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UPDATING DEPRECIABLE LIVES: IS THERE SALVAGE VALUE IN THE CURRENT SYSTEM?

HEARING

BEFORE THE

SUBCOMMITTEE ON LONG-TERM GROWTH AND DEBT REDUCTION

OF THE

COMMITTEE ON FINANCE UNITED STATES SENATE

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UPDATING DEPRECIABLE LIVES: IS THERE SALVAGE VALUE IN THE CURRENT SYSTEM?

THURSDAY, JULY 21, 2005

U.S. SENATE,
SUBCOMMITTEE ON LONG-TERM
GROWTH AND DEBT REDUCTION,
COMMITTEE ON FINANCE,
Washington, DC.

The hearing was convened, pursuant to notice, at 2:39 p.m., in room SD–215, Dirksen Senate Office Building, Hon. Gordon Smith (chairman of the subcommittee) presiding.

Present: Senator Kerry.

Also present: Republican staff: Dean Zerbe, tax counsel and senior counsel to the Chairman; Nick Wyatt, tax assistant. Democrat staff: Bill Dauster, deputy staff director; Pat Heck, chief tax counsel; Jonathan Selib, tax counsel; and Mary Baker, detailee.

OPENING STATEMENT OF HON. GORDON SMITH, A U.S. SENATOR FROM OREGON, CHAIRMAN, SUBCOMMITTEE ON LONG-TERM GROWTH AND DEBT REDUCTION

Senator SMITH. Ladies and gentlemen, thank you for your attendance at this very important hearing of the Senate Finance Subcommittee on Long-Term Growth and Debt Reduction. Our topic today is "Updating Depreciable Lives: Is There Salvage Value in the Current System?"

We will soon be joined by my colleague, Senator Kerry. He and I were both led to believe that there was a vote on at 2:30, but it was called off as we arrived, so I expect he will be here soon.

But in the interest of time, we will go ahead with my opening statement, and his when he arrives.

We are going to hear from a distinguished panel of witnesses, who will provide us with their insights on the current tax depreciation system and its effects on long-term economic growth.

Over the last 2 decades, the U.S. economy has changed dramatically, and many new technologies and industries have emerged. Twenty years ago, no one had ever heard of the Internet or e-mail, such things as e-commerce, Blackberries, and iPods, just to name a few.

We all know the use of computers has also revolutionized and streamlined manufacturing processes in many traditional industries.

Unfortunately, however, we have not modernized our tax depreciation system. It has not kept pace with these industry changes.

Our depreciation system is simply out of date. An un-updated tax depreciation system is not good for the American economy.

We need a system that promotes and encourages capital investment, especially investments in technology, and also a system that responds to the emergence of new technologies and industries. The more companies invest in equipment and buildings, the more our economy grows.

An example of how the current depreciation system is out of date, is the fact that the recovery periods used to calculate depreciation allowances for many types of equipment, especially high-tech assets, do not reflect the actual economic lives of such equipment.

As one of our witnesses, Dr. Neubig, pointed out in an article on depreciation, when the asset classes for computerized equipment under the current system were developed, mainframe computers were the norm. The fact that such asset classes have not been updated since that early time demonstrates the need for modernization of our tax system.

For example, a personal computer has a depreciable life of 5 years. However, its economic life is really only 2 or 3. Although a personal computer may work perfectly for 5 or more years, we all know from our own experiences that after a couple of years, more technologically advanced computers enter the marketplace, and such new computers are faster and have superior applications, making the older computer economically obsolete.

Another example that all of us on Capitol Hill can relate to is Blackberries. They may run for several years, however, many of us replace our Blackberries every couple of years to take advantage of new and helpful features. Like personal computers, a Blackberry has a depreciable life of 5 years.

As these examples demonstrate, years ago, useful lives were determined by the wear and tear on the asset. However, these days there is a greater frequency of change in our society, so today we must focus on an asset becoming economically obsolete, not just actual wear and tear.

To address these concerns with the depreciation system, I am working with my colleague, Senator Kerry, and also Senator Baucus, on legislation aimed at modernizing and simplifying the depreciation rules. This bill will encourage capital investment, strengthen the economy, and make it easier for companies to comply with depreciation rules.

I would like to thank all of our witnesses for coming today, and I look forward to hearing your testimony. As soon as Senator Kerry arrives, we will hear from him as well.

