not recognized until the asset is disposed or abandoned. Does it make sense for the tax code to include the concept of impairment?

Response: The Congress would be wise to dispense altogether with the ideas of asset lives for tax purposes.

The concept of asset lives for tax purposes is a relic of the unfortunate theory of economic depreciation. The theory of economic depreciation is essentially that a charge should be allowed against taxable income for productive assets in accordance with the asset's decline in value resulting from time, use, and the technological advances incorporated in subsequently available productive assets. Thus, assets that are expected to yield value for a specific number of years would be depreciated for tax purposes for a like number of years.

It is, of course, impossible to know at the time of purchase how long an asset will be in service or how it will decline in value over time. Thus the theory depends on rough measurements of the nearly immeasurable resulting in specific lives of great precision. However, this is not the theory's chief flaw.

The theory's chief flaw is that it violates tax neutrality, thus raising the cost of capital or hurdle rate on investment, slowing capital formation, productivity growth, and wage growth. Fortunately, policymakers and commentators are increasingly coming to understand that expensing of capital expenditures, not economic depreciation, is consistent with tax neutrality. Expensing is independent of any concept of the asset's useful life.

To be clear, however, setting aside asset lives for tax policy in no way conflicts with financial accounting practices. Tax accounting rules and financial accounting rules are different tools for different tasks. Tax accounting rules should preserve tax neutrality, while financial accounting rules reflect other concepts such as ongoing enterprise. Neither is right or wrong except as with regard to the purpose to which it is put, just as a saw isn't wrong and a hammer right unless the task at hand is to affix a nail.

Question from Senator Tom Coburn

1. Please explain the effects that not having a territorial tax system has on businesses and their capital investments.

Response: Generally, the alternative to a territorial tax system is to have some variation on a worldwide tax system, and the consequence of the U.S. worldwide tax system is that it is a drag on our economic prosperity. Worldwide taxation distorts the relative prices that direct the use of our fundamental resources of capital and labor and so as a nation we are less productive and less prosperous than we would be under a properly functioning territorial system.

One way to conceive of the current system is as imposing a tax surcharge on much of the profits earned by U.S. corporations overseas. Where the surcharge applies, investment is diminished, leaving the U.S. company less competitive and its U.S. shareholders less wealthy.

However, global commerce is more complicated than this, and so too are the distorting effects of worldwide taxation. Companies operate as globally integrated competitors. Where U.S. tax policy impedes the ability of a U.S. company to compete overseas on a level playing field with other nations' companies, then the entire company is disadvantaged, including its U.S. operations.

There is, however, a very simple example of the consequences of the worldwide tax system currently in place, and we have concrete examples demonstrating these consequences:

Worldwide taxation encourages the export of parent companies and company headquarters. Recent examples include the purchase of Chrysler by Mercedes-Benz and of Budweiser by Inbev. These transactions allowed a combining of the two companies in such a way as to prevent the foreign companies' income from becoming ensnared in U.S. tax, but also of lifting the U.S. tax from what had been the U.S. parent's foreign operations. We can expect more of these transactions if current U.S. tax law is preserved, with foreign companies buying up major U.S. companies, as global competition becomes more intense and the consequences of U.S. policy even less sustainable. And we can expect an marked acceleration of these transactions whereby U.S. multinational companies are purchased by foreign companies if proposals like the President's proposals with respect to deferral are enacted.

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United States Senate

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Barack Obama
President of the United States of America
The White House
1600 Pennsylvania Avenue, NW
Washington, DC 20500

Dear Mr. President:

I am writing to express my concerns with your definition of tax reform. There is no doubt that our tax code is badly in need of reform. It currently imposes unacceptable compliance and economic costs on individuals and businesses. So it makes sense to look at tax reform at a time of anemic economic growth and job creation to alleviate the inefficiencies created by the current tax code and to help get our economy back on the right track.

I am very concerned that, under the guise of tax reform, you intend to increase revenues to pay for more spending. In your public statement on Monday, August 8, you stated that we need to combine the spending cuts included in the debt ceiling increase deal with "tax reform that will ask those who can afford it to pay their fair share." You made no mention of lowering tax rates, broadening the tax base or other reforms such as transitioning to a territorial tax system to ensure that the United States remains competitive in the global marketplace.

My concerns have only increased after seeing statements made by others in your party. Senator Bill Nelson published a piece in Politico that seems to echo your position. He states:

"In addition to the spending cuts Congress just made, we need tax reform. And by tax reform, I mean closing loopholes, special interest tax breaks and corporate subsidies. It's just plain wrong to be protecting tax breaks for oil companies and to be rewarding businesses that ship jobs overseas."

I fear many people have been intentionally conflating tax expenditures with tax loopholes in order to score cheap political points. Tax expenditures are defined in the Congressional Budget Act of 1974 as lost federal income due to provisions in the tax code that exempt or reduce taxes for certain groups, products or activities. Unlike tax loopholes, which provide unintentional benefits and are used to game the system, tax expenditures were intentionally passed by Congress for certain policy goals, such as encouraging employer-provided health insurance or home ownership, so they are also called tax incentives. Since they help achieve goals set by Congress, they are not loopholes.

RANKING MEMBER,
JUDICIARY

Committee Assignments:

AGRICULTURE
BUDGET
FINANCE

CO-CHAIRMAN,
INTERNATIONAL NARCOTICS
CONTROL CAUCUS

During my tenure in the Senate, first as Chairman and then as Ranking Member of the Finance Committee, I worked hard with colleagues from both sides of the aisle and both houses of Congress to shut down loopholes and curb abuses. However, any revenue raised from closing loopholes or shutting down abuses were used to provide tax relief – not to pay for more spending. If there are more true loopholes to be closed, they should be closed in the context of tax reform and reducing the debt.

The 1986 tax reform law eliminated some expenditures and closed some loopholes but the savings realized was used to lower rates and simplify the tax code overall. Also, these changes were negotiated over at least two Congresses and with significant leadership by President Reagan and his Treasury Department staff. All those involved in that effort, including me, know that difficult choices were made. But, they were made after lengthy debates and much negotiation. The limited timeframe provided to the new “super committee” of Congress does not appear sufficient to accomplish true tax reform

Twenty-five years since the tax code was last overhauled, globalization has changed the U.S. economy and the tax code certainly has not kept up. I dispute Senator Nelson’s position that the tax code rewards “businesses that ship jobs overseas.” The reality is that the U.S. now has one of the highest corporate income tax rates in the world and still retains a worldwide system of taxation. These factors alone encourage companies to keep billions of dollars in the countries where they are earning that money. But it’s also important to understand that American companies are also going to where their customers are. Companies like Proctor & Gamble and John Deere have a significant presence in Iowa but they are also increasing manufacturing where consumers and farmers need their products. These companies should not be penalized for their success overseas, especially when such success improves the companies’ operations here.

In the Senate Finance Committee, we recently heard testimony from Chief Executive Officers (CEOs) of four of the largest American companies competing overseas. The message from these CEOs was clear – they need a lower rate and certainty to compete overseas. While they seemed to agree that they would be willing to give up some of the tax incentives for guaranteed lower rates, they also highlighted the challenges we face if we just adopt a slash and burn approach. For example, some countries are able to offer lower corporate tax rates while retaining incentives like the research and development credit.

The National Bureau for Economic Research (NBER) issued a paper last year titled “Large Changes in Fiscal Policy: Taxes Versus Spending”. The paper, authored by two Harvard economists, states that: “As far as reduction of large public debts the lesson from history is reasonably optimistic. Large debt/GDP ratios have been cut relatively rapidly by sustained growth.” The authors go on to explain, however, that the growth rates experienced in the 1990s or after World War II are not likely. As a result, they turn to answering the question of whether taxes or spending can spur growth.

The paper examined “the evidence on episodes of large stances in fiscal policy, both in cases of fiscal stimuli and in that of fiscal adjustments in OECD countries from 1970 to 2007.” Its findings, summarized below, should be extremely informative for the current debate.

“Fiscal stimuli based upon tax cuts are more likely to increase growth than those based upon spending increases. As for fiscal adjustments, those based upon spending cuts and no tax increases are more likely to reduce deficits and debt over GDP ratios than those based upon tax increases. In addition, adjustments on the spending side rather than on the tax side are less likely to create recessions.”

Since this study focuses on “fiscal policy episodes” in OECD countries, it is important to highlight that the OECD member countries have an average marginal statutory tax rate of approximately 25 percent - a full 10 percent lower than the United States'. The CEO of PMC-Sierra testified that his company is competing in Asian countries where the tax rate is as low as 15 percent.

Without a doubt, economic growth will help reduce our deficit and debt problems. It is our responsibility to spur that growth, in part, by reforming the tax code to level the playing field for American companies. These companies – the ones that invent and have money to invest – are the ones that are going to create jobs here in the United States. Extending the payroll tax holiday for employees or further extending employment benefits are not going to create jobs or stimulate the amount of economic growth we need to improve our economy.

Tax reform in a global economy is a serious task. There are complex issues to be considered. These include a comparison of the rates and incentives provided by the countries we are competing with for jobs. A serious task needs serious leadership. Demagoguery of tax incentives may provide good political sport but it does not provide the strong leadership needed for the serious task of reforming the tax code to secure America's competitiveness in the global economy.

Former House Majority Leader Gephardt and Former Treasury Secretary Baker – two of the architects of the 1986 tax reform legislation – appeared before the Joint Committee of Taxation on April 6, 2011. Both had sage advice to dispense including that presidential leadership is essential to striking a bipartisan, bicameral deal on tax reform like they did with President Reagan in 1986.

I ask that you heed their recommendation and take responsibility for the tone and tenor of the tax reform debate you are setting. Serious leadership is needed for this important and critical task. With unemployment and growth rates where they are, the country cannot afford the kind of “tax reform” you are promoting.

Sincerely,



Charles E. Grassley
United States Senator



DEPARTMENT OF THE TREASURY
WASHINGTON, D.C. 20220

10/03/11 10:03:05

October 3, 2011

The Honorable Charles E. Grassley
United States Senate
Washington, DC 20510

Dear Senator Grassley:

Thank you for your letter expressing your concerns about the President's approach toward tax reform. Because your letter raises issues of tax policy, it was referred to me.

The Treasury Department and the Administration share your interest in reforming the Tax Code so that it reflects the economic realities of the 21st century and encourages investment and job creation. To achieve these objectives, comprehensive tax reform should aim to broaden the tax base and, to the extent possible in the current fiscal climate, lower marginal tax rates. We agree with you that tax expenditures are, in many cases, incentives that reflect intentional government policy. In this respect, they differ from pure tax loopholes, which are unintentional benefits derived by taxpayers who may have found a way to game the system. Any broadening of the tax base, however, is likely to require a reevaluation of many tax expenditures in order to assess their effectiveness, efficiency and appropriateness in the current fiscal environment.

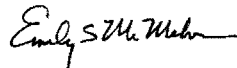
As the President has pointed out, "revenue increases are going to be required to close our deficit and deal with our debt over the long term." Tax reform must take place in this context of long term deficit reduction. To that end, the bipartisan National Commission on Fiscal Responsibility and Reform recommended a tax reform plan intended to raise substantial amounts of revenue in future years, while also reducing the top marginal income tax rates on individuals and on corporations. Thus, it is possible to have a broader tax base and lower tax rates, yet still raise sufficient revenue to make a meaningful contribution to deficit reduction.

Like you, we recognize the challenges faced by the new Joint Select Committee on Deficit Reduction that has been charged with addressing our nation's fiscal problems. That said, we have every hope that the Joint Select Committee on Deficit Reduction will be able to complete its task. To assist the Committee in its work, the President sent to Congress on September 19, 2011, his Plan for Economic Growth and Deficit Reduction, a comprehensive plan to reduce the deficit by \$4.4 trillion and spur economic growth and job creation. A key element of the President's Plan is a call on the Joint Select Committee to undertake comprehensive tax reform that achieves five principles: (1) lower tax rates, (2) cut inefficient and unfair tax breaks, (3) cut the deficit by \$1.5 trillion over the next decade, (4) increase job creation and growth in the United States, and (5) observe the "Buffett Rule" that no household making over \$1 million annually should pay a smaller share of its income in taxes than middle-class families pay.

The President's Plan includes a detailed set of specific tax loophole closers and measures to broaden the tax base that, together with the expiration of the high-income tax cuts, would be more than sufficient to meet the \$1.5 trillion target. Tax reform should draw on these specific proposals, together with the elimination of additional inefficient tax preferences. If the Joint Select Committee is unable to undertake comprehensive tax reform in the time allotted for its work, the President believes that the discrete measures included in the Plan should be enacted on a standalone basis. Their enactment as a standalone package still would significantly improve the country's fiscal standing, represent an important step towards more fundamentally transforming our tax code, and serve as a strong foundation for economic growth and job creation.

Thank you again for your letter. We look forward to working with you and other members of Congress to reform our tax system in the context of long-term deficit reduction.

Sincerely,

A handwritten signature in black ink that reads "Emily S. McMahon". The signature is written in a cursive, flowing style.

Emily S. McMahon
Acting Assistant Secretary (Tax Policy)

Statement of Jane G. Gravelle
Senior Specialist in Economic Policy
Congressional Research Service
Before
The Committee on Finance
United States Senate
March 6, 2012
on
Tax Reform Options: Incentives for Capital Investment and Manufacturing

Mr. Chairman and Members of the Committee, I am Jane Gravelle, a Senior Specialist in Economic Policy in the Congressional Research Service of the Library of Congress. I would like to thank you for the invitation to appear before you today to discuss tax reform issues relating to capital investment and manufacturing.

Although much attention has focused on statutory tax rates and how they compare to tax rates in other countries, tax burdens on investment are also influenced by provisions that affect the business income tax base. These tax base provisions along with preferential rates lead to differences between statutory and effective tax rates.

To illustrate these effects consider the comparisons in Table 1, which show statutory and effective tax rates of various types, comparing the United States and the average for other countries in the Organization for Economic Development (OECD). Although statutory tax rates (combined national and subnational) in the United States are often cited as almost 15 percentage points higher than the OECD, this gap narrows when foreign rates are weighted to reflect the size of foreign countries, narrows further for

firms eligible for the production activities deduction, and almost disappears when measures of effective tax rates are considered.

Table 1

Corporate Tax Rates, United States and Rest of the OECD (in %)

Tax Rate Measure and Year	United States	OECD, Average Weighted by GDP, Excluding United States	OECD Average, Unweighted, Excluding United States
Statutory (2010)	39.2	29.6	25.5
Statutory (2010) with Production Activities Deduction	36.3	29.6	25.5
Effective (2008)	27.1	27.7	23.3
Marginal Effective Equipment (2010)	23.6	21.2	17.3
Marginal Effective Equipment (2005)	23.0	21.1	18.7
Marginal Effective Buildings (2005)	29.0	26.4	23.4

Source: Congressional Research Service (CRS) Report R41743, *International Corporate Tax Rate Comparisons and Policy Implications*, by Jane G. Gravelle. Effective tax rates are taxes divided by income. Marginal tax rates measure the effective tax rate on a new equity investment (the share of the pretax internal return paid in taxes). Both effective tax rates are affected by depreciation provisions.

Depreciation provisions are a significant reason that differences in effective tax burdens are significantly smaller than differences in statutory rates. According to data reported on the present value of depreciation allowances for equipment for 2005 (the latest available), out of 19 countries, only three (Greece, Italy and Switzerland) had higher values than the United States.¹

¹ Two countries had the same values: Portugal and Sweden. Institute for Fiscal Studies, <http://www.ifs.org.uk/publications/3210>.

Statutory corporate tax rates in other countries have declined, but these rate cuts have been offset in part by changes in other tax provisions, such as depreciation.² Data on effective tax rates for the G-7 indicate that while statutory rates fell from 1982 to 2005, effective rates on equipment either rose or fell by a smaller amount.³ Subsequently, the 2008 cut in the German tax rate was combined with base-broadening provisions eliminating declining balance depreciation methods, capping interest deductions, and other revisions.⁴ The United Kingdom is also planning a reduction in capital allowances as part of its rate reduction and move to a territorial system.⁵

Thus, rules for measuring the tax base, as well as the rate, affects the tax burdens on corporate investments. This is the central issue in any tax reform, including one that is revenue neutral: the need to balance rate reductions and base broadening.