Why do we not then proceed to our first witness, Joseph M. Mikrut? The mic is yours.

STATEMENT OF JOSEPH M. MIKRUT, PARTNER, CAPITAL TAX PARTNERS, WASHINGTON, DC

Mr. MIKRUT. Thank you, Mr. Chairman.

Mr. Chairman, I would like to start by, first, commending you and the subcommittee for holding this hearing. Depreciation is not the most glamorous of tax topics, yet it is probably one of the most important. Capital investment is the backbone of the U.S. economy.

As pointed out by the staff of the Joint Committee in their pamphlet for this hearing, over $1.5 trillion of depreciable property is placed in service every year in the United States. Tax depreciation rules, or how those costs are recovered, significantly influence the level and direction of investment.

Thus, it is important for the tax depreciation rules to "get it right." This hearing represents an important step in ensuring that our system of tax depreciation is made and kept efficient and current.

The cost of a capital asset is generally thought of as the present value of the future stream of income that could be generated from that expenditure. Expensing of the cost of an asset is the economic equivalent of exempting from tax the expected income stream from the asset. Thus, consumption taxes, which seek to exempt from tax the return from capital, allow the immediate expensing of capital investment.

Income taxes, however, attempt to match the income from an asset with its cost. Thus, income taxes generally require the capitalization of the cost of productive assets and provide depreciation deductions to spread this capitalized cost over the life of the asset to provide such matching, however roughly, and to account for the expected decline in the value of the asset over time.

Income tax depreciation deductions are generally determined by the use of several conventions regarding a property's placed-in-service date, its useful life, its rate of depreciation, and its salvage value.

Since its inception in 1913, the Federal income tax has allowed depreciation deductions for the exhaustion, wear, tear, and obsolence of property. Since the Tax Reform Act of 1986, depreciation deductions generally have been determined by the Modified Accelerated Cost Recovery System, or MACRS.

MACRS assigns property to one of 10 recovery periods, and each recovery period is assigned a recovery method. Most personal property—for example, machinery and equipment—is assigned to the 5- or 7-year recovery periods and is depreciated using the 200-percent declining balance method.

Real property is generally recovered using 27.5 years for residential property, or 39 years for non-residential property, and the straight-line method. Less beneficial allowances are provided on the Alternative Minimum Tax.

MACRS assigns property to its various recovery periods in one of two ways. Certain properties are assigned by statute. For instance, automobiles and light-purpose trucks are assigned the 5-year recovery period. However, most property is assigned to a recovery period based on industry-specific class lives developed by the Treasury Department over 40 years ago.

Reliance on this class life system results in some controversy as, as you have pointed out, new industries have emerged, new assets have been developed, and the rate of obsolescence has changed since these prior Treasury studies.

Thus, some new industries often do not properly fit into the present class life, while others find their assigned recovery periods to be too long relative to their industry's rate of reinvestment.

As the name suggests, MACRS is the successor to ACRS, the depreciation system that was put in place in 1981 and was intended to provide an incentive to invest in productive property. ACRS resembles MACRS in format, except that the depreciation allowances provided under ACRS were much more liberal.

Prior to ACRS in 1981, taxpayers had considerable leeway in determining the depreciation allowances based on their present facts and circumstances. From the 1930s to the enactment of ACRS in 1981, the Treasury Department had conducted numerous studies and promulgated guidance to provide depreciation guidelines for various industries and assets. These guidelines generally corresponded to some degree with the observed useful lives of property within various industries.

An examination of prior and present law leads to certain conclusions. As you pointed out, Mr. Chairman, first, the class life system upon which present law is based is outdated. This results in economic discontinuities for some taxpayers and industries and leads to controversies between the IRS and other taxpayers.

Consideration should be given to changes in the process to improve the depreciation system. Treasury has demonstrated the ability to study and provide guidance with respect to appropriate depreciation allowances in the past, but under present law has no authority to change the class life system.

With sufficient resources, industry input, and Congressional direction and oversight, processes could be put in place to allow Treasury to again take up this work toward modernizing our tax system. I believe Dr. Neubig is going to speak in greater detail on some of these processes.

The second observation is that, whatever changes are made, care should be given to promote equity between industries and among industry participants, something that Dr. Gravelle has written of significantly.

But, for one example, there should be an examination regarding the extent to which depreciation under the Alternative Minimum Tax creates a tax wedge between certain taxpayers on the AMT and those not on the AMT.

Finally, any changes in the system should promote simplification. Of all the broad-based deductions, depreciation imposes the greatest number of calculations and the greatest record-keeping burdens.

This stems, in part, from the requirement to classify assets into class lives, to calculate and maintain depreciation for a variety of purposes—separate depreciation is required for the regular tax, for the Alternative Minimum Tax, for earnings and profits purposes, for State and local purposes, and financial accounting purposes.

This all has to be done on an asset-by-asset basis. More liberal use of mass asset accounts, where groups of assets are placed together and depreciated as one asset, should be explored to provide simplification.

This concludes my prepared statement. I would be happy to answer any questions at the appropriate time.

[The prepared statement of Mr. Mikrut appears in the appendix.]

Senator SMITH. We have been joined by my colleague. If there is no objection, we will conclude with statements by other members that may want to be part of the record.

But with that, John, we invite your opening testimony.

OPENING STATEMENT OF HON. JOHN KERRY, A U.S. SENATOR FROM MASSACHUSETTS

Senator KERRY. Well, Mr. Chairman, thank you. I apologize for being late. I was down on the floor, both in anticipation of a vote that did not happen, as well as working on some scheduling issues. I apologize.

I really want to just hear the testimony. I do not need to say a lot, except that I am glad that we are having this hearing. You can tell, from the turnout of the press, what a scintillating subject it is.

Most people here would say, "Class life? What is that?" But for those of us who represent States, as both Gordon and I do, that have a huge base in technology and other kinds of product development, health care and so forth, which is technology in many cases, this is an enormous issue, of enormous consequence, and it has great implications, obviously, for the economy as a whole.

Right now, we are going through what people call the "roulette audit system," this great uncertainty. It is not, frankly, smart in terms of the incentives that we are putting in place and the expectations that people are operating with.

So, for all those reasons, and more that you will all describe, I think we have to revamp it. I want to work with the Chairman. We have not introduced it, but I know we are developing legislation to change the class life designation and to work on how we adjust the depreciation process. We clearly need a bipartisan approach to this, and hopefully we can get that done.

So, I welcome your testimony. Thank you all for being here, particularly, Mr. Anderson. Thanks a lot for being here. I have admired and worked with the Massachusetts High Technology Council for a long time, and it has done a lot of good. So, we welcome your testimony and presence. Thank you all.

Senator SMITH. Thank you, Senator Kerry. I think it is fair to say that there is a very bipartisan interest in this issue, because, if we do nothing, we damage our economy, and no one has an interest in that.

So, let me see. Next, is Thomas S. Neubig, the national director of Quantitative Economics and Statistics with Ernst & Young. Welcome.

STATEMENT OF DR. THOMAS S. NEUBIG, NATIONAL DIRECTOR, QUANTITATIVE ECONOMICS AND STATISTICS, ERNST & YOUNG, LLP, WASHINGTON, DC

Dr. NEUBIG. Thank you, Mr. Chairman and Senator Kerry. I also would like to compliment you on holding this hearing on depreciation, and especially trying to keep the class lives current.

As the former Director and Chief Economist of the Treasury's Office of Tax Analysis, I was responsible for setting up the Depreciation Analysis Division after the 1986 Tax Reform Act, and that was intended to keep the class lives current.

Unfortunately, 15 years later, I wrote an article called "Twenty-first Century Distortions from 1950s Depreciation Class Lives." The current system of depreciation class lives is heavily based on a survey of corporate income tax returns done in 1959, and only modest changes have been made since that time.

This hearing's title asks if there is salvage value in the current system, and my answer is yes. The system does work, but the depreciation class life system can be improved, and some administrative flexibility is badly needed.

If the U.S. is going to retain its income tax, then we need a tax depreciation system that reflects our dynamic economy, which relies on innovative technologies, new assets, and new industries, such as DNA sequencing equipment, wireless cell site equipment, and digital photography and printing that were not contemplated in 1986, let alone in 1959 or 1962.

This outdated classification system results in a number of distortions. First, new assets do not have a class life, so they have to get shoe-horned into some existing class life, like wire-line telecommunication, or they are assigned an arbitrary 7-year default life.

Other assets that might have been originally appropriately classified back in the early 1960s may have experienced technological or economic changes resulting in shorter economic lives.