In this testimony, I review the most significant provisions associated with capital investment and with manufacturing: accelerated depreciation and the production activities deduction. These provisions are two of the largest corporate tax expenditures. A

² See Eurostat, *Taxation Trends in the European Union, 2007*, which shows falling statutory corporate rates but constant or rising effective rates, which they ascribe to base broadening in part. http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-78-07-021/EN/KS-78-07-021-EN.PDF. See also *Taxation Trends in the European Union Data for the EU Member States, Iceland and Norway, 2011 edition*, which cites reductions in depreciation values and other revisions, along with rate cuts, http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-DU-11-001/EN/KS-DU-11-001-EN.PDF.

³ Jane G. Gravelle, "Economic Effects of Investment Subsidies," in *Tax Reform in Open Economies: International and Country Perspectives*, Ed. Iris Claus, Norman Gemmill, Michelle Harding and David White, Edward Elgar, Northampton, MA, 2010.

⁴ Bundesministerium der Finanzen, *From the 2000 Tax Reform to the 2008 Corporate Tax Reform – consistent and palpable reduction of direct tax burden for citizens and enterprises*, July 9, 2007, <http://www.german-business-portal.info/GBP/Redaktion/en/PDF/steuerreform-2008.property=pdf.bereich=gbp.sprache=en.rwb=true.pdf>; Dorsey and Whitney, *German Corporate Tax Changes: New Limitation of Interest Deductions, Exclusion of Loss Carry Forwards, Tax on Relocation of Functions*, June 26, 2008, http://www.dorsey.com/german_corporate_tax_changes/.

⁵ HM Treasury and HM Revenue and Customs, *Corporate Tax Reform: delivering a more competitive system*, November 2010, http://www.hm-treasury.gov.uk/d/corporate_tax_reform_complete_document.pdf.

number of other tax provisions and how they might be used to reduce rates are discussed in CRS reports.⁶

Accelerated Depreciation

Accelerated depreciation is normally the most costly corporate tax expenditure, although its revenue effect has recently fluctuated considerably because of the effects of changes in bonus depreciation provisions. Because bonus depreciation was enacted on a temporary basis, the tax expenditure would rise significantly for a year or two, and then be projected to fall. Accelerated depreciation is also affected by the business cycle. For FY2014, a more normal year with respect to the business cycle, the estimated revenue loss for equipment, with the effect of bonus depreciation eliminated, is about \$35 billion. This amount is slightly over twice as large as the production activities deduction.⁷ (Both include losses associated with unincorporated businesses). Accelerated depreciation provisions could be liberalized, which would require an offset from either raising corporate rates, or cutting back some other provisions, if the change were to be revenue neutral. Alternatively, lives could be increased and methods slowed to finance a cut in the corporate income tax rate.

⁶ CRS Report R41743, *International Corporate Tax Rate Comparisons and Policy Implications*, by Jane G. Gravelle, considers a variety of tax provisions, including provisions affecting foreign source income, other tax expenditures, and restricting interest deductions. See also CRS Report R40623, *Tax Havens: International Tax Avoidance and Evasion*, by Jane G. Gravelle for more detailed provisions relating to foreign source income.

⁷ Updated from data in Jane G. Gravelle, "Practical Tax Reform for a More Efficient Income Tax," *Virginia Tax Review*, Vol. 30, No. 2, Fall 2010, pp. 389-406. The expenditure for nonresidential structures is negligible, and the expenditure for residential structures is primarily noncorporate.

Liberalization of Depreciation: Bonus Depreciation

Currently, depreciation rules are very generous for equipment, as temporary bonus depreciation, first at 50%, 100% in 2011, and, currently, 50% of the cost of investment, has been enacted. Bonus depreciation allows a fraction of investment to be deducted when acquired, while costs of equipment are normally deducted over several years (typically five to seven years). Bonus depreciation was first enacted in 2002, at 30%, and subsequently raised to 50%, to stimulate the economy. The provision was intended to be temporary and expired after 2004. It was enacted again in 2008, for a one year period, to combat the recession and continued to be extended as unemployment remained high. It was allowed at 100% in 2011 and is currently 50%, expiring in 2013. Based on estimates of overall effective tax rates of equipment, currently estimated at 26%, effective tax rates would fall to 20% for 30% expensing, to 15% for 50% expensing and to 0% for 100% expensing.⁸

Empirical studies of the effectiveness of investment incentives in stimulating investment, using data over time or across industries, found mixed, but frequently small, effects of investment subsidies on investment.⁹ New evidence has come to light with studies of the effectiveness of the 2002 bonus depreciation provision, which provides a natural experiment. This evidence, however, largely suggests that reducing effective tax rates through investment subsidies may not be very effective in stimulating investment. A study by academic researchers found some effect; a study by economists at the Federal

⁸ CRS Report RL30299, *Capital Income Tax Revisions and Effective Tax Rates*, by Jane G. Gravelle.

⁹ Numerous studies have been done, generally yielding small elasticities (absolute value of the percentage change in investment divided by the percentage change in the cost of capital). These studies are reviewed in Jane G. Gravelle, "Economic Effects of Investment Subsidies," in *Tax Reform in Open Economies: International and Country Perspectives*, Ed. Iris Claus, Norman Gemmill, Michelle Harding, and David White, Edward Elgar, Northampton, MA, 2010.

Reserve Board found negligible effects. (The Federal Reserve economists also reported the results of several surveys of firms that indicated between two-thirds and 90% of firms were not influenced by the provision.) Moreover, a Treasury study indicated that many firms did not use bonus depreciation even though it was beneficial.¹⁰ Since the effects of a temporary subsidy should be much more powerful than a permanent one (since firms needed to act in the window of opportunity), these results suggest little effect from an investment subsidy.¹¹

Moreover, given the evidence that suggests domestic savings is relatively unresponsive to increases in returns, any investment diverted into equipment spending by such a provision would be withdrawn from other, in some cases, more valuable, uses. The only source of investment funds that would not come from other uses would be capital attracted from abroad. However, the benefits of encouraging capital to flow in from abroad are quite limited. An analysis of the effect of cutting the corporate tax rate from 35% to 25% indicated that output would increase by only 2/10 of a percentage point, and that 90% of that benefit would accrue to foreign owners of capital, not U.S. income.¹² This change would be considerably larger than a permanent 50% bonus depreciation on equipment and was analyzed assuming no offsetting changes elsewhere that might offset

¹⁰ Christopher House and Matthew Shapiro, *Temporary Investment Tax Incentives: Theory With Evidence from Bonus Depreciation*, National Bureau of Economic Research Working Paper 12514, Cambridge, Mass., September 2006. Subsequently published in the proceedings of the American Economic Association meetings: House, Christopher and Matthew Shapiro, *Temporary Investment Tax Incentives: Theory With Evidence from Bonus Depreciation*, *American Economic Review*, Vol. 98, June 2008, pp. 737-768; Darryl Cohen and Jason Cummins, *A Retrospective Evaluation of the Effects of Temporary Partial Expensing*, Finance and Economics Discussion Series 2006-19, Federal Reserve Board, Washington, D.C. April 2006; Matthew Knittel, *Corporate Response to Bonus Depreciation: Bonus Depreciation for Tax Years 2002-2004*, U.S. Department of Treasury, Office of Tax Analysis Working Paper 98, May 2007.

¹¹ Unlike current circumstances where bonus depreciation may not be effective because of the slack demand in the economy, the early bonus depreciation was in effect when the economy was performing normally.

¹² CRS Report R41743, *International Corporate Tax Rate Comparisons and Policy Implications*, by Jane G. Gravelle

the reduction in tax rates. Since the corporate tax is only 2% of output, however, it is not surprising that the effects of even a significant rate cut would be modest.

An investment subsidy such as bonus depreciation, enacted on a permanent basis, would be costly as well, perhaps around \$30 billion annually.¹³ This revenue cost could be reduced if targeted to a narrower class of investments, such as manufacturing equipment, however. Manufacturing is estimated to account for about a quarter of capital in equipment.¹⁴ Moreover, three quarters of the assets in manufacturing are accounted for by five types of investments (instruments, general industrial equipment, special industrial equipment, fabricated metal products and metal working machinery), allowing for further targeting.

Treatment of Section 179 Expensing

In addition to bonus depreciation that is available for individuals in general, there is also a provision that has been temporarily expanded, allowing a limited amount of investment to be expensed (the full cost deducted on acquisition), a provision aimed at small businesses. This provision is often referred to as Section 179 expensing, and it was increased in 2002 along with bonus depreciation. In 2002, the maximum amount that could be expensed was \$24,000 and the benefit began phasing out dollar for dollar once investment rose above \$200,000. These amounts were increased to \$100,000 and

¹³ This estimate is based on extrapolating the 2008 estimate of bonus depreciation (Joint Committee on Taxation, JCX-17-03). The economic outlook was probably more optimistic in early 2008 and therefore more reflective of normal times than the 2009 estimate. The result of making the change permanent was a \$28 billion average annual loss over the first ten years and a steady state loss of about \$23 billion, assuming a 5% growth rate. In normal times, however, more firms would be able to use the deduction and participation would be likely be higher.

¹⁴ Capital stock profile for manufacturing based on expenditure shares from the National Income and Product Account capital flows tables, http://www.bea.gov/industry/capflow_data.htm, applied to capital stock estimates at http://www.bea.gov/scb/pdf/2011/09%20September/0911_fixed-assets.pdf.

\$400,000 respectively for 2003, then indexed for inflation, but those amounts were scheduled to expire and return to the (indexed) 2002 values in 2008. In 2007, the amounts were increased to \$125,000 and \$500,000. In 2008, the amounts were further increased to \$250,000 and \$800,000 as part of the stimulus bill for 2008. These provisions were extended by subsequent legislation through 2009 and 2010. Legislation in 2010 increased the amounts to \$500,000 and \$2,000,000 for 2010 and 2011. These provisions became redundant for 2011 after legislation enacted in December 2010, allowing expensing for all equipment, but the limit was set at \$125,000 and phaseout after \$500,000 in 2012 by that law.

The provision for small business, section 179 expensing, is much less costly. It can also be viewed in part as a way to simplify compliance by small and medium sized businesses. Under current law, this limit would fall back to the 2002 limit of \$24,000 (indexed for inflation), although a higher amount (such as the \$100,000 enacted for 2003) could be considered. A study of the effect of the provision in 2001-2003 found that taxpayers elected this provision for only about half their eligible investment.¹⁵ The provision and its change had small effects as well: under the lower limit about 6.5% of investment was expensed and under the higher limit 8.4%. Thus, the additional investment deducted under Section 179 as a result of the increase was less than 2% of total investment. An even smaller share of manufacturing investment would be covered since small firms represent a smaller share of this industry. Thus, this provision is not likely to have a significant effect on investment.

¹⁵ Matthew Knittel, "Small Business Utilization of Accelerated Depreciation: Section 170 Expensing and Bonus Depreciation," *Proceedings of the National Tax Association, 2005*, pp. 273-275. Data on coverage was compared with estimates of equipment investment from the National Income and Product Accounts, Table 5.5.5, <http://www.bea.gov/national/nipaweb/SelectTable.asp?Selected=N>.

Slowing Depreciation as a Base Broadening Provision

Much of the discussion about corporate tax reform, however, proposes to use tax expenditures as a way of financing a rate reduction in a revenue neutral change, as is proposed, for example, by the Fiscal Commission¹⁶ and in legislation such as the Wyden-Coats bill (S. 727).

This portion of my testimony considers two illustrative examples of revising the depreciation system: returning to the alternative depreciation system as proposed in S. 727 and by the Fiscal Commission, and a more limited approach of lengthening the lives of the basic equipment classes that is proposed as a CBO budget option.¹⁷

Table 2 shows the effect, compared to the 35% statutory rate, of current law depreciation rules and the proposals on various types of equipment and structures. Under current law, tax rates on equipment range from 17% to 36%, based on estimates of economic depreciation. (Some variation in rates is inevitable if assets are grouped into a limited number of classes). Under the alternative depreciation system, which has longer lives and straight-line methods, tax rates range from 27% to 44%. Under the CBO budget options, tax rates range from 24% to 44%. Public utilities, which are classified as equipment for tax purposes but structures for National Income and Product Account purposes, are taxed at 27% and their rates will rise to 31% and 33% respectively. Most buildings are taxed at or above statutory rates (although some undermined amount of industrial buildings may be treated as equipment and taxed at lower rates).

¹⁶ The National Commission on Fiscal Responsibility and Reform, *The Moment of Truth*, December 2010, <http://www.fiscalcommission.gov/sites/fiscalcommission.gov/files/documents/TheMomentofTruth12.1.2010.pdf>;

¹⁷ Congressional Budget Office, *Reducing the Deficit: Spending and Revenue Options*, March 2011, <http://www.cbo.gov/ftpdocs/120xx/doc12085/03-10-ReducingTheDeficit.pdf>.

Table 2

Effective Tax Rates by Asset Type, No Change in Statutory Rate

Asset Type	Current Law (%)	Alternative Depreciation (%)	CBO Budget Options (%)
Equipment			
Autos	35	39	44
Office/Computing Equipment	31	39	41
Trucks, Buses, Trailers	30	34	39
Aircraft	30	44	38
Construction Machinery	24	31	32
Mining/Oilfield Equipment	29	42	37
Service Industry Equipment	29	37	37
Tractors	27	37	35
Instruments	28	42	36
Other	27	39	35
General Industrial Equipment	26	38	33
Metalworking Machinery	24	34	31
Electric Transmission Equipment	34	43	42
Communications Equipment	19	34	26
Other Electrical Equipment	24	36	31
Furniture and Fixtures	23	33	30
Special Industrial Equipment	21	34	28
Agricultural Equipment	21	31	28
Fabricated Metal	30	39	38
Engines and Turbines	36	41	43
Ships and Boats	17	27	25
Railroad Equipment	18	29	24
Structures			
Mining/Oil and Gas	7	16	8
Other	40	41	40
Industrial	37	37	37
Public Utility	27	31	33
Commercial	36	36	36
Farm	26	30	33

Note: Author's calculations; assumes 5 percent real discount rate and 2 percent inflation rate.
Source: Reducing Depreciation Allowances to Finance a Lower Corporate Tax Rate, by Jane G. Gravelle, forthcoming, *National Tax Journal*.

Table 3 aggregates the rates for equipment, structures, and the total, indicating that equipment is taxed at effective rates of 26% under current law, rising to 36% under the alternative depreciation system and 34% under the CBO budget option. Thus both changes, while moving rates closer to statutory rates, would significantly increase effective tax rates for equipment. Except for public utility structures there would be little change in the tax rate on structures. Overall tax rates would rise from about 30% to close to the statutory rate (35% or 34%).

Table 3

Aggregate Effective Tax Rates, No Change in Statutory Rate

Asset Type	Current Law (%)	Alternative Depreciation (%)	CBO Budget Options (%)
Equipment	26	36	34
Structures	32	34	34
Total	30	35	34

Note: Assumes 5 percent real discount rate and 2 percent inflation rate.

Source: Reducing Depreciation Allowances to Finance a Lower Corporate Tax Rate, by Jane G. Gravelle, forthcoming, *National Tax Journal*.

Table 4 calculates tax rates for the assets for the manufacturing sector. As indicated in the table, the initial tax rates for equipment are slightly lower, at 24%. The rate on equipment would rise by 50%, to 36%, for the alternative system and by 29%, to 31%, for the CBO budget option. Although actual industrial buildings would not be affected, as noted earlier, some undetermined amount of these structures may be taxed at lower rates as equipment and may experience tax increases.

Table 4

Aggregate Effective Tax Rates, Manufacturing Sector, No Change in Statutory Rate

Asset Type	Current Law (%)	Alternative Depreciation (%)	CBO Budget Options (%)
Equipment	24	36	31
Structures	37	37	37
Total	31	37	34

Note: Author's calculations; assumes 5 percent real discount rate and 2 percent inflation rate. Capital stock profile for manufacturing based on expenditure shares from the National Income and Product Account capital flows tables, http://www.bea.gov/industry/capflow_data.htm, applied to capital stock estimates at http://www.bea.gov/scb/pdf/2011/09%20September/0911_fixed-assets.pdf. Note that some share of structures for manufacturing may receive lower tax rates if they are classified as equipment for tax purposes, so tax rates may be lower.