Finally, as a result of controversy about asset classifications, there can be a number of assets where taxpayers in the same industry take different recovery periods, and there can be costly and lengthy disputes with the IRS.

Assets embodying new technologies in rapidly innovating industries are most likely to see rapid economic obsolescence from significant price reductions and increases in capacity, as have occurred with computers and communications. Assigning a nascent asset the same class life as a mature asset could be very far from reality.

The 1986 Tax Reform Act anticipated the need to stay current by giving the Treasury Secretary authority to study and change class lives. That is why we set up the Depreciation Analysis Division. However, that authority was removed by Congress just 2 years later, in 1988. Treasury then stopped studying asset depreciation.

Technical changes based on factual experience can be more quickly, thoroughly, and consistently handled by administrative, rather than legislative, action. In addition, legislative changes involve revenue scoring, which is a further impediment to appropriate technical changes.

The Treasury Department's 2000 Depreciation Report suggested several alternative mechanisms for adjusting class lives, but all of those would rely upon having additional government resources to do those studies.

As an alternative, one could expand on several successful IRS programs which involve taxpayers in resolving technical and factual issues. The IRS currently does this on many other tax issues with pre-filing agreements, advanced pricing agreements, and the IRS's new industry issue resolution program.

What I call an advanced depreciation agreement could be part of the industry issue resolution program. In this ADA, if Treasury is given the authority to change depreciation class lives, both taxpayers and the Treasury would have an incentive to work together to resolve factual issues involving the appropriate class life.

In an ADA, the taxpayer or an industry association would be responsible for providing the resources to conduct the analysis, but it would be subject to Treasury's review and agreement. This is very similar to the APA.

It would also alleviate some of the problems that we have seen occur with the APA as a result of insufficient government funding so that the government is not able to make as quick a resolution of the issues as would be desirable.

This approach would focus government and taxpayer resources on assets whose economic lives are expected to be significantly shorter than their current tax lives. Concern about private sector analysis would be addressed through Treasury review and oversight.

The ADA process could also be used to address new assets by assigning a temporary class life for new assets, with an expiration date, pending a more complete analysis.

It is important that the definition of class life used in the ADA process be feasible empirically, and also set a reasonable, consistent standard against which new class lives are determined. Most class lives were based on a typical holding period of only the initial holder of the asset.

If we stay with the current income tax, then the tax depreciation rules need more administrative flexibility to remain current. This can be done with two changes. First, Treasury's successful administrative programs should be expanded to include an advanced depreciation agreement that covers depreciation class lives, and, second, Treasury should have the authority to set class lives for assets which have undergone an advanced depreciation agreement.

Those two changes would keep my great-grandchildren from writing about 22nd century tax distortions from 20th century class lives.

I would be happy to answer any questions later.

Senator SMITH. Thank you very much, Doctor.

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

Senator SMITH. Dr. Gravelle?

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

Dr. GRAVELLE. Thank you. I would like to thank you for the invitation to appear before you today to discuss depreciation policy.

Senator SMITH. Jane, maybe I should tell them you are a part of the Congressional Research Service.

Dr. GRAVELLE. Yes, I am a Senior Specialist with the Congressional Research Service. Also, this is a very narrow topic, but my dissertation was entitled, "Non-Neutral Taxation of Depreciating Assets," so I have had a longstanding interest in this issue.

Senator SMITH. That is wonderful.

Dr. GRAVELLE. That was a long time ago, and things have changed.

Senator SMITH. I am sure the people in the press are going to have some questions for you afterwards. [Laughter.]

Dr. GRAVELLE. Tax depreciation rules are important to an efficient economy. Absent specific market imperfections, business investment is efficiently allocated, but different types of assets and returns are subject to the same effective tax rate.

In an income tax system, this goal is achieved from the value of tax depreciation equals the value of economic depreciation. If subsidies are provided, they should be provided in a way that is neutral across assets.

In 1986, an explicit attempt was made to achieve this goal, and estimated tax rates on different types of assets were fairly even, with very slightly lower tax rates on equipment, on average, than on buildings.

This treatment was a significant departure from the past, when wide differences across assets existed. Since that time, legislative and economic changes have led to a fall in the tax rate on equipment.