Some of the increased burden would be offset if the statutory rate were lowered. This effect depends not only on which option is considered but also on two other factors. First, the revenue gain over the budget horizon is almost twice the size of the steady state gain (relative to GDP or tax revenues). The steady state occurs after the longest depreciation is reached and is the estimate that remains (for a given growth rate) constant relative to output. For long run revenue neutrality the steady state should be used as an offset. Second, almost a quarter of the revenue gain is from unincorporated business, so if neutrality were confined to the corporate sector, only corporate revenue gains would be considered. Table 5 shows the effects of these alternatives. If rate reductions were based on all depreciation and the ten year budget horizon, the corporate rate could be reduced by 4.7 percentage points, almost, but not quite, offsetting the aggregate tax rate increase shown in Table 3. However, equipment tax rates would still be higher. If the steady state and only corporate depreciation were used, a reduction of less than half that amount 2.2 percentage points, would be possible. The comparisons for the CBO budget options

proposal result in an even smaller offset, with a rate reduction of slightly less than a percentage point when steady state corporate depreciation is used.

Table 5

“Revenue Neutral” Statutory Tax Rates

Basis for Estimate	Alternative Depreciation System (%)	CBO Budget Options (%)
Budget Horizon, All Depreciation	30.3	32.8
Budget Horizon, Corporate Depreciation	31.3	33.3
Steady State, All Depreciation	32.3	33.8
Steady State, Corporate Depreciation	32.8	34.1

Notes: New corporate rate is current rate divided by 1 plus the ratio of revenue gain to corporate revenues. For the budget horizon the rate is derived from the revenue cost and corporate tax revenue, first ten years. The ratio is 54 percent as large for the steady state. Ratios in either case when confined to using corporate depreciation are multiplied by 0.78.

Source: Reducing Depreciation Allowances to Finance a Lower Corporate Tax Rate, by Jane G. Gravelle, forthcoming, *National Tax Journal*.

The reason for this lack of trade off is that corporate rate cuts provide a larger windfall because they benefit assets that are already in place as well as new investment. These calculations thus illustrate the tradeoffs in using depreciation changes to offset rate reductions. A more neutral set of tax rates is obtained and the headline statutory tax rate is reduced, but the burden on new investment is increased.

Production Activities Deduction

The other major tax expenditure associated with manufacturing and capital investment is the production activities deduction, which allows a deduction of 9% of taxable income for domestic production for certain industries, primarily manufacturing, electricity and natural gas production, and construction. This provision costs

approximately \$15 billion for FY2014.¹⁸ Because the deduction applies to taxable income, it is equivalent to a rate reduction from 35% to 31.85% where applicable. One of the original rationales for the tax reduction was to benefit manufacturing. This provision has been criticized as distorting the tax treatment of different industries by granting differential tax rates. In addition, it creates administrative and compliance problems both in distinguishing domestic content and identifying eligible activities.

About a quarter of the subsidy benefits unincorporated businesses, although that share is growing and is projected to reach 35% by FY2014. Of the corporate component, the manufacturing share is 66%, while manufacturing's taxable income was 40% of the corporate total.¹⁹ Assuming little of the reduction in the noncorporate sector is for manufacturing, manufacturing receives less than half the benefit, and corporate manufacturing receives 44% of the benefit. About 12% of the corporate benefit is from firms in the information sector, which is responsible for 6% of profits. The mining sector claims 6%.

A reason to question eliminating this deduction relates to international capital flows. This deduction is more likely to apply to multinationals because of the industry restrictions. A revenue neutral rate substitution could lower the effective statutory rate by about 1.2 percentage points if noncorporate benefits were used and 0.8 otherwise. Therefore to the extent that lowering the domestic tax rates is attractive to induce capital inflows or reduce profit shifting, this deduction may be more targeted to multinationals. It

¹⁸ Joint Committee on Taxation, 2010a, *Estimates of Tax Expenditures for FY2010-2014*, December 21, 2010, JCS-3-10

¹⁹ Data on Distribution is from CRS Report R41988, *The Section 199 Production Activities Deduction: Background and Analysis*, by Molly Sherlock.

is doubtful, however, that this issue outweighs the drawbacks of the provision, making this change a good candidate for revenue raising.

One intermediate option is to limit the benefit to corporate manufacturing, which would recoup more than half the revenue loss. Such a change would concentrate the benefit where the concern is greatest (to affect international capital flows) and reduce the numbers of firms that need to address the administrative complexities.

**MEMORANDUM**

March 19, 2012

To: Senator Max Baucus
From: Jane G. Gravelle, Senior Specialist in Economic Policy, 7-7829
Subject: Responses to Follow-Up Questions From Hearing of March 6, 2012.

Question from Senator Thomas Carper

Members of this Committee have heard a great deal about whether the U.S. should adopt a territorial corporate tax system to replace the current worldwide system with deferral. Those who advocate a territorial system point out that it would make U.S. multinational manufacturers much more competitive with foreign companies. I have to admit that I'm interested in examining this approach further.

However, there are critics of this approach. Opponents argue that a territorial tax system would encourage companies to send jobs overseas to manufacture products that are shipped back to the U.S.

I'd like to ask Doctors Gravelle, Hanlon, and Brannon: What is your response to these criticisms? Is there a way to thread the needle and effectively design international tax reform so that we gain the benefits of a territorial system but avoid any incentives for manufacturers relocate domestic production overseas? If so, what are your specific recommendations?

Answer:

Although nominally a world wide tax system, the U.S. tax system already has some features of a territorial tax; very little residual U.S. tax is collected on foreign source income. Therefore the policy options compared to the current system are to move from the current hybrid system in the direction of a territorial tax, or to move in the opposite direction, towards increasing the tax on foreign source income.

The two objectives mentioned in your question are incompatible. If the U.S. does not tax foreign source income, U.S. firms operating abroad will face the same taxes as other firms operating in the same location, since other countries generally have territorial taxes. At the same time, in lower tax locations, these U.S. firms investments will face a lower rate on foreign investments compared to domestic investment, discouraging domestic investment. This treatment could involve operating abroad for export back to the United States. If firms are taxed under the U.S. system on their foreign source income, they will face the same treatment on domestic and foreign investment, but, in lower tax countries, higher taxes than those paid by other firms operating locally.

Economic theory suggests the problem with this conflict is that U.S. tax policy goals should not be framed as ensuring competitiveness, but rather in achieving an efficient, or an optimal, deployment of U.S. owned resources. International competitiveness is not a meaningful concept for a country, because

the United States is not competing with other countries, it is trading with them. Standard economic theory suggests that a territorial tax is neither efficient nor optimal, because it misallocates a country's capital through differential taxes based on the location of investment. The goal should be to equalize taxes or returns on foreign versus domestic investment. This theory has motivated numerous proposals in the past to eliminate deferral or to limit other benefits to foreign investment (such as cross-crediting under the foreign tax credit). These issues are discussed in CRS Report RL34115, *Reform of U.S. International Taxation: Alternatives*, by Jane G. Gravelle.

The application of economic theory suggests that the U.S. should not move to a territorial tax, and should move in the direction of a more effective world wide tax, as has been proposed in the past and more recently by the Obama Administration; such provisions are also contained in the Wyden-Coats tax reform proposal, S. 727.

The principal argument against moving in that direction is the concern that firms might move their headquarters abroad (invert), might merge with foreign firms (with the foreign firm becoming the parent), or might originally incorporate abroad. Those incentives already exist in the current rules to some extent. Prior to the adoption of The American Jobs Creation Act in 2004 several U.S. firms did invert, but inversion appears to have been effectively prevented by measures adopted in that Act. Even stronger anti-inversion rules could be considered. Mergers not only involve significant non-tax issues, but current tax law imposes a toll charge on these acquisitions and that law could, if needed, be strengthened.¹ For new firms, there are many non-tax advantages to U.S. incorporation and evidence indicates that only a tiny fraction of U.S. firms incorporate abroad.² Moreover, critics of a territorial tax argue that a more serious issue than artificial shifting of headquarters is artificial profit shifting, which is already a problem and would likely become worse with a territorial tax.

Our current system is a hybrid without being fully territorial or fully worldwide. It is possible to adopt an intermediate system between a territorial tax and a residence based system that might be an improvement over the current hybrid. One option is a minimum tax on foreign source income that would narrow but not eliminate the gap between tax on domestic income and foreign source income in low tax locations. Another option, which might achieve the same effect, is a partial elimination of deferral, by requiring a share of income to be taxed currently. Proposals could also be targeted by eliminating tax benefits for U.S. manufacturing abroad for export or for export to the United States.³

Question from Senator Chuck Grassley

The listing of asset lives in the tax code stands in stark contrast to financial accounting practices. There is no master list that dictates the useful life of an asset. Companies make judgment calls which are reviewed by independent auditors. This raises the question of what is the most effective way to determine asset lives for tax purposes. Should Congress continue to be responsible for this? Or would it make sense to reauthorize the Treasury Department or possibly look to an independent panel of experts to periodically review asset lives? In addition, for financial reporting purposes, if the value of a tangible or intangible

¹ This point is made in Edward Kleinbard, *The Lessons of Stateless Income*, October 12, 2011, forthcoming, *Tax Law Review*.

² Eric Allen (Ph D Candidate, UC-Berkeley) & Susan Morse (UC-Hastings), *Firm Incorporation Outside the U.S.: No Exodus Yet*, Presented at the American Tax Policy Conference on International Competitiveness, October 17, 2011. This study found about 2% of U.S. firms incorporated abroad.

³ A number of options are discussed in CRS Report R40623, *Tax Havens. International Tax Avoidance and Evasion*, by Jane G. Gravelle.

asset becomes impaired, the impairment loss is recognized when the asset is impaired. In contrast, for tax purposes, impairment losses generally are not recognized until the asset is disposed or abandoned. Does it make sense for the tax code to include the concept of impairment?

Answer:

For most of the history of the income tax, taxpayers used facts and circumstances, supplemented by various guidelines set by the Treasury to inform audits or provide safe harbors. Beginning in 1981 and continuing into the current system adopted in 1986, tax lives are set by the government. Our current system has a limited number of lives and methods, but the lives are mapped into an existing set of detailed tax lives that were developed by regulation. In the past, these lives which were periodically revised. When the current tax depreciation was adopted in 1986, Treasury had authority to set the reference lives and was charged with studying depreciation. In 1988, amidst a controversy over Treasury's proposed study of aircraft depreciation, that authority was removed. Since that time, only a few legislative changes in depreciation have been made and usually for reasons other than a better match of tax lives with useful lives.

In 1998, the Treasury was required to study the current class lives, but their report, issued in 2000, indicated that a comprehensive review of class lives would require extensive time and resources.⁴ Their study includes a number of general suggestions for a more targeted review, including a review of the depreciation period for non-residential buildings.

In a study published in May 2000, the authors point out five misclassification issues: (1) new assets have to be shoehorned into existing classes; (2) new assets that cannot be fit into a specific class are assigned a default life of seven years (an example is cellular equipment); (3) some existing assets, such as computerized equipment, have had significant technical change; (4) many assets are assigned lives according to industry and the nature of industry assets has changed with technological advance; and (5) assets that do not clearly fit may be assigned lives based on individual negotiations with the IRS, leading to costs of administration and differences across taxpayers.⁵

Given the technical challenges and the detail required in setting reference tax lives, and the demands on the time of Congress, there is a case to be made for delegating regulatory authority to another group. The Treasury Department is an obvious choice, although an independent agency could also be set up, or another existing entity could be assigned the task. Rather than undertaking a wholesale review of class lives, the initial focus could be on items identified by the Treasury study and assets using advanced technology or embodying new technology. Such an exercise would still likely require significant budgetary resources and time.

The major difficulty with recognizing impairment costs (which can arise from many sources, including general market conditions) is that the tax code recognizes gains and losses on a realizations basis while accounting rules are on an accrual basis. When a property rises in value, the gain is not recognized for tax purposes unless the property is sold, and when the property declines in value a loss is not realized until sale. Losses are recognized when assets or inventory are discarded and when they are damaged in natural disasters, or by theft.

⁴ Report to The Congress on *Depreciation Recovery Periods and Methods*, <http://www.treasury.gov/resource-center/tax-policy/Documents/depreci8.pdf>

⁵ Thomas S. Neubig and Stephen E. Rhody, "21st Century Distortions from 1950s Depreciation Class Lives," *Tax Notes*, May 20, 2000, pp. 1267-1273.

Depreciation is provided, in both financial accounting and the tax law, for the ordinary, expected decline in the value of an asset as it ages and becomes obsolete, eventually allowing the recovery of the cost. One reason to maintain this general principle is for tax administration reasons, since it would be difficult to monitor impairment costs. And, for symmetrical treatment, gains as well as losses should be recognized.

One possible revision, suggested by the Treasury study, is to allow the deduction of a loss when a component of a building is discarded and the replacement is subject to depreciation. (Abandoned leasehold improvements can be deducted as losses.)

Question from Senator Tom Coburn

Please explain the effects that not having a territorial tax system has on businesses and their capital investments.

Answer:

A territorial tax can be designed in a number of ways, but this answer discusses one that is straightforward: the exemption of active dividends (income of foreign subsidiaries that under present law is not taxed until repatriated). With the exemption of active dividends, the associated foreign tax credits would also be disallowed. It also assumes that foreign branch income would be treated the same as subsidiary income and would be exempt, with foreign tax credits disallowed.

Under the current deferral system, there is an incentive not to repatriate income (that is, to pay lower levels of dividends to the parent). The disincentive would disappear in a territorial system. The lower repatriations under current law could increase investment abroad and decrease it in the United States. Since money is fungible, however, it is not clear how important this feature is to investment. Empirical evidence suggests that the money repatriated during the one year repatriation holiday granted in 2004 was generally used to repurchase shares (the equivalent, in the aggregate, of paying dividends).⁶

Not having a territorial tax means that there is a possibility of eventual taxation of income not repatriated, which increases the tax burden on foreign investment compared to a fully territorial system. Taxes on foreign investment are still, however, significantly favored compared to investment in the United States, but to some extent not having a fully territorial tax should limit the flow of capital out of the United States. These effects are likely relatively small, since most of our major trading partners have effective tax burdens similar to those in the United States and since many earnings abroad can be permanently deferred. Nevertheless, the attractiveness of investment in countries such as Ireland and Singapore might increase significantly under a territorial system.

Loss of foreign tax credits under a territorial system means that these credits cannot be used to shield some foreign royalties from the U.S. tax. Royalties associated with active business are generally not taxed under foreign tax systems because they are deductible costs, but because they are considered foreign source income, U.S. tax on them can be offset by unused foreign tax credits. Also, cross crediting of the foreign taxes permits a U.S. export subsidy (the title passage rule). This rule allows half of income from manufacturing exports (and all income from sales of inventory) to be considered foreign source, and thus eligible for excess credits to shield this income from U.S. tax. Indeed, because of these effects, a territorial tax could raise revenue.

⁶ See CRS Report R40178, *Tax Cuts on Repatriation Earnings as Economic Stimulus: An Economic Analysis*, by Donald J. Marples and Jane G. Gravelle.

The imposition of tax on royalty income would encourage firms to develop more innovations abroad, and the end of the export subsidy would cause some substitution of foreign production for domestic production for export.

Moving to a territorial tax would probably exacerbate the artificial shifting of profits out of the United States. Although this effect costs revenues, it also reduces the effective U.S. tax burden which might offset some of the direct consequences of a territorial tax on causing investment to flow abroad.

It is unlikely that any of these investment effects would be significant compared to U.S. GDP, because the U.S. corporate tax is small and many other factors constrain the flow of capital.

Testimony of Michelle Hanlon
before the
United States Senate Committee on Finance
March 6, 2012

Chairman Baucus, Ranking Member Hatch, and distinguished members of the Committee, I appreciate the opportunity to participate in this hearing on corporate tax reform and investment incentives. I am an associate professor of accounting and taxation at the Sloan School of Management at the Massachusetts Institute of Technology. I am an editor of the *Journal of Accounting and Economics* and the chair of the accounting group at MIT Sloan.

The main point of my testimony is that financial accounting implications for publicly traded companies can influence the effectiveness of tax policies, including policies related to investment. The financial accounting effects represent a non-tax cost (or benefit) that public companies consider in their decision-making process. Thus, public companies' responses to tax policies are not only governed by the tax effects, but also the financial accounting effects, often producing unintended consequences.

I illustrate the financial accounting effects using current U.S. tax policies. The United States has one of the highest statutory corporate tax rates in the world. In recent years, rather than reducing the corporate statutory tax rate, our policies have instead included targeted tax provisions such as bonus depreciation and the IRC Section 199 Domestic Production Activities Deduction in attempts to reduce economic effective tax rates and provide incentives for investment. The research evidence on whether these policies have spurred aggregate investment is mixed (i.e., not conclusive). Furthermore, because the U.S. has retained such a high corporate tax rate, U.S. multinational corporations hold a great deal of cash overseas, an amount in excess of \$1 trillion. Financial accounting has affected corporations' tax policy response in each of these cases.

I offer a detailed discussion and support in the remainder of the document, but a summary is as follows. First, companies respond less than predicted to bonus depreciation partly because the tax savings are not reflected on a firm's accounting income statement. Second, the Section 199 deduction was structured as a deduction at least partially because of financial accounting. Specifically, companies with substantial deferred tax assets on their accounting balance sheets would have had to write-down these assets if the provision were structured as a rate cut. Structuring the provision as a deduction, however, has led to a complex tax rule. Finally, financial accounting provides an unintended, additional incentive for multinational companies to leave cash in offshore locations. If the foreign earnings are designated as permanently reinvested for financial accounting purposes, repatriating the cash and subjecting it to U.S. taxation requires not only an additional cash outlay but an additional financial accounting expense as well. Companies' reluctance to repatriate foreign earnings leads to more corporate debt in the U.S., lower payouts to shareholders, and quite

possibly less investment in the U.S. and less efficient investment in foreign jurisdictions. I would like to emphasize, however, that given the current tax rules, the financial accounting treatment is correct. A reduction in the corporate tax rate (and/or move to a territorial tax system) would simultaneously lower both the tax and accounting disincentives related to the repatriation of foreign earnings.

The remainder of the document proceeds as follows. I first provide a brief discussion of the reporting rules for public corporations in the U.S. to provide a basis for describing the accounting effects of tax policy. I then provide evidence on the importance of accounting to firm management and describe the accounting effects related to bonus depreciation, Section 199, and the international tax system of the U.S. I close with conclusions and caveats.

Book-Tax Differences and Accounting for Income Taxes

Publicly traded companies compute two different measures of income every year – taxable income and financial accounting (book) income. The two measures of income are computed for different purposes. Financial accounting is intended to measure economic performance for external stakeholders. The rules for computing accounting income are conservative in nature, requiring the recognition of expenses and losses earlier than the recognition of income and gains. Taxable income is not publicly available and is not intended to inform external parties. The rules for taxable income are, of course, not guided by conservatism. Rather the income tax rules are written to ensure taxpayers do not understate their income and to raise revenue to finance the government.

The line item differences between book and taxable incomes are referred to as book-tax differences and include two types – temporary and permanent. Temporary differences are items of income or expense that are included in both income computations but in different time periods. Thus, a temporary difference in the current period will reverse in some future period. The classic example of a temporary book-tax difference is depreciation. In the early years in the life of a depreciable asset, tax depreciation (accelerated) will often be greater than book-depreciation (generally, straight-line). As the asset nears the end of its life, however, this difference will reverse such that the same total amount of depreciation is taken for both book and tax purposes over the life of the asset.¹

The financial accounting rules require firms to account for these temporary differences. The income tax expense on the financial accounting income statement is an accrual based expense; it is not the cash taxes paid by the company. In essence, what this means is that the income tax expense related to this period's accounting earnings is accrued (i.e., expensed) regardless of when the cash is paid. In the depreciation example, for instance, the company receives an additional tax deduction in the current year but in some future period will have a tax deduction for depreciation

¹ For simplicity, I ignore salvage value sometimes used for financial accounting.

that is less than book depreciation expense. Thus, for financial accounting, the future tax related to the reversal is accrued (expensed) in the current period. As a result of the accrual basis accounting for income taxes, accelerated depreciation does not reduce income tax expense for accounting purposes in the current period even though it saves cash taxes in the current period.

Such an accrued expense (or benefit) without a corresponding cash payment (or receipt) creates a liability or asset on the firm's accounting balance sheet. The liabilities, termed deferred tax liabilities, represent the tax effects of future book-tax difference reversals that result in an increase to future taxable income relative to book income (or a decrease in future book income relative to taxable income). The depreciation example above creates (or increases) a deferred tax liability in the years that tax depreciation is greater than book depreciation. The assets, termed deferred tax assets, represent the tax effects of future book-tax difference reversals that reduce future taxable income relative to future book income (or increase future book income relative to future taxable income).

Deferred tax assets and liabilities are computed by taking the tax rate expected to be in effect in the period that the temporary book-tax differences reverse times the cumulative temporary book-tax differences (i.e., differences between book and tax bases). Thus, a corporate tax rate increase causes an increase in the amount recorded for deferred tax liabilities and a corresponding increase in income tax expense in the period in which the rate change becomes known. A rate increase applied to net deferred tax assets increases the amount recorded for deferred tax assets (i.e., computed at the higher rate) and decreases income tax expense. Conversely, a corporate tax rate decrease requires a decrease in the amount recorded for deferred tax assets and liabilities. Thus, for firms with deferred tax assets in excess of deferred tax liabilities, a tax rate decrease reduces recorded net deferred tax assets on the balance sheet and results in a one-time decrease to reported accounting earnings.

The total amount of deferred tax assets and liabilities are substantial. Ernst & Young recently tabulated the deferred tax assets and liabilities in the financial statements of the 50 largest U.S. companies (ranked by 2009 revenues). The gross deferred tax assets totaled \$521 billion in 2010 for these companies and the deferred tax liabilities totaled \$465 billion.²

Permanent differences are straight-forward. The classic example is municipal bond interest. This type of interest income is not taxable so is not included in taxable income in any period, current or future. Municipal bond interest is, however, included in accounting income. Thus, there is a difference between book and taxable incomes that is permanent in nature – it will never reverse. Because there is no future reversal there is no deferred tax asset or liability. Thus, permanent

² Neubig, T., C. Abell, and M. Cox (2011) "Some Financial Reporting Considerations for the Tax Reform Debate: Changing the Corporate Tax Rate" Ernst & Young Tax Insights Report. Deferred Tax Assets net of the valuation allowance totaled \$396 billion.

differences affect the income tax expense on the firm's income statement and correspondingly affect reported accounting income.

The Importance of Accounting and How Tax Policies Affect Accounting Numbers

Accounting income is an important performance measure used in the capital markets, many lending contracts, and often for internal performance evaluation. Indeed, there is a long-line of research in accounting that shows that companies will often tradeoff tax savings in exchange for more favorable accounting treatment. One example, documented in a study I co-authored with Merle Erickson and Ed Maydew, is that some companies that were accused of fraudulently overstating financial accounting earnings by the Securities and Exchange Commission (SEC) also overstated their income to the Internal Revenue Service. Management at these companies paid cash (to the IRS) in order to overstate their accounting earnings.³ In addition, two recent surveys of managers reveal that when asked 1) most CFOs surveyed rank accounting earnings as the most important benchmark for investors (not cash flow from operations or free cash flows), and 2) 85% of surveyed tax executives of publicly traded companies state that top management at their companies view the effective tax rate for financial accounting purposes (defined as total income tax expense for accounting purposes divided by pre-tax accounting earnings) as being at least as important or more important than cash taxes paid.⁴

Bonus Depreciation

As stated above, accelerated depreciation, including bonus depreciation, is a temporary book-tax difference and therefore, does not affect accounting earnings. Tom Neubig wrote an article in 2006 that he entitled "Where's the Applause?"⁵ He presented portions of that article in his testimony before this committee that same year. In the article, he discusses the Growth and Investment Tax Plan outlined in the President's Advisory Panel on Federal Tax Reform. This plan essentially included an expensing option allowing for a first-year 100% write-off of capital investment. Contrary to his expectations, the response from corporate America was the "proverbial sound of one hand clapping." Companies much preferred the alternative reform option of a lower corporate tax rate. One reason Neubig offers about why companies were not excited about the targeted expensing provision is that it is only a timing benefit and does not reduce the accounting effective tax rate.

³ Erickson, M., M. Hanlon, and E. Maydew (2004) "How Much Will Firms Pay for Earnings That Do Not Exist? Evidence of Taxes Paid on Allegedly Fraudulent Earnings" *The Accounting Review* (April).

⁴ Graham, J., C. Harvey, and S. Rajgopal (2005) "Economic Implications of Corporate Financial Reporting" *Journal of Accounting and Economics* and Graham, J., M. Hanlon, and T. Shevlin (2011) "Inside the Corporate Tax Department: Insights on Corporate Decision Making and Tax Planning" working paper.

⁵ Neubig, T. 2006. "Where's the Applause? Why Most Corporations Prefer a Lower Rate" 111 *Tax Notes* 483 (April 24).

A recent study by economist Jesse Edgerton also provides evidence on this issue.⁶ He compares the effectiveness of accelerated depreciation to the effectiveness of the investment tax credit, which in contrast to accelerated depreciation reduces income tax expense and increases accounting earnings. He concludes that the investment tax credit had more of an effect on investment than accelerated depreciation because of the accounting benefits of the credit.

Section 199 Domestic Production Activities Deduction

Under the rules for Section 199, qualified activities are eligible for a deduction equal to 9% of the lesser of taxable income derived from qualified production activities, or taxable income. For a C-corporation subject to the highest corporate tax rate, the provision results in qualified activity income being subject to a 31.85% rate rather than a 35% rate. By structuring the provision as a deduction rather than a corporate tax rate reduction, the benefits were made available to non-corporate taxpayers. In addition, it avoided a negative financial accounting effect for the firms with deferred tax assets. Hanna (2011) describes the efforts by these companies to obtain deduction treatment – they wanted a deduction rather than a rate cut in order to avoid the earnings charge that would result from a tax rate reduction (i.e., from a write-down of the tax assets).⁷

While the tax rules allow an additional deduction under Section 199, there is no analogous expense for financial accounting purposes and never will be. Thus, a permanent difference is created and the Section 199 deduction reduces accounting income tax expense. In other words, the Section 199 deduction has no mitigating financial accounting effect. However, it is important to note that a rate cut would not have a mitigating accounting effect either. To the extent that Section 199 as implemented is more complex than a rate cut, it will be more expensive to comply with and more expensive to audit. Indeed, Section 199 is a Tier 1 audit issue.

In the case of Section 199, the importance of accounting is demonstrated by the form in which the tax policy was implemented. The subset of firms with deferred tax assets did not want the value of those accounting assets to be diminished by a tax rate cut. Both forms of the policy would provide the same cash flow investment incentives, if any, and neither would result in mitigating accounting effects with respect to investment incentives. The issue was one of the impact on accounting earnings from reducing the value of tax assets that were on the balance sheet from prior, unrelated transactions.

⁶ Edgerton, J. (2011) "Investment, Accounting, and the Saliency of the Corporate Income Tax" working paper, Federal Reserve Board.

⁷ Hanna, C. (2009) "Corporate Tax Reform: Listening to Corporate America" *J Corp Law* 283 (Winter). See also White, G. (2011) "Dead Space 2: Tax Rip-Off?" *Tax Notes*, October 3; and Poterba, J., N. S. Rao, and J. K. Seidman (2011) "Deferred Tax Positions and Incentives for Corporate Behavior Around Corporate Tax Rate Changes" *National Tax Journal*, March. I note that other jurisdictions have also adjusted the form or method of implementation of tax policy because of the deferred tax issue, for example the state of Ohio and the U.K. See Neubig et al. (2011) and Poterba et al. (2011) referenced above for further discussion.

This example offers insights for broader tax policy options. If the U.S. determines, based on an evaluation of all other costs and benefits, that a corporate tax reform option of base broadening in exchange for a lower corporate tax rate is the best policy, then the fact that some firms have deferred tax assets should not prevent the U.S. from moving forward. In other words, in my opinion, the fact that some firms with deferred tax assets would have to write-down the value of those assets if corporate tax rates are reduced should not stop the U.S. from lowering the corporate tax rate. Even this sub-set of companies will benefit from lower rates if they become profitable in the future.

Worldwide Taxation and High Statutory Tax Rate

Operating income earned by a U.S. multinational in a foreign subsidiary is not included in U.S. taxable income until the earnings are repatriated.⁸ For financial accounting purposes, the income is included in reported earnings in the period earned. Thus, the foreign income included in accounting earnings but not included in U.S. taxable income (until repatriated) is a temporary book-tax difference which requires a deferred tax liability and a related deferred tax expense to be recorded. There is an exception, however, to the deferred tax accounting for these earnings (in ASC 740, previously in APB 23). This exception requires firms to designate the amount of foreign earnings that are “permanently reinvested.” For earnings that are permanently reinvested, the book-tax difference will not reverse – it is a permanent difference – and thus no deferred tax liability or expense is recorded. Permanent difference treatment reduces income tax expense and increases earnings compared to a case where the U.S. income tax is fully accrued. The result of this exception to deferred tax accounting is that the accounting statements are more comparable to the statements of companies in jurisdictions with territorial taxation because there is generally no home country tax to record in territorial regimes. This also puts U.S. companies in a more competitive position relative to companies from territorial jurisdictions in terms of accounting returns.

If a U.S. multinational repatriates earnings that were previously designated as permanently reinvested the company not only has to pay cash taxes but also has to record an accounting expense. This accounting effect is an additional reason why firms do not repatriate earnings.⁹ One anecdote is found in a letter to the editor of the *Wall Street Journal* written by James Tisch, CEO of Loews, that states “Unbeknownst to many...GAAP allows corporations to avoid the accrual of taxes on foreign earnings...The results of the interaction of our repatriation tax laws and the GAAP accounting rules is that very little in the way of foreign earnings are repatriated...The accounting penalty for repatriating even a penny of foreign profits is so great that those foreign funds will not come back to the U.S...” (July 5, 2008).

⁸ The repatriated amount is taxable at the U.S. rate and a foreign tax credit is allowed. Expense allocation rules are used in determination of the allowable credit.

⁹ To be sure, neither taxes nor accounting are likely primary drivers of foreign investment or retention of cash overseas (especially for non-intangibles based companies). Companies consider many factors – growth in the foreign markets, location of customers, and other determinants – which often dominate tax and accounting considerations.

Further evidence is found in a recent survey of tax executives. Depending on the sample, between 44% and 65% of the respondents indicate that the financial accounting effect is important in their decision of whether to repatriate earnings. Indeed, overall, the financial accounting effect has an importance rating that is statistically equal to the importance rating of the cash tax effect.¹⁰

Conclusions and Caveats

The main point of the above testimony is that financial accounting effects can act to mitigate or strengthen incentives provided by the tax code. That is, financial accounting effects have the potential to blunt the intended incentive effects of policies designed to lower the effective U.S. corporate tax rate and they have the potential to lead to unintended consequences.

Studies have shown that “taxes matter” in the sense that the timing of investment is altered as a result of bonus depreciation provisions, but the evidence that aggregate investment is responsive is very mixed. The Section 199 deduction is complex and as a result is costly to comply with for taxpayers and is costly to audit and enforce for the tax authority. Financial accounting has a role in each of these outcomes. Bonus depreciation does not reduce the income tax expense for financial accounting and thus does not reduce a company’s effective tax rate, mitigating the responsiveness to the incentive. The reason that Section 199 is a deduction and was not implemented as a rate cut is, it seems, in part due to the fact that with a rate cut, companies with large deferred tax assets are required to write those assets down and value them using the new, lower tax rate.

There are currently large amounts of cash held overseas by U.S. multinationals. The reluctance to repatriate these earnings leads to more debt in the U.S., lower payouts to shareholders, and quite possibly less investment in the U.S. and less efficient investment in foreign jurisdictions. Research indicates that the disincentive to repatriate foreign earnings due to the relatively high U.S. corporate statutory tax rate is exacerbated by financial accounting effects.

In sum, financial accounting effects can affect responsiveness to tax policies. Thus, financial accounting implications and the related incentives for managers should be considered when writing tax policy in order to maximize responsiveness and correctly score provisions. However, in my opinion, the fact that some firms with deferred tax assets would have to write-down the value of those assets if corporate rates are reduced should not stop the U.S. from lowering the corporate tax rate. Even this sub-set of companies will benefit in the future from lower rates, assuming these companies become profitable.