In 1986, the average tax rate on equity investments and equipment in the corporate sector was estimated at around 32 percent, 2 percentage points below the 34 percent statutory tax rate at that time. Taxes on buildings were slightly above that rate, ranging from 35 percent to 38 percent.

In 1993, the statutory tax rate was increased to 35 percent, and the useful life for non-residential buildings expanded from 31.5 years to 39 years. The inflation rate also fell from an expected rate of about 5 percent to an expected rate of about 2 percent.

These effects were offsetting because inflation raises the tax burden on capital income, lowering tax rates on equipment to 27 percent, while keeping tax rates on buildings essentially unchanged.

Incorporating new depreciation estimates lowers the projected 27 percent by a couple of percentage points. This current law is characterized by a favorable treatment of equipment in the aggregate compared to real estate. There are also differentials across types of equipment assets which arise, in part, from the limited number of class lives.

In 1986, rates and equipment were estimated to range from 22 percent to 41 percent. The current range is from 17 percent to about 33 percent—these are all estimates, of course, you understand—reflecting changes in inflation rates and some undated depreciation numbers.

Although there are problems with the present depreciation system, by historical standards it is more even-handed than was the case with most past combinations of depreciation and investment subsidies.

There are certain rigidities in the current system that arise because of the limited number of asset classes and legislation adopted in 1988 that restricted the authority of the Treasury Department to assign assets to classes.

The limited number of classes means that within a class the shorter-lived assets are subject to higher tax rates than the longer-lived assets. Limitations on Treasury authority mean that assets

may not be assigned to the appropriate classes because, for example, they are new and because changes in technology have affected their durability, or because they were not properly assigned in the first place.

Proposals have been made to provide more generous treatment to equipment or to "high-tech" equipment. The argument that these assets should be favored simply because they embody technology is not consistent with economic theory, which suggests that assets should be treated in a neutral fashion.

A different argument is that many of these assets really have shorter lives than assumed when the asset lives were assigned. A review of evidence on economic depreciation does not suggest that there are major changes in the estimated economic depreciation rates assumed in 1986. Indeed, overall, equipment assets' effective tax rates have declined slightly with the new estimates—not in every case, but overall.

In addition, these concerns are often directed at very short-lived assets and these assets have a built-in protection against lives that are too long, since the remaining costs can be deducted when they are disposed of.

Moreover, investment in short-lived assets is less sensitive to changes in effective tax rates than is investment in long-lived assets.

Among the options for change is to provide Treasury some additional authority to assign assets to classes. Other options include taking measures to narrow the gap between equipment and structures, and expanding the number of asset classes to provide more even tax treatment within equipment.

Expensing or partial expensing of equipment or of a narrow group of assets would exacerbate current differences across assets. Full expensing across all assets would be neutral, but would result in significant negative tax rates unless other measures, such as disallowing interest deductibility, were taken and would be extremely costly in the short run, unless deductions for existing assets were disallowed. Thank you.

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

Senator SMITH. So are you arguing then for us to give specific authority to redefine lives and that we not necessarily dictate it here?

Dr. GRAVELLE. Well, you might want to oversee it. The Treasury Department is where they have more skills to determine technical things.

Senator SMITH. That is true, actually.

Dr. GRAVELLE. I mean, I really cannot make recommendations, but I think there is a general recognition, which you will hear from lots of people, that we do need a more flexible system. We have not changed anything since 1986, and that was almost 20 years ago.

Senator SMITH. Is it fair to say I have not really heard any disagreement from our first three witnesses? I think everyone is pretty much in agreement. All right.

Mr. Simonson?

STATEMENT OF KENNETH D. SIMONSON, CHIEF ECONOMIST, ASSOCIATED GENERAL CONTRACTORS OF AMERICA, ALEXANDRIA, VA

Mr. SIMONSON. Good afternoon. Thank you for this opportunity. I am Ken Simonson, chief economist for Associated General Contractors of America, the leading national trade association of the construction industry, representing over 32,000 firms, most of them small businesses.

I will wear my AGC hard hat today, but also draw on my past lives in the Small Business Administration's Office of Advocacy as chair of the Tax Committee of the Small Business Legislative Council, staffer for the Capital Resources Committee for the President's Commission on Industrial Competitiveness, and other positions in which the tax system, and specifically capital cost recovery, were very important issues.