A few caveats to this testimony are in order. The above discussion deals only with corporate income taxes. Corporations pay many other types of taxes (e.g., value added taxes in other

¹⁰ Graham, J., M. Hanlon, and T. Shevlin (2011) “Real Effects of Accounting Rules: Evidence from Multinational Firms’ Investment Location and Profit Repatriation Decisions” *Journal of Accounting Research* 49.

countries) that contribute to their tax burden. In addition, many businesses operate in a non-corporate form. How these companies are affected by corporate tax reform is important. For example, if bonus depreciation is eliminated and the corporate tax rate reduced, those operating under a non-corporate form will not receive the benefit of the lower rate. The same is true for small C-corporations if only the top corporate rate is reduced. Moreover, the discussion above highlights financial accounting considerations which are generally only important for publicly traded firms or private firms that are large enough to have either publicly traded debt or other stakeholders that demand GAAP-based financial statements. Firms that are not required to prepare financial accounting statements will not have financial reporting incentives.

Thank you for holding this series of hearings on tax reform and inviting me to participate. I look forward to your questions.

Senate Finance Committee Hearing
“Tax Reform Options: Incentives for Capital Investment and Manufacturing”
March 12, 2012
Questions for Dr. Michelle Hanlon

Responses by Michelle Hanlon
April 12, 2012

Question from Senator Thomas Carper

1. Members of this Committee have heard a great deal about whether the U.S. should adopt a territorial corporate tax system to replace the current worldwide system with deferral. Those who advocate a territorial system point out that it would make U.S. multinational manufacturers much more competitive with foreign companies. I have to admit that I'm interested in examining this approach further.

However, there are critics of this approach. Opponents argue that a territorial tax system would encourage companies to send jobs overseas to manufacture products that are shipped back to the U.S.

I'd like to ask Doctors Gravelle, Hanlon, and Brannon: What is your response to these criticisms? Is there a way to thread the needle and effectively design international tax reform so that we gain the benefits of a territorial system but avoid any incentives for manufacturers relocate domestic production overseas? If so, what are your specific recommendations?

Response:

I think both sides are correct to some degree. We need to reform our corporate tax system to one that enables our companies to be more competitive. In a recent survey I conducted with two co-authors, over 75% of the tax directors of public companies surveyed said they thought the U.S. tax system hindered their company's competitiveness. One option to improve the competitiveness of U.S. companies is for the U.S. to implement a territorial system along with enacting a lower U.S. corporate tax rate. If a territorial system is adopted, however, the appropriate enforcement measures do need to be in place to prevent income stripping from the United States. In addition, a territorial system would need to be structured such that the incentives to relocate manufacturing (and intellectual property) overseas are not increased. Personally, I would favor a territorial system that does not apply to income in tax haven nations.

Another option entirely is to decrease reliance on the income tax and implement a Value Added Tax (VAT). Generally, VATs encourage exports. If a VAT is implemented, however, care should be taken to structure the VAT to avoid some of the fraud schemes known to occur in Europe (e.g., carousel fraud). I recognize that VATs have their own issues (e.g., money machine notion and potential regressive effects) that may make the option politically infeasible.

Question from Senator Orrin Hatch

1. In your testimony you note that the investment tax credit, which was in effect until 1985, is a more effective incentive for investment than accelerated depreciation. Although not expressly stated in your testimony, it appears that your statement is based on the investment tax credit being a permanent difference and accelerated depreciation being a temporary difference. Would you please explain this difference, and should the Congress consider the financial accounting treatment with respect to tax incentives that affect corporate America? Follow-up question: if permanent differences are more highly valued than temporary differences by corporate America, where would a corporate tax rate cut fit in the hierarchy? Would it be more or less valuable than a permanent difference?

Response:

The short answer is that publicly traded companies prefer permanent differences relative to temporary differences (in the case where the book-tax difference reduces taxable income relative to financial accounting income). In my opinion, this preference should be considered when designing and scoring tax policies because it is likely that the responsiveness to a tax incentive will be greater for one that is structured to give rise to a permanent difference (or tax credit) relative to one that gives rise to a temporary difference.

Explanation of Temporary and Permanent Differences

Temporary differences are differences between book and taxable incomes strictly due to timing. In other words, these differences are created by income or expense amounts that are included in both financial accounting income and in taxable income, but are included in the two income measures in different time periods. Thus, a temporary difference in the current period will reverse in some future period. The classic example of a temporary book-tax difference is depreciation. In the early years in the life of a depreciable asset, tax depreciation (accelerated) will often be greater than book depreciation (generally, straight-line). As the asset nears the end of its life, however, this difference will reverse

such that the same total amount of depreciation is taken for both book and tax purposes over the life of the asset.¹

The financial accounting rules require firms to account for these temporary differences on both the income statement and the balance sheet. The income tax expense on the financial accounting income statement is an accrual-based expense; it is not equal to the cash taxes paid by the company but rather reflects both current taxes due as well as the future reversal of this timing difference (i.e., deferred tax expense). In the depreciation example, for instance, the company receives an additional tax deduction in the current year relative to book depreciation, but in some future period the company will have a tax deduction for depreciation that is less than book depreciation expense. Thus, for financial accounting, the future tax related to the reversal is accrued (expensed) in the current period and a deferred tax liability is created on the balance sheet. As a result of this accrual basis of accounting for income taxes, accelerated depreciation does not reduce income tax expense for accounting purposes in the current period even though it actually saves current cash taxes due. Instead, accelerated depreciation reduces current tax expense (to reflect lower taxes in the current period) but increases deferred tax expense (to reflect higher future taxes) and thus, total tax expense for financial accounting is not decreased. Consequently, financial accounting income is not increased despite the accelerated depreciation benefit reported on the tax return.²

Permanent differences are differences between financial accounting and taxable incomes that are not timing differences. More specifically, an item of income or expense is included in one measure of income but is never included in the other measure of income. The classic example is municipal bond interest. This type of interest income is not taxable so is not included in taxable income in any period, current or future. Municipal bond interest is, however, included in accounting income in the period earned. Because there is no future reversal (the interest is never in taxable income), permanent differences only affect a company's income statement not its balance sheet (that is, there is no related

¹ For example, assume a company purchases an asset for \$10. It depreciates the asset for tax purposes over 3 years, with depreciation equal to \$6 in year 1, \$3 in year 2, and \$1 in year 3. For financial statement purposes, the asset is depreciated over 5 years, with \$2 of depreciation per year. Over the life of the asset, the same amount of depreciation (\$10) is taken for book and tax purposes, but the *timing* of the deductions is different. Specifically, in year 1, the company reports \$4 more of a deduction on its tax return than depreciation expense on its financial statements (\$6-\$2).

² Continuing the above example, assume that the company made \$20 of income (before depreciation) in the current year. For book purposes, the pre-tax income would be \$18 (\$20 - \$2 of depreciation), while the income on the tax return would be \$14 (\$20-\$6 of tax depreciation). The total tax expense on the financial statements will be equal to \$6.30, assuming a 35% tax rate (\$18 x 35%). This amount is comprised of a current portion and a deferred portion. The *current* tax expense (i.e., the amount shown on the tax return) is \$4.90 (\$14 x .35). The difference of \$1.40 (\$6.30-\$4.90) is the *deferred* tax expense and relates to the temporary difference (($\$6-\2) x 35%), which will reverse in later periods. Thus, the total tax expense is \$6, the same as it would be if there were no accelerated depreciation for tax purposes.

deferred tax asset or liability). Thus, a permanent difference will affect the income tax expense on the firm's income statement (i.e., it changes current tax expense and does not change deferred tax expense) and correspondingly will affect reported accounting income.³

If Congress implements a tax rule with a specific policy goal (e.g., investment incentives), then most certainly the financial accounting aspects should be considered when computing the expected response. If the policy is one that generates a temporary difference, the corporate response will likely be weaker than a rule that generates a permanent difference because temporary differences do not yield the same financial statement reporting benefits as permanent differences. In other words, because the tax savings related to permanent differences or tax credits are also reflected in financial accounting income, corporations will likely be more responsive.

There is evidence in the academic literature, as well as in surveys conducted by accounting firms and academics, that permanent differences are more valuable to companies than temporary differences. This is especially true for publicly traded firms where financial accounting earnings are reported to external stakeholders, and it is likely also the case for corporations with public debt (and to some degree for corporations with other stakeholders who demand financial statements).

Rate cut or permanent difference?

I do not think there is research on whether a corporate rate cut would be preferred to a permanent difference, but in my opinion it would be. A lower rate is simpler and less targeted.

Question from Senator Chuck Grassley

1. The listing of asset lives in the tax code stands in stark contrast to financial accounting practices. There is no master list that dictates the useful life of an asset. Companies make judgment calls which are reviewed by independent auditors. This raises the question of what is the most effective way to determine asset lives for tax purposes. Should Congress continue to be responsible for this? Or would it make sense to reauthorize the Treasury Department or possibly look to an independent panel of experts to periodically review asset lives? In addition, for financial reporting purposes, if the value of a tangible or intangible asset becomes impaired, the impairment loss is recognized when the asset is impaired. In contrast, for tax purposes, impairment losses

³ Assume now that revenue before municipal bond interest is \$20, and the company receives \$4 of this tax-exempt interest. For financial statement purposes, the company's income before tax is \$24, but taxable income is only \$20 because municipal bond interest is never taxed. Assuming a tax rate of 35%, the tax expense on the company's financial statements will be \$7 (\$20 x 35%). Therefore, the company recognizes a benefit on both its tax return (less income to be taxed) and on its financial statements (less tax expense).

generally are not recognized until the asset is disposed or abandoned. Does it make sense for the tax code to include the concept of impairment?

Response:

The different rules and processes between the tax code and financial accounting principles exist because the two incomes are computed for very different purposes. Financial accounting is intended to 1) inform external stakeholders (e.g., debt and equity investors) and 2) be used for contracting purposes (e.g., debt contracts, compensation contracts, etc.). Taxable income rules are written to raise revenue for the government and, in certain cases, to influence behavior. In general, I do not agree with the notion of wholesale conformity between accounting and taxable incomes.

Asset lives

There are different options available when considering asset lives and tax depreciation. One option is to allow full expensing of the asset in the year the asset is purchased, which would remove the issue of setting useful lives for tax purposes. A second option is to reduce corporate tax rates (and tax rates on schedule C income for individuals) significantly and eliminate accelerated depreciation altogether. In the latter scenario, one could make a case for allowing the accounting asset lives to be used for tax purposes as well.

If we maintain the current system, however, how should we deal with asset lives? I favor the option of reauthorizing the Treasury Department or using an independent panel to review asset lives, allowing a consideration of policy objectives and the nature of specific assets in the changing economy. This would relieve Congress of this duty, freeing time for bigger policy issues and possible overall tax reform.

Impairment losses

The recording of impairment losses for tax purposes is inconsistent with current tax policy and the intended purpose of taxable income computation. Reporting impairment losses for financial accounting purposes provides external stakeholders with more timely information about the assets. While this practice may provide investors with relevant information, the amount of the loss is less reliable because the actual impairment will not be known until the asset is disposed. This tradeoff between relevance and reliability is an important, underlying issue in accounting; in general, relevance is important in financial accounting because external stakeholders use financial information. However, because no external stakeholders rely on taxable income, I would argue that relevance is not an important concept for tax policy.

Tax rules generally require taxable income to include reliable numbers on which tax can be assessed. Thus, tax policy favors reliability over relevance. Allowing managers to estimate impairment losses before the loss is actually realized would allow managers to exercise discretion in recording unverifiable expected losses.

I note that in some cases estimates of expenses (not impairments) for tax purposes are allowed under certain cases to better match the expenses with the related revenue and this is generally correct tax policy in those cases. Impairment losses for assets for financial accounting are quite different, however. Impairment losses are generally not required to improve matching but to inform external stakeholders.

In sum, I do not think it makes sense for the tax code to include the concept of impairment.

Question from Senator Tom Coburn

1. Please explain the effects that not having a territorial tax system has on businesses and their capital investments.

Response:

I have not conducted research on what business investment would be under a territorial tax system. Thus, I cannot directly answer your question.

However, if I may, let me provide my opinion on the tax system that we have. Our current tax system is one of worldwide taxation with deferral. This means (in a simplified description) that the U.S. taxes domestic income, foreign branch income, passive income of foreign subsidiaries, and operating income earned by a foreign subsidiary of U.S. corporation if those foreign subsidiary operating earnings are repatriated (brought back to the U.S. as a dividend payment from the subsidiary located in a foreign jurisdiction). The 'deferral' part of our system means that companies can defer the U.S. tax on operating earnings of foreign subsidiaries if they do not repatriate the earnings but instead leave the earnings (reinvested in operations or in cash) offshore. In my opinion, this is a sub-optimal tax system. The U.S. has the highest corporate statutory tax rate in the world (after Japan reduced their rate) and we tax companies on their foreign operating earnings if they repatriate the earnings back to the U.S. Thus, in order to compete with foreign companies and to maximize after-tax profit, U.S. companies have incentives to locate operations overseas and possibly even incorporate in foreign jurisdictions if they can do so. Once overseas, the U.S. tax system provides incentives for the firms to continue operating overseas, and, in some cases, keep large balances of cash overseas. I do not think it is optimal that our tax system provides such strong incentives for this type of behavior on the part of our businesses and entrepreneurs. I understand that foreign growth

is often beneficial for both the foreign and domestic jurisdictions of the company, so I am certainly not advocating barriers to foreign growth. Yet it seems best if the foreign growth is driven by economics (i.e., customer base, product demands, labor force, etc.) and not by the U.S. tax system itself imposing such high costs on U.S. companies and creating incentives to move overseas.

The broad question is how to tax global companies, many of which are highly intangibles-based, when tax systems are jurisdiction-specific. This is a difficult issue to which there is no simple answer. I doubt that a standard territorial tax system is the panacea. However, some combination of a lower tax rate, a more feasible and competitive international tax system (e.g., territorial tax (excluding haven nations), a VAT, a very low corporate rate but worldwide taxation, etc.), and better tax enforcement would certainly be an improvement over the current system.

Thank you again for inviting me to participate in the hearing on corporate tax reform and capital investment incentives.

**STATEMENT OF HON. ORRIN G. HATCH, RANKING MEMBER
U.S. SENATE COMMITTEE ON FINANCE HEARING OF MARCH 6, 2012
TAX REFORM OPTIONS: INCENTIVES FOR CAPITAL
INVESTMENT AND MANUFACTURING**

WASHINGTON – U.S. Senator Orrin Hatch (R-Utah), Ranking Member of the Senate Finance Committee, today delivered the following opening statement at a committee hearing examining the impact of tax incentives for capital investments and manufacturing:

The manufacturing sector remains a critical segment of our economy. For the year 2010, the manufacturing sector generated about \$1.8 trillion in gross domestic product. The United States still has the world's largest manufacturing sector. If it were a separate economy, with its own GDP, the U.S. manufacturing sector would be the world's ninth largest economy.

At the same time, America's manufacturing sector is not static, and it has experienced significant changes in recent decades. Manufacturing jobs have been in decline for a number of years. In 1979, manufacturing employment peaked at about 19.6 million workers. In 2010, manufacturing employment was about 11.5 million workers. Coupled with this decline in U.S. manufacturing jobs is a decline in U.S. manufacturing as a percentage of GDP — from about 27 percent of GDP in the 1950s to about 11 percent in 2010.

Much of the decline in manufacturing jobs is due to increased productivity and automation. Because U.S. workers are among the most productive in the world, the number of manufacturing jobs necessary to achieve similar outputs has declined.

However, part of the decline in U.S. manufacturing is also due to offshoring. In a recent survey of 287 manufacturing companies, labor costs were listed as the most important factor in selecting locations for manufacturing operations or supplier operations. And U.S. labor costs are significantly higher than labor costs in many countries around the world. After labor costs, the next three most important factors identified in the survey were proximity to the market, skills of the workforce and taxes.

As a result, taxes can play an important part in a company's decision about where to locate its manufacturing operations. In the United States, we have a top corporate tax rate of 35 percent. When coupled with state corporate taxes, a U.S. corporation may face a marginal tax rate of 39 percent, which is the second highest corporate tax rate in the world behind Japan.

I want America to be the leader in many areas, including manufacturing. But having one of the highest corporate tax rates in the world isn't one of them!

In 2004, Congress enacted a deduction for manufacturers that reduces their effective tax rate by about three percentage points. But we need to do more — much more. We need to bring the corporate tax rate down to a level in line with other OECD countries. We need to reform our tax system to make our U.S. companies, including manufacturers, more competitive with the rest of the world.

Closely related to manufacturing is capital investment. We have a number of tax incentives with respect to capital investment. Some of these incentives are relatively new, such as bonus depreciation, but other incentives are quite old, such as the current accelerated depreciation rules that date back to 1986 and even earlier. Still other tax incentives seem to go in and out of the tax code, such as the investment tax credit, which was first enacted in 1962 and was last in effect in 1985.

When dealing with tax incentives, the focus seems to be on whether the incentives are achieving their intended purposes.

Do these tax incentives enhance economic growth? How much bang for the buck are we getting from the various tax incentives for capital investment?

For example, one recent economic paper suggests that the investment tax credit may be a better incentive for capital investment than accelerated depreciation. Sometimes tax incentives for capital investment are viewed as interchangeable with a corporate tax rate cut. Yet, they are really two separate issues.

First, a corporate tax rate cut would not affect many small businesses that are conducted as partnerships, S corporations, or limited liability companies. And second, a corporate tax rate cut affects both old and new corporate capital, while expensing and accelerated depreciation affect only new capital.

Finally, as we go about our business today, I think it is important for us to recall the damage that is done to the manufacturing sector not only by tax policy, but by over-regulation. We should not lose sight of underlying issues such as environmental and labor policies that artificially drive up the cost of labor, distort resource allocations, and make America an unnecessarily costly place to do business.

Chairman Baucus, we have a great panel here. We have some very learned economists and a prominent accounting professor with us today, and I look forward to their testimony.

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Statement for the record
Senator John D. Rockefeller IV
Tax Reform Options: Incentives for Capital
Investment and Manufacturing
March 6, 2012

Mr. Chairman, I want to speak today about one of my top priorities. That is strengthening the manufacturing sector in my home state of West Virginia and across the country.

The manufacturing sector is at the heart of West Virginia's economy going back to our proud history of providing coal and steel necessary to build and fuel this country. The economic recovery and our long-term prosperity are linked to a revitalized manufacturing sector. I have been partnering with West Virginia manufacturers for years looking for opportunities to help them increase exports and grow. In 2011 alone, I held a series of roundtables with my state's manufacturers to discuss the challenges they face and the steps that can be taken to grow their businesses.

The conversations I have had with West Virginia's manufacturers have helped me to develop legislative initiatives that create jobs through new research and development, strong Buy America laws, and targeted technical assistance for manufacturers.

We have benefitted in the past year from a resurgence in the manufacturing sector in this country, but more still needs to be done to make sure that the job growth in this sector continues. This growth can only continue if we promote policies that increase infrastructure investment and provide the right tax incentives to continue to make manufacturing in the United States an attractive option for businesses.

President Obama's recent corporate tax reform proposal contains some good ideas to help American manufacturers that we can build off of, such as capping tax rates for manufacturers and increasing tax deductions for manufacturing activity. Other proposals this committee should consider are improving existing manufacturing tax credits such as the Research and Development Credit make them more targeted and effective.

We must be sure that any effort to reform the corporate tax code does not take money away from American manufacturers and put it in the hands of corporations who move their jobs overseas, and hide their profits in low-tax countries.

This hearing today also touches on the other issue that I am focusing on in the tax reform debate. That issue is income inequality. The wealthiest members of our society are paying historically low tax rates, while our debt is at an all time high. Meanwhile, middle class families are being asked to make sacrifices to balance the budget. That is unacceptable.

It is imperative that tax reform close loopholes that disproportionately benefit the wealthy and encourage offshoring. We can no longer afford to ask our middle class to shoulder the burden of deficit reduction, while the wealthiest businesses and individuals are hiding income offshore or receiving tax breaks for purchasing luxury items like yachts and racehorses. Working families are struggling to make ends meet as it is.

I look forward to working with the committee on all of these issues in the tax code that we will be dealing with soon as part of tax reform.

COMMUNICATIONS

Statement for the Record by
The Association of Equipment Manufacturers
1000 Vermont Ave, NW, Suite 450
Washington, DC 20005

Finance Committee Hearing
Tax Reform Options: Incentives for Capital Investment and Manufacturing
Tuesday, March 6 2012

The Association of Equipment Manufacturers (AEM) is the U.S. based international trade organization representing more than 850 companies involved in the production of off-road equipment and services used worldwide in the agriculture, construction, forestry, mining and utility fields.

AEM believes there are important opportunities to reform the tax code to enhance the competitiveness of U.S. manufacturers and are pleased to submit the following comments to the Senate Finance Committee's Hearing on 'Tax Reform Options: Incentives for Capital Investment and Manufacturing' held on Tuesday, March 6 2012.

Agricultural Equipment Depreciation

The U.S. is the world leader in agricultural equipment production, directly and indirectly employing 250,000 workers according to a 2007 study conducted by Global Insight. A five-year depreciation schedule will boost domestic demand, helping to keep these jobs here. In the Renewable Energy and Job Creation Act of 2008, Congress wisely and appropriately changed the depreciation schedule for agricultural equipment from seven to five years. However, the modified schedule and all of the benefits it provides to U.S. agriculture and manufacturing expired at the end of 2009. An extension of this important provision was included in the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 but was removed in the final hour for arbitrary reasons.

Reducing the depreciation schedule for agricultural equipment to five years not only helps manufacturers, it also makes the tax code more consistent, since construction equipment, which has similar use patterns and life-span as agricultural equipment, is depreciated over five years. Furthermore a reduced deprecation schedule will aid rural development, improve farm safety and environmental stewardship. The U.S. Department of Agriculture's Farm Service Agency surveys show, on average, farmers and ranchers finance equipment for five years. Aligning deprecation and debt service increased farm income by over \$850 million in a typical year, helping farmers and ranchers cover their debt service and facilitate the replacement of worn-out machinery. Lastly, today's newer equipment models employ the latest safety, emission controls and precision agriculture technologies, making our farms safer while significantly reducing air pollution, soil erosion and fertilizer and chemical runoff. A five-year depreciation schedule will speed up the deployment of these critical technologies across our nation's many farms and ranches.

During the First Session of the 112th Congress, Senators Klobuchar (MN) and Moran (KS) introduced S. 700 which seeks to permanently lower agricultural equipment's depreciation schedule to five years. This legislation enjoys a bipartisan list of co-sponsors as well as the support of the American Farm Bureau Federation, Associated Equipment Distributors, Association of Equipment Manufacturers, the Farm Equipment Manufacturers Association, National Association of Manufacturers, National Association of Wheat Growers, National Chicken Council, National Cotton Council, National Farmers Union, National Grange, National Potato Council, North American Equipment Dealers Association and the Western Growers Association.

Comments for the Record

**United States Senate
Committee on Finance**

Tax Reform Options: Capital Investment and Manufacturing

Tuesday, March 6, 2012, 10:00 AM
215 Dirksen Senate Office Building

By Michael Bindner
Center for Fiscal Equity
4 Canterbury Square, Suite 302
Alexandria, Virginia 22304

Chairman Baucus and Ranking Member Hatch, thank you for the opportunity to address these topics, which were originally submitted for the original hearing date in October 2011. In our comments, we will address how our four part tax plan relates to these issues, specifically how investment expenses are paid for in a consumption tax environment, the impact of lower tax rates on productivity and jobs, how corporate ownership may be impacted under various scenarios for Personal Accounts in Social Security and the impact of tax reform on globalization.

As you know, the Center for Fiscal Equity has a four part proposal for long term tax and health care reform. The key elements are

- a Value Added Tax (VAT) that everyone pays, except exporters,
- a VAT-like Net Business Receipts Tax (NBRT) that is paid by employers and includes OASI employer contributions but, because it has offsets for providing health care, insured personal retirement accounts, education benefits and family support, does not show up on the receipt and is not avoidable at the border,
- an employee payroll tax to for Old Age and Survivors Insurance (OASI), and
- an income and inheritance surtax on high income individuals so that in the short term they are not paying less of a tax burden because they are more likely to save than spend -- and thus avoid the VAT and indirect payment of the NBRT.

In a VAT and Net Business Receipts Tax environment, tax is paid to the suppliers of plant and equipment when services are invoiced. VAT is receipt visible, while NBRT, as a vehicle for deductions, is designed not to be (hence the need for a second tax). Those providers then pay taxes to the taxing authority based on those sales. How these assets are accounted for in the price of the product, however, is open for debate.

The credit against VAT and NBRT collections resulting from purchasing investment assets might be applied in the year the purchase is made or, if Congress so desires, the credit can be applied over the useful life of the asset. Extending the credit allows the taxpaying business to even out tax payments over time and will cause less disruption along the supply chain so that the entire price of the item is not a VAT credit at the next stage in the production process. How other nations deal with these questions is dealt with in the VAT literature and is beyond the scope of these comments. Should the Committee desire a more complete treatment of this issue, a separate hearing would be appropriate.

Separate rules could conceivably be adopted for VAT and NBRT, as VAT is collected on a transaction basis, similar to Sales Taxes, while NBRT can be calculated on a period basis, like Corporate Income Taxes. This is especially the case if NBRT collections are not "receipt visible" due to their purpose as a vehicle for claiming offsets for the Child Tax Credit, the health insurance exclusion and other tax expenditures.

As important as how capital expenditures are treated as a factor of production is how dividends and capital gains are taxed. Prior to 1981, tax rates at the highest income levels were confiscatory, especially between 1956 and 1965 when the tax rate was 91%. During this era, special tax benefits were necessary so that when combined with state taxes, the effective tax rate was not over 100% of income. Beginning in 1981, tax obligations for these forms of income declined in several steps, including the 1986 tax reform, the 1997 decrease in capital gains tax rates to the current permanent rate of 20% and the 2003 tax legislation which dropped these rates to 15%.

While technology exploded during this period, as we moved from the mainframe computer to Cloud Computing, robotic and the iPad, much of this explosion was incentivized by the ability of owners to keep an ever increasing percentage of the resulting productivity gains, as well as productivity gains from taking advantage of the expansion of free trade due to the North American Free Trade Agreement, other trade actions and the opening of China as a source of cheap assembly. If the gains from these investments were all kept by the government, they might not have been made. The downside of such gains, however, is the loss of manufacturing jobs, as well as a greater incentive to engage in union busting and the threat of union busting to keep wage increases low, essentially excluding the middle class from enjoying the benefit of these gains through wages, although some might realize them to the extent that they have accumulated either pension assets or participated in defined contribution plans.

Studies have shown that dividend payouts of these productivity gains are generally at the level of normal profit. Dividend levels have not substantially increased due to these gains. Instead, they have gone mainly to CEO bonuses and stock grants and options. While CEO leadership is, of course, important to the adoption of innovation and investment, it is not so great that this factor deserves the lion's share of reward.

It is rather unseemly that fiscal policy has had what amounts to a causal effect on what can be described as disastrous levels of inequality, leading most consumers to borrow to maintain their standard of living and partake in the rise of advanced consumer electronics that in another form has reduced their wages. This overleveraging has led us to the financial situation now plaguing this nation, which can best be described as a long term Depression, even though there are periods of recession and recovery within this era.

Tax reform can ameliorate these effects. Adoption of consumption taxes like a VAT and NBRT impact labor and capital equally. In Europe, this allows for the adoption of lower rates for capital gains taxes. While profit is theoretically taxed by the Corporate Income Tax, such taxation is uneven given the maze of special tax provisions favoring some industries and businesses over others, leaving profit untaxed in many cases, except as part of personal income taxation. Given the probability of evasion, lower rates are not justified. This Center opposed these rate cuts in 2003 and we continue to oppose them.

In the area of personal income taxation, the Center favors a single rate structure for dividend, capital gain, wage and inherited income (rather than inherited assets that are not yet liquidated – with the only exception being that proceeds from sales of these assets to a broad based Employee Stock Ownership would remain tax free). Tax rates could range from 4% on at the \$100,000 a year level for joint filers or widows (\$50,000 for individuals) to a top level of 28% - which is roughly the effective rate for the NBRT (to discourage income shifting). While fewer, less graduated rates are possible, most middle income taxpayers would not find them desirable. As tax tables will only have a single rate for each income level, the existence of multiple rates does not increase complexity for the taxpayer.

Another option to ameliorate the maldistribution of wealth is the adoption of Personal Retirement Accounts for Social Security, although doing so is like holding a lightning rod in a thunderstorm. We do agree with President Obama that such accounts should not be used for speculative investments or even for unaccountable index fund investments where fund managers ignore the interests of workers. Investing such accounts in insured employee-ownership of the workplace would have an entirely different outcome, especially if voting shares occurred on an occupational basis with union representation. The impact at the international level of such employee-ownership if extended to subsidiaries and the supply chain is also potentially profound, especially in regard to transfer pricing and the international growth of the union movement.

A major strength of Social Security is its income redistribution function. We suspect that much of the support for personal accounts is to subvert that function – so any proposal for such accounts must move redistribution to account accumulation by equalizing the employer contribution.

We propose directing personal account investments to employer voting stock, rather than an index funds or any fund managed by outside brokers. There are no Index Fund billionaires (except those who operate them). People become rich by owning and controlling their own companies. Additionally, keeping funds in-house is the cheapest option administratively. We expect it is even cheaper than the Social Security system – which operates at a much lower administrative cost than any defined contribution plan in existence.

Safety is, of course, a concern with personal accounts. Rather than diversifying through investment, however, we propose diversifying through insurance. A portion of the employer stock purchased would be traded to an insurance fund holding shares from all such employers. Additionally, any personal retirement accounts shifted from employee payroll taxes or from payroll taxes from non-corporate employers would go to this fund.

The insurance fund will serve as a safeguard against bad management. If a third of shares were held by the insurance fund than dissident employees holding 25.1% of the employee-held shares (16.7% of the total) could combine with the insurance fund held shares to fire management if the insurance fund agreed there was cause to do so. Such a fund would make sure no one loses money should their employer fail and would serve as a sword of Damocles' to keep management in line. This is in contrast to the Cato/ PCSSS approach, which would continue the trend of management accountable to no one. The other part of my proposal that does so is representative voting by occupation on corporate boards, with either professional or union personnel providing such representation.

The suggestions made here are much less complicated than the current mix of proposals to change bend points and make OASI more of a needs based program. If the personal account provisions are adopted, there is no need to address the question of the retirement age. Workers will retire when their dividend income is adequate to meet their retirement income needs, with or even without a separate Social Security program.

No other proposal for personal retirement accounts is appropriate. Personal accounts should not be used to develop a new income stream for investment advisors and stock traders. It should certainly not result in more “trust fund socialism” with management that is accountable to no cause but short term gain. Such management often ignores the long-term interests of American workers and leaves CEOs both over-paid and unaccountable to anyone but themselves.

Progressives should not run away from proposals to enact personal accounts. If the proposals above are used as conditions for enactment, I suspect that they won't have to. The investment sector will run away from them instead and will mobilize their constituency against them. Let us hope that by then workers become invested in the possibilities of reform.

All of the changes proposed here work more effectively if started sooner. The sooner that the income cap on contributions is increased or eliminated, the higher the stock accumulation for individuals at the higher end of the age cohort to be covered by these changes – although conceivably a firm could be allowed to opt out of FICA taxes altogether provided they made all former workers and retirees whole with the equity they would have otherwise received if they had started their careers under a reformed system. I suspect, though, that most will continue to pay contributions, with a slower phase in – especially if a slower phase in leaves current management in place.

The international consequences of adopting personal retirement accounts which include employee-ownership are also interesting. As employees begin to own and control their workplace, they will find it in their best interests to include overseas subsidiaries and their supply chains in the same type of arrangement. They are also more likely to set transfer pricing so that all employees in an international enterprise receive the same standard of living from work, so that incentives to exploit other workers would be eliminated. This development would not only revive the labor movement, it would make it international in a way that trading agreements have not been able to accomplish. Recognition of this fact should make the possibility of personal accounts more attractive to progressives and the more populist members of the Tea Party, but not to the more corporatist members of either party.

International aspects are unavoidable in a discussion of tax reform. Indeed, one of the reasons for engaging in tax reform is to increase the competitiveness of American manufacturers. While VAT does not function as an explicit tariff, the lack of one while many of our trading partners have one essentially builds all of our tax costs into the cost of exported products, where competing nations exclude these costs at the border. The current regime violates the spirit, though likely not the letter, of constitutional provisions banning export taxes.