Construction is a major creator and buyer of depreciable assets. The value of construction put in place last year totaled $1 trillion, of which $270 billion was for depreciable private, non-residential, and multi-family structures.

As for equipment, shipments of new construction machinery accounted for $29 billion, or 11 percent of total domestic machinery shipments. Contractors spent billions more on imported and used equipment, and on vehicles, computers, and other equipment that are not classified as construction machinery, but are integral to their operations.

Because equipment, tools, and vehicles are so essential in construction, capital cost recovery rules, depreciation, expensing, tax credits, recapture, et cetera are an important aspect of the taxes contractors must contend with.

Getting depreciation right for assets used and created by construction firms is vital for all construction-related businesses, contractors themselves, supplier industries, and building owners.

Most construction firms are very small. In 2002, more than 91 percent of construction firms had fewer than 20 employees, and only 1 percent had 100 or more. Approximately 79,000 of the nearly 600,000 firms were new. There were also 2 million construction firms without employees.

These facts suggest that most construction firms do not have the size or experience to be able to cope with complex or frequently changing tax rules.

A simple, rational, and relatively stable set of tax rules, particularly with reference to capital cost recovery, will enable small contractors to adapt and concentrate on building a strong economy rather than having to become tax experts.

In response to the invitation to testify at this hearing, AGC conducted a quick survey by e-mail—thank goodness for new technologies. The questions and responses received to date are on page 8 of my written testimony.

I would summarize the points as follows. For the most part, contractors said that the accelerated 5-year write-off allowed for most of their property fairly reflects the life and decline in economic value of major machinery.

However, some contractors said that hand tools and smaller equipment, such as pumps, generators, and tamps, tend to wear

out or be damaged beyond the cost of repair after less than 5 years and should be written off over 3 years, or expensed and immediately deducted.

In addition, contractors, like taxpayers in many other industries, said their computers and associated software are obsolete in less than 5 years.

Respondents split on whether the amount and timing of investments are affected by either the general rules or temporary incentives, such as the recently expired bonus depreciation or the current higher limits for small investor expensing under code section 179.

I would urge that any changes be large and long-lasting enough to be worth the considerable cost small businesses incur in managers' and owners' time to learn about, analyze, and, if appropriate, adapt their business practices. Short-term provisions, even if later extended, exact a high overhead cost.

As for other recommendations, one respondent listed "tax simplification!" I think he understated the case. I believe enormous efficiency gains throughout the economy could be achieved by making the tax system—and notably the capital cost recovery rules—simple and generally unchanging for long periods.

A good way to start, and one mentioned by several survey respondents, would be to eliminate the Alternative Minimum Tax, or at least the separate depreciation required for it.

If this is too expensive or elaborate a change to enact this year, I hope Congress will at least substantially raise the income floor below which it does not apply for all types of business, whether taxed as C corporations or through the individual income taxes, S corporations, partnerships, or sole proprietorships.

Congress should permanently spare most individuals and small businesses from devoting time and expense to duplicate accounting and tax computations.

Alas, simplification is not simple to enact, or even agree on the approach. In the interim, there may be cases where small adjustments to the present system are appropriate.

One of these is in the area of pollution control equipment. Contractors generally receive no financial benefit from the expense of overhauling their existing equipment to add pollution controls.

Therefore, AGC believes it is appropriate to allow contractors to expense the cost of purchasing and installing pollution-reducing devices. Such tax treatment would be consistent with the deductions for clean fuel vehicles and refueling property, and for small refiners who install equipment to comply with EPA low-sulfur regulations now allowed under the tax code. In fact, Oregon has a tax credit to compensate contractors, in part, for installing this kind of equipment.

Thank you.

Senator SMITH. Well, you are the first one to hit on my big question, when Mr. Anderson is finished, and that is obviously the AMT and how we ought to deal with that.

[The prepared statement of Mr. Simonson appears in the appendix.]

Senator SMITH. Mr. Anderson, you are with the Massachusetts High Technology Council from Waltham.

Mr. ANDERSON. That is right.
Senator SMITH. Go ahead.

STATEMENT OF CHRISTOPHER R. ANDERSON, PRESIDENT, MASSACHUSETTS HIGH TECHNOLOGY COUNCIL, INC., WALTHAM, MA

Mr. ANDERSON. Thank you, Mr. Chairman, for the opportunity to discuss this issue with the committee. My name is Chris Anderson, president of the Massachusetts High Technology Council. I have been with the council since 1984, as president since the end of 2000.