As the Committee is well aware, VAT is good for competitiveness because it can be zero rated at the border for exports and collected fully for imports. Unlike a VAT, an NBRT would not be visible on receipts and should not be zero rated at the border – nor should it be applied to imports. While both collect from consumers, the unit of analysis for the NBRT should be the business rather than the transaction. As such, its application should be universal – covering both public companies who currently file business income taxes and private companies who currently file their business expenses on individual returns.

It is not appropriate for NBRT to be zero rated, as doing so would decrease the incentive to pass Child Tax Credit and Health Insurance tax benefits to employees. As importantly, the tax benefits and government services provided under this tax go to workers and their families. As such, overseas purchasers accrue benefits from these services and should therefore participate in their funding.

If the NBRT is enacted in this way, the United States should seek modification to our trade agreements to require that similar expenditures not be funded with taxes that are zero rated at the border. As foreign consumers benefit from subsidies for American families, American consumers benefit from services provided to overseas workers and their families. This benefit should be recognized in international tax and trade policy and American workers should not be penalized when other nations refuse to distribute the cost of benefits to foreign workers to the American consumers who receive the benefit of these services. If our trading partners do not match this initiative, some items of spending could be shifted from NBRT funding to VAT funding, so that we are not making unilateral concessions in this area.

The final question on capital investment is the repatriation of profit from overseas subsidiaries. Under a consumption tax regime, there would be no separate levy on profit. Value added taxes are already paid in the country where the product is sold and these taxes include both the contributions of labor and capital. For the purposes of businesses, profit should not be taxed again when repatriated, except to the extent that this profit results from value added in the United States. Use of VAT exemptions must not be allowed as a tax avoidance scheme. Products with parts that have been produced or developed in the United States, then sent elsewhere for assembly, must reacquire any obligation to pay that was shed at the border. Not providing for this contingency opens the door for a great deal of abuse.

The source nation of dividend income, meanwhile, must be irrelevant for purposes of collection of the proposed high income and inheritance surtax. The subject of this tax is not the income of the business, which has been shifted to the NBRT for individual filers, but the income of households for personal consumption and savings. The existence of this tax takes into account the decreased likelihood that this income will be spent and therefore taxed under NBRT and VAT regimes and to safeguard savings opportunities for the non-wealthy, who would otherwise be priced out of the market for investments by higher income individuals who, because they have greater opportunities to save, garner greater and greater shares of America's wealth. The proposed surtax is an attempt to level the playing field so that everyone can invest.

Thank you for the opportunity to address the committee. We are, of course, available for direct testimony or to answer questions by members and staff.



March 6, 2012

The Honorable Dave Camp
Chairman
House Committee on Ways and Means
United States House of Representatives
1102 Longworth House Office Building
Washington, DC 20515

The Honorable Max Baucus
Chairman
Senate Committee on Finance
United States Senate
219 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Sandy Levin
Ranking Member
House Committee on Ways and Means
United States House of Representatives
1102 Longworth House Office Building
Washington, DC 20515

The Honorable Orrin Hatch
Ranking Member
Senate Committee on Finance
United States Senate
219 Dirksen Senate Office Building
Washington, DC 20510

Dear Chairmen Camp and Baucus and Ranking Members Levin and Hatch:

There is an overwhelming consensus among taxpayers, Congress, academics and nearly all other stakeholders that the federal tax system must be reformed and simplified in order for U.S. businesses to compete globally, promote economic growth and create U.S. jobs.

We believe the cornerstone of reform must be a significant reduction in the current 35% statutory corporate tax rate, which is why we have come together as the RATE Coalition (Reforming America's Taxes Equitably). The RATE Coalition is made up of like-minded businesses and associations with the purpose of advocating for sound and equitable reforms to the federal tax code that would reduce the corporate tax rate in order to improve the competitiveness of American business. Importantly, in our current deficit environment, we understand that base-broadeners may be required to achieve a meaningful corporate rate reduction.

Coalition member companies employ millions of Americans and provide benefits for retirees right here in the U.S.; yet higher tax rates and a complicated tax code put our companies at a distinct competitive disadvantage compared to our foreign competitors. In a global economy where capital is highly mobile, it's simply harder to compete from America. Research has found

that the corporate income tax rate can have a large impact on where companies choose to place production facilities and on the size of investments. We need to ensure that America is the place to invest now and in the future.

It has been 25 years since the last comprehensive tax reform was accomplished. Since then, other countries' tax systems have changed dramatically, and not to our benefit. Our competitors in the OECD have lowered their statutory tax rates while the U.S. rate has remained relatively constant. This has resulted in an uncompetitive tax environment that discourages investment and job creation here at home.

A lower U.S. corporate tax rate offers critical benefits to the U.S. economy and to all Americans. Most importantly, a lower corporate rate will boost investment in the U.S., bringing more American jobs, innovation and growth.

We urge you to move forward now to enact a lower corporate tax rate and restore America's competitive edge.

Respectfully,

Michael E. Szymanczyk
Chairman and
Chief Executive Officer
Altria Group, Inc.

Edward R. Hamberger
President and
Chief Executive Officer
Association of American Railroads

Randall Stephenson
Chairman and
Chief Executive Officer
AT&T Inc.

Jim McNerney
Chairman, President and
Chief Executive Officer
The Boeing Company

Larry J. Merlo
President and
Chief Executive Officer
CVS Caremark

Frederick W. Smith
Chairman of the Board and
Chief Executive Officer
FedEx Corporation

Alan Roger Mulally
President and
Chief Executive Officer
Ford Motor Company

Gregory B. Maffei
President and
Chief Executive Officer
Liberty Media

Robert J. Stevens
Chairman and
Chief Executive Officer
Lockheed Martin Corporation

Terry J. Lundgren
Chief Executive Officer, Chairman of the
Board, President, and Director
Macy's, Inc.

Matthew Shay
President and
Chief Executive Officer
National Retail Federation

Philipp Humm
Chief Executive Officer and
President
T-Mobile

Scott Davis
Chief Executive Officer
United Parcel Service

Robert A. Iger
President and
Chief Executive Officer
The Walt Disney Company

William H. Swanson
Chairman and
Chief Executive Officer
Raytheon Company

Glenn Britt
Chairman and
Chief Executive Officer
Time Warner Cable

Lowell McAdam
President and
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How Obama and Democrats are Not Going Far Enough Regarding Tax Policy and American Job Growth

By Tom Pallow of Third Way Progressives: (202) 903-1133 or

This paper is not at all about what one would commonly imagine upon reading its title. It is not at all about Obama and Democrats not being "progressive" or "liberal" enough. It is about them not going far enough into the radial center, not adopting enough Endogenous Growth policies, or what we call qualityist policies. As of early 2012 Obama Democrats are certainly not doing these things enough to turn the economy around or to inspire the electorate to vote for him and Democrats this fall.

We are in a unique position in history. The most important change in our lifetimes has been the effective 12 fold increase in global trade that has accompanied the weakening and fall of communism, along with new technologies that make outsourcing across state and national borders as easy and fast as the movement of light. The old world order is never going to return. Therefore, all successful tax and spending regimes in the future will need to be structured around the realities of this highly competitive global economy. Not only will this new regime make our economy more competitive, but it will make it more egalitarian and more environmentally sustainable than it ever has been.

Regarding tax policy, a good first step in the right direction is the resent plan by Senators McCaskill and Collins to cut the employer payroll tax rate as a way of carving out, or exempting, US employers from any tax increase on the wealthy. Given that about 65% of US employers are taxed at the personal income tax rate, and given that these businesses are generally responsible for creating as much as 90% of America's new jobs, raising taxes on these job providers is never a good idea in a global economy and especially when the economy is weak. US employers are always a very small percentage of tax payers. For example, the McCaskill-Collins carve out would only cost about 13% of their tax increase on those who make over \$1 million that was proposed by them in December to pay for this year's employee payroll tax cut.

There are several reasons why a US employer exemption, or carve out, is very important. For one, it is very cheap while it accomplishes much. This is because, with a US employer carve out, the math always works for us. Very little of the earnings of the wealthy, as well as all others, actually comes from the profits of the active ownership of a business that employs in the US. The high mark for this number is about 20%. This comes as incomes reach about \$350,000 a year or at about what demarcates the top 1% of US income earners. As incomes go higher and lower from this point this percentage drops quickly. Again, the McCaskill-Collins carve out for those earning over \$1 million a year would only cost 13% of the total tax increase. If this new tax incentive to employ in the US were to motivate more of the wealthy to employ in the US so that this percentage were to increase, then great, more Americas would be employed and the increased demand for labor would increase real incomes and tax revenues.

Reason two, when raising income taxes on the wealthy without a US employer carve out, raising taxes on wealthy growing businesses has the effect of slowing the economy to some degree because capital is taken away quarterly from growing businesses who would otherwise use that capital to invest in new US jobs. This is especially true coming out of a recession when about 90% of all new jobs are typically created by businesses that are taxed as personal income.

Thirdly, without a carve out, US employing businesses have an incentive to close up shop in the US and outsource to foreign countries in order to avoid the higher tax. This is especially true within the US when states that raise their income taxes will often see employer flight to states that are not raising their income tax or do not have a state income tax. This is a big problem right now with our cash strapped states. The current problems in Illinois are just the most recent example, and their example will deter others states from raising their income tax. These states, along with Illinois, will continue their cash flow problems, but a state employer carve out would solve this problem. There is more concerning this problem below.

Reason four is one of the most important reasons. The greater the carve out is made, that is, the larger the difference in effective tax rates are made between the US employing wealthy and the non-employing wealthy, the greater will become the tax incentive for the non-employing wealthy, or others who want to become wealthy in the future, to find ways to stay wealthy or become wealthy by employing fellow Americans. This tax incentive will greatly increase economic growth and the demand for labor in the US. It is only increases in productivity along with increases in the demand for labor primarily in the private sector that has the effect of raising real wages for the poor and middle class.

Reason five is as important as reason four. Because American voters will soon realize that a US employer carve out tax strategy will not slow down the economy but actually increase private sector jobs, our federal and state governments will be able to raise income taxes far above where Americans would otherwise let them go. As this occurs, the above reason four will only become more pronounced, thus creating a virtuous cycle of increasing private sector job growth that will also be accompanied with increasing government revenues!

Reason six is as important as reasons four and five. These increased tax revenues will allow our governments to fully fund new industrial policy plans that will further grow the US private sector while allowing us to fully fund current government programs. Fully funded governments, along with a robust private sector that is added by new industrial policy projects will increase the demand for labor in the US so high as to increase real wages in the US for the first time since 1967 when the global economy really began with the end of the Kennedy GATT trade rounds!

Reason seven, our federal deficit and debt problems, along with those of our states, that have the effect of creating economic uncertainty and trepidation that then slows the economy, will be no more!

In his American Jobs Act President Obama proposed an employer payroll tax reduction that holds the possibility of working much like the McCaskill-Collins US employer carve out. The problem is that Obama proposed that this tax cut only exist for one year when it needs to be permanent. We can only hope that if this part of the American Jobs Act were ever passed, a part of this tax cut would be made permanent along with the Bush tax cuts expiring on the top two income tax brackets thus creating an income tax increase with a permanent US employer carve out.

If President Obama does not aggressively sell such an idea by the general election season he will lose reelection. Under current proposals, it will not take long before the Republicans will be able to explain that all of Obama's proposed tax increases will only cover about 10% of our federal deficit. Obama's proposed expiration of tax rates on the top two brackets, his Buffet Rule which is essentially a capital gains tax increase on those earning over \$1 million, his taxing carried interest at the ordinary income rate, his valuing itemized deductions at 28% for those earning over \$250,000, and his elimination of oil tax preferences and corporate jet depreciation will altogether only raise about \$150 billion a year while our deficit in 2011 was over \$1.5 trillion. Therefore, the president will be asking to raise all of these taxes on a still slow and probably even slowing economy just to cover 10% of our deficit!

I know that Democrats like to point to polls that show that most Americans favor many of these tax increases. But very importantly, if you read the actual wording of the questions in these polls you will see that most of these polls make it appear as though these tax increases would create an equal trade off with spending cuts in order to cover our deficit. The questions read as though these tax increases would cover 50% of the deficit. However, given that they would only cover about 10% while likely slowing the economy, the Republicans will easily be able to argue that we have a spending problem not a revenue problem and that Democrats will destroy any economic growth we have. However, with US employer carve outs this problem will be eliminated. In fact, due to reason number four above, we will be able to argue for and enact even larger tax increases. So hopefully President Obama will push for a permanent employer payroll tax cut and sell it as a US employer carve out that would accompany a tax increase on the wealthy.

Better yet, the President and all others looking to create an employer carve out when increasing income taxes should look to institute a Employee Tax Credit along with an employer payroll tax cut. Regarding employer carve outs for income tax increases, while a payroll tax cut has some advantages over a US Employee Tax Credit, a US ETC has more advantages, but a combination of the two is optimum. An ETC is a credit against a final income tax bill that has a flour cap at a particular rate. For more on US ETCs see our website, ThirdWayProgressives.org.

An employer payroll tax cut does have the advantage that the tax cut is awarded immediately with the first employment of an individual, while with an ETC the tax cut is awarded latter, after a profit is made. The immediacy of the payroll tax cut makes the cost of capital for the employment of new hires lower than it would be with an ETC. Further, it is important in the global economy to make employing fellow citizens as easy as possible and an employer payroll tax cut helps in this regard. However, Social Security and Medicare must be paid for, and employer payroll taxes cover about 18% of our total federal revenues, so only so much can be cut. For these and another very important reason our tax plan proposes an employer payroll tax cut for new hires while relying primarily on a US ETC to achieve most of the carve out.

The most important advantage of a US ETC is that it will allow our 31 states that do have income taxes to enact state employer carve outs, while with an employer payroll or withholdings tax cut this would not be possible. Given that the economic competition for employment between our states is even more intense than it is between us and other nations, employer carve outs are a must for our states! Employer payroll tax cuts as carve outs are impossible for our states because most of these tax rates are already very low in places, too low to create carve outs. More importantly, these payroll taxes, that usually come in the form of unemployment and disability insurance taxes, are generally structured as to create very valuable tax incentives, with those businesses and industries that have high rates of unemployment and injures paying higher tax rates and those without them paying lower to often extremely lowest tax rates. It is very important that these tax incentives are maintained. Therefore, in order to create carve outs state ETCs will need to be enacted. Further, given that most tax policing is done by the IRS and that states have much less resources in this regard, it would be very inefficient for each individual state to have to do all of its policing for its ETC. For this reason, and the fact that we can only cut federal payroll taxes so far, the federal government should enact a US ECT as part of an employer carve out strategy. Hopefully we are concerned as much about the welfare of our state governments as we are the federal government.

Another very positive feature of December 2011's McCaskill-Collins Bill is its "technology company," venture capital investment tax credit or possible carve out. However, this tax credits shortcoming is that it is only for investments in technology companies that are expanding in the US, while it should be for investments in all companies that are expanding in the US. Further, many problems will arise be trying to define what a "technology company" is.

Our capital gains tax plan would raise to 25% today's top capital gains tax rate from 15%. However, it would carve out and slightly lower from where the rates are today capital gains tax rates on four basic investments that would all need to have a minimum of jobs created in the US. These for basic investments are: first issue bonds, stocks bought at IPOs, venture capital investments, and the underwriting of any of these three investments. More on our capital gains tax plan can be found at ThirdWayProgressives.org. These four investments are the primary products of the financial market that allow it to raise capital for growing businesses in America. Generally in order to expand, small businesses raise venture capital, medium sized businesses launch IPOs, and large corporations float bonds. With our qualifications for increased employment in the US in order to achieve the lower tax rate, the financial markets will be generating jobs in the US like never before!

The virtues and math in our capital gains tax plan are nearly identical to that of a US employer carve out with an income tax increase. Generally, only about 5% to 12% of all gains in the financial markets come from the above four basic investments. However, these four investments are responsible for nearly all of the job growth that is facilitated by the financial markets. It is not that the other products in the financial markets are not important to the economy. It is just that a higher capital gains tax on them would have little to no effect on American job growth. Except for first issue mortgage backed securities that could also receive a lower tax rate with little cost, the rest of the financial products sold are preexisting stocks and bond, and options and derivatives. This other, typically 90% or more, of the financial markets, even with a much higher capital gains tax, would retain enough liquidity in their market as to not present any adverse effect on the businesses that rely upon them. However, the more investment we have in the four basic financial vehicles, the lower will be the cost of capital for American businesses that are expanding in the US. The greater the difference in tax rate between these four investments and all the other financial vehicles that are generally speculative paper trades, the more

American economic growth will occur through financial markets via this tax incentive and the more tax revenues will be raised. Therefore, our capital gains tax regime will allow the federal government and our state governments to be able to raise capital gains tax rates far above were they are today while actually improving the economic efficiency of our financial markets!

Our overall qualityist tax plan also has a C Corporation tax plan that uses ETCs to incentivize job growth in the US along with further rewarding and incentivizing compensation above the US norm for US employees. Our overall plan also contains tax policies designed to create a more environmentally sustainable and safe economy. All of these plans can be found at ThirdWayProgressives.org.

But tax policy is not the only area where we need to adapt government policies to the realities of our highly competitive global economy. Qualityism resides in the world of the New Growth, or Endogenous Growth, Economics School, a school that is only a few decades old and not completely defined. Like most Endogenous Growther, qualityism believes that economies are affected positively by three primary factors. Like the Keynesians, qualityists believe that it is important that government's take an active role in keeping consumer demand high. Yet like classical, neoclassical, or supply-side economists, qualityists believe that it is very important to keep the cost of capital low for the private sector by keeping taxes low on businesses and capital formation. The above qualityist tax policies and others that can be found at ThirdWayProgressives.org destroy the policy catch 22 that we have been in for the last 100 years regarding this unfortunate tradeoff between Keynesian and supply-side economics. Our new global economy is too competitive, complex, and demanding to put up with this catch 22 any longer! But qualityists also believe that there exists a third primary engine of economic prosperity that is at least as important as the other two. This engine is the emergence of new technologies and methods of production.

Like New Growth or Endogenous Growth economists, and like those on the right who call themselves Real Business Cycle theorists, qualityists see economic growth and the business cycle as being dominated by the arrival of new technologies, products, and methods of production that will be bought and invested in even if consumer demand is low or the cost of capital is high. When one examines historically how relatively small portions of the economy can be responsible for very large portions of the growth of an economy the reality for this perspective becomes extremely evident. Some studies have shown that as much as 60% to 90% of the economic growth in an expansion occurs in what begins that expansion as only 2% to 3% of GDP. For example, housing, healthcare, and cell phones were responsible for an extremely large percentage of economic growth in the US between 2002 and 2008. Between 1992 and 2000 it was personal computers and the internet that drove growth. Between 1982 and 1990 it was commercial real-estate and computers for businesses. In the 1970's it was gasoline and inflation. In the 1960's it was aerospace and war. In the 50's it was TVs and other consumer electronics. In the 40's it was war, in the 30's government, in the roaring 20's cars, trucks, and radios, and in the 10's cars and war. Before 1913 there took place shorter economic cycles that were most effected by railroad expansions

Yet unlike Real Business Cycle theorists who believe that the best policy is for governments to simply not get involved and let this real cycle play out, Endogenous Growthers and qualityists believe that the government should, and has in the past but never optimally or efficiently done so, facilitate and add to new technological development. When one recognizes that the private sector alone has never been able to produce at close to peak potential scientific and technological outputs, and given our need for more environmentally sustainable technologies among others, it is easy to realize that the government should

be doing much more in this area. It has been said by those who study the subject that the free market alone only generates about half of the R&D that the economy could efficiently produce.

A majority of the most impressive achievements of mankind were financed and designed with government funding, from the pyramids in Egypt, to the ships that were designed via Prince Henry the Navigator of Portugal and then financed by the royalty of Spain that discovered the New World, to the moon landing, satellites, and the internet. Moreover, war financing has generated much technological improvement, from arguable everything but the pyramids above, to many improvements in the combustible engine and most improvements in aerospace. Given our technological needs as a growing species with only one planet, we should not rely on the inefficiencies of war as the catalyst for needed technological improvements!

It is wealth and better technologies that allow societies to preserve their environments while acquiring what they need and desire, not economic constraints and poverty. The poorest and least politically and economically free nations of the world are all its least environmentally preserved. Therefore, it is the free market in accordance with predictable, transparent, and robust government R&D support, along with tax incentives both on the purchasing and profit end, which will preserve our environment. But it is also the free market with such government support that will best allow us to fulfill our economic needs, wants, and dreams that are not hampered in any major way by environmental concerns. The people of the world are made better off if a favorite play toy of many that the private sector alone would have taken 50 years to develop is there to enjoy 25 years earlier because a government helped in the development of that product and production. Further, when structured properly, workers are able to engage in jobs that produce higher rates and qualities of output while enjoying a larger share of this output.

For all of these reasons an important feature of qualityism is structuring the most fair and economically efficient way for the government to assist the private sector in increasing the economies overall scientific and technological output. As importantly, qualityism is structured so that the people of a nation who pay for their government's successful R&D support receive just compensation for these expenses while their workers are able to benefit from an increased demand for their employment. For this to be done in a way that is predictable, transparent, and not swayed by political influence is of the utmost importance. Fortunately, such a method is also one that would be most economically efficient and without waist.

In the last several years our federal government under programs like the Energy Policy Act of 2005 and the assistance of General Motors has began to move in this proper direction. However, many of these programs have provided assistance at points of production that create waist and can be adversely altered by political influence. It is very important to remember that the point of production where government can assist the private sector with the least amount of waist and adverse political influence is during the basic and applied research stage.

President Obama's newly proposed National Network for Manufacturing Innovation at first glance looks to be the right step in the right direction, as has long been the Brookings Institute's Energy Discovery – Innovation Institutes. However, with only \$500 million to \$1 billion to be spent over four years with the new NNMI this is a baby step when an Olympic long jump is needed. Nonetheless, if structured properly it will take relatively little time before it is found that this program more than pays for itself. I don't mean "pay for itself" using typical squishy Washington DC accounting, so the monies

earned through the program could be ploughed back into it. However for now, at the very least and with this year's election, a real commitment to this program needs to be made!

At present there is a debate within the administration as to whether the NNMI should be structured with incentives for businesses to manufacture in the US those products that arise using the NNMI government funds. Unless China and India offer to pay, and I don't mean lend, the NNMI funding, the answer is yes. More specifically what should happen is that as federal, state, and local funds begin to rise on a particular project, so too must correspondingly rise the percentage of payroll that a business has in each jurisdiction relative to its global payroll in order for it to have a right to the intellectual property developed. Failure to do so would mandate very high royalties and fees in order to use the intellectual property. Further, the best way to calculate payroll increases would be to measure them through the amount Employee Tax Credits earned. Given that our ETCs as part of our personal income and corporate tax plans allow for ever greater ETC rewards that can be given to businesses that compensate their employees at ever greater amounts above the norm, the NNMI would then maintain, create, and attract higher paying jobs in the US. Germany's Fraunhofer Institute, which the NNMI is reported to be modeled after, provides 70% of its funding via its own internal profits, with only 30% of its funding coming from German governments. With the right incentives and tax structure the NNMI would more than pay for itself!

Such institutes in the US will need to expand far beyond what is just being proposed above. A very extensive NNMI along with robust state involvement and connected institutes through business incubators and our universities will be a must. One of the missions of our universities should now be to be their own business incubators with manufacturing institutes. Large patent pools and networks should be formed within and among them. Students, private groups, and perhaps even non-affiliated individuals would give up exclusive intellectual property rights in exchange for a predetermined percentage of royalties. The exclusivity of each patent pools would be determined by the university and each program coordinator. Private investors, existing businesses, and those within the business incubators would then be able to license any such patents with similar payroll, ETC, and/or royalty commitments as would exist above with the NNMI. Further, universities should stop using not always relevant math courses as "weeder" courses into many science and engineering degrees. Albert Einstein, perhaps the greatest physicist of all time, was a well below average mathematician. It is safe to say that many of the futures greatest inventors and scientists may be the same.

All of this will be part of a transformation of our universities that is typical for a time period that has experienced an even more profound economic transformation, our rapid movement into the global economy. After the Civil War and around the turn of the last century the mission of America's universities was greatly broadened. Prior to the Civil War American college students could typically only receive degrees in one of five subjects: law, medicine, theology, philosophy, or science. But as our economy was rapidly transformed from agricultural to industrial during this period, within our colleges and universities the subjects of philosophy and science splintered and became specialized eventually into what we know them to be today. During this period higher education became much more relevant to the needs of society. A similar revolution is now upon us, and reluctant schools will only suffer.

Given this reform to higher education along with the NNMI it would not take long until the economies scientific and technological output would be taken to a more desired level. Along with various environmental tax incentives and programs, the possibility of maintaining a pristine and safe environment for the US and the rest of the world would greatly increase. On the purchasing end the federal, state, and even local governments could enact an Environmental Fair Tax. For states and local

governments this would simply mean that they would structure their sales taxes such that products with a great environmental rating would receive a very low to no sales tax, while products with low environmental ratings would make up for this costs by having much higher sales tax rate. This tax would be revenue neutral. A federal Environmental Fair Tax would piggy back on the state and local sales tax system, lowering sales taxes even further for products with great environmental ratings while raising sales taxes even further on those with poor ratings.

Our other environmental tax proposal would reward tax credits for the production of products using best practices. Just like with an Environmental Fair Tax on the federal level, the EPA could designate, and then Congress and the president could OK, best, standard, and poor practices, and then award a lower income tax rate via this designation. Also just like with an EFT, these practices could be judged for what is generated for the production of a product, when a product is in use, and when a product is discarded. Another very positive proposal for the environment is to have the federal government announce that the first some odd amount of the production of a certain best practice could be produced tax free. All of these tax incentives would slowly but inevitably create a cleaner environment as new best practices are invented and old best practices becomes standard practices and so on. With these tax policies understood as being permanent, given potential technologies being even close to equal, engineers will always default to employing the more environmentally friendly technology. Furthermore, given that the overall output of environmentally friendly technologies will increase under qualityism, if the free market with these tax incentives alone is not enough for a given sector to move away from certain less environmentally friendly products and procedures, it will then be easier for governments to mandate the use of cleaner technologies without adversely affecting the economy.

But what qualityism would best achieve over time is a more egalitarian society! Our tax plan would raise far more government revenues than any other currently proposed tax plan. Much of these new revenues could be used to improve education. Greater educational opportunities are liberating for both individuals and the overall economy. Until the last few years, greater educational outputs have been virtually the only policy initiatives of Endogenous Growth Economists. A more highly educated work force will entice capital and job growth, along with raising productivity and incomes. But the tax incentives in qualityism also increase the demand for labor in the jurisdiction of the government that employs them. In the end, given that government can never be larger than the private sector that creates it and keeps it alive, it is only the demand for labor in the private sector and increases in productivity that can overtime raise real incomes for workers. These tax incentives, along with the NNMI and our proposed incentives for their associates to employ domestically, would ensure that the demand for labor in the domestic private sector is at its optimum, along with ensuring that desired scientific and technological outputs are at their optimum.

With a greatly increased demand for labor and better technologies that will increase productivity, clean the environment, and deliver better products, workers will be able to demand more of better products, and/or more time off and vacations if they so chose. Free market entrepreneurs will have more opportunities than ever before to rise and become wealthy, while everyone will have a more prosperous life even if they chose to do less, all while creating a more environmentally sustainable economy. The economy will be of a higher quality, and this will give all individuals more of an opportunity to do what they dream. Such is the essence of anything that is liberating.

Qualityism liberates us from the failed philosophies of both Keynesianism and neoclassical economics. Keynesians, especially in a competitive global economy, adversely constrain and shun the private sector while far too often spending through the government in ways where economic efficiency is inadequately

measured. Meanwhile, neoclassical economists or supply-siders fail to live in the real industrial economy where, without government or union intervention, consumer demand by the masses is never able to keep pace with the rest of the economy, leading to an ever slower and less prosperous economy. Unfortunately today in our global economy, the only redeeming value of either economic philosophy, and therefore most of the beliefs either political party, is that their advocates block the other party from completely running, and therefore completely destroying, our economy.

Unfortunately for Democrats in our global economy, it would take Keynesians less time to destroy our economic prosperity than it would for supply-siders to do so. Certain destruction would come with supply-side policies, but a slower certain destruction. The American people sense this, and this is why since the global economy really began with the end of the Kennedy GATT trade round in 1967 Democrats have only had one two term president while the Republicans have had three. Further, every exit poll showed that that without Ross Perot running Bill Clinton never would have won in 1992, so the Republicans would have had a fourth two term president and the Democrats zero. In order to win in 1996 Clinton had to "triangulate" and become a "New Democrat." Without Watergate, the financial crash in the fall of 2008, and Ross Perot, it could have been a complete wipeout for Democrats since 1967. No president has ever been reelected with such a poor approval rating this close to an election as President Obama now has. Democrats can pretend this is not a problem and continue to lose, as the American people continue to lose. Or they can face reality and adopt Endogenous Growth, qualityist policies, thereby improving their lot, and more importantly the lot of the American people.

Exactly 100 years ago, as the most developed economies of the world experienced an equally pronounced and profound economic transformation as our sudden movement into a global economy, the Democratic Party took up the mantle of the progressive income tax and other progressive legislation as a way of adapting to the sudden movement from a primarily agricultural economy to a primarily industrial economy. This economic transformation was primarily due to their recent development of electricity, mechanized farm equipment, and railroad expansion. In an agricultural economy, during a recession people can remain or move back to family farms and live off of them. In an industrial economy this is much less so. Plus, industrial economies have to deal with non-reinvested profits that disallow workers to be able to keep their consumer spending at pace with the rest of the economy, thereby helping to bring on recessions. Only progressive income and capital gains taxes can increase consumer spending by the poor and middle class because all other forms of taxation are regressive so they cannot increase moneys to the poor and middle class. These are the reasons why between 1910 and 1915 virtually all of the economically developed nations of the world enacted for the first time, with a few short exceptions in Britain and the US in order to pay for 19th century wars, progressive income taxes, along with other progressive legislation. All of these nations, and soon after most of the rest of the world, have had a progressive income taxes ever since.

Today we still live in an industrial economy and hopefully with vigor want to remain in one. Therefore, we still must redistribute income in order to keep consumer demand up, and we must do it through progressive income taxes. However, given our now highly competitive and employment mobile global economy we must counter our progressive income and capital gains taxes in a much more sophisticated manner that does not damage domestic job growth but actually incentivizes it. Income and capital gains taxes make up about 55% of our federal revenues and the top 5% of income earners pay about 70% of these taxes. The top 5% or higher of income earners is where the money is, and this is where we must acquire it. However, and very importantly, our qualityist income and capital gains tax plans increase taxes only on the moneys in the economy that are LEAST responsible for domestic economic growth while incentivizing domestic economic growth!

No major nation of this world in going to champion communism or socialism and take this world back to the pre-global economy days. The lesson that has been learned by effectively all the world that came out of the grand struggle of communism and socialism against the free market is that a private economy with a profit margin is much more efficient and liberating than is a government controlled economy without a profit margin. Communism and socialism have been permanently discredited and there is no going back. The global, industrial, free market economy is here to stay, until sometime long after we are dead it transforms into something different. If the US were to now champion qualityism, it would not take long until the rest of the world had more democratic, free market, qualityist governments which would therefore have higher labor and environmental standards. This would in turn allow the US and the other economically developed nations of the world to have ever higher labor and environmental standards.

Just like with what was done 100 years ago, the Democratic Party must lead the way in applying new policies to a new economic reality. Being the "conservative" party, or in other words the "slow to little change" party, we cannot rely on the Republicans to champion these new policies. The Democratic Party also led the way during its inception during the Second Great Awakening of the early 1800's by championing very important democratic reforms that made our democracy much more representative. The early part of each century, following a cycle of four roughly 25 year long generations, or roughly every 100 years, has always experienced a profound and very substantial redefinition of what people considered as politically and socially liberating. This occurred during the Progressive Era of the early 1900's, the Second Great Awakening of the early 1800's, the Great Awakening of the early 1700's, the Puritan Awakening of the early 1600's, and the Protestant Reformation of the early 1500's. The 100 year cycle in this manifestation appears to have begun with the great period of nation building in Europe in the late 1400's that was primarily a result of the invention of the canon and the printing press during that century. However, a paralleled 100 year cycle in new and profound societal changing ideas appears to have followed this same pattern as far back as into the ancient world. But most importantly for us, an Awakening of more modern magnitude is, and must, now be upon us. The sooner we accomplish what past generations have and rise to the challenge of history, the better off we and all future generations will be!