I would also like to thank Chairman Smith and Senator Kerry for the opportunity as well to testify on this issue, which is one of significant importance to the technology employers, certainly in Massachusetts, and, I am sure, around the country.

A quick little thumbnail on who we are. The Massachusetts High Technology Council was founded in 1977 by technology CEOs whose goal is to help make Massachusetts the world's most attractive place in which to live, work, and operate high-tech companies.

That remains our mission today. Today, our members employ hundreds of thousands of skilled workers in all of Massachusetts key technology sectors, including computer hardware, life sciences, software, medical products, semiconductors, defense technology, and communications.

Our members include the executive leadership of such employers including EMC, Boston Scientific, Analog Devices, Genzyme, and MITRE.

I might say that when I joined the council we had companies called Digital Equipment Corporation, Data General, Wang, and Colonet Software, none of whom exist in their current or previous form today.

As many of you know, Massachusetts, historically, has had a reputation for being a high-tech State, but over the past 15 years the political leadership has realized that a high-tech State like ours needs tax policies that help maintain a stable, predictable, and competitive business cost climate. Because of that attitude, we have done a number of things to help shed that Taxachusetts moniker.

A few of those examples—and I will be brief—include a competitive Research and Development Tax Credit, and making permanent the 3-percent Investment Tax Credit that rewards companies for making capital expenditures.

This, and a number of other initiatives, resulted in, as Senator Kerry cited in testimony on July 6 before the Base Realignment and Closure Commission hearing in Boston, that Massachusetts is the top technology State in the U.S., according to the annual rankings by the Milken Institute.

The lesson is that we have, and need, a thoughtful and strategic tax policy that can have a positive impact on economic competitiveness.

Despite the ever-evolving nature of technology and growing global reach of innovation firms, investment in capital assets and the cost recovery for those assets are critical to the competitiveness of U.S. employers.

According to the April 2005 study led by PricewaterhouseCoopers for the President's Advisory Panel on Federal Tax Reform, in 2002, gross corporate depreciable and amortizable assets were valued at $10 trillion. The depreciation and amortization deductions for the same year totaled $825 billion.

By comparison, corporate incomes, with all deductions, came in at $1.4 trillion. This shows that, even in an innovation-based economy, capital investment is still king.

As the committee contemplates the future structure of depreciation, it should consider that—while technology, factories, and jobs are becoming more and more portable—technology- and science-oriented research companies strongly want to invest in operations close to their home base. We applaud your interest in seeking out how best to achieve this objective.

Let me put a face on a specific example where the current structure is a problem. A precision equipment manufacturer outside of Boston had a very negative experience due to the current depreciation structure.

This company had the type of opportunity that every ambitious tech firm yearns for, the chance to be a sole-source global supplier for Intel. This high-tech firm of about 200 employees had the expertise and workforce to do the job, but needed to make significant capital investments in a short period of time to meet the needs of Intel.

The company invested $10 million in real estate and capital equipment to accommodate the new project, a significant capital outlay for a firm of its size. They were able to successfully meet Intel's goals and, from a business and technological standpoint, the venture was a success.

But from a tax standpoint, it became a nightmare that lasted for years. The contract with Intel had been for a finite period, which the company knew but, in the end, had millions of dollars of equipment that they could not put back to use right away.

They also could not expense the assets because of the depreciation schedule, unless they were to sell them off, which would prevent reuse.

The depreciation schedule did not recognize that some capital investments were destined to be short-term, or would likely have unpredictable lives, so what at first glance was an ideal opportunity became a burden on an otherwise successful company.

They had cash flow problems for a few years and, as a result, bumped up against issues concerning the AMT. They were forced to leverage the company's assets, which made for some nervous moments for executives and employees alike.

They have since bounced back, but, as the President of this firm told me this week, "We were forced to take our focus away from operational activities and move it to financial activities."

There are many more stories, many with more damaging outcomes, from across Massachusetts and the Nation. It seems that a system which may have made sense decades ago is ripe for an overhaul to reflect the speed and flexible nature of the new economy.

Besides the economic effects on the economy, the depreciable lives schedule has an unintended effect of suppressing investment

in technological areas that would have a direct impact on improving society.

One specific example is in the area of renewable energy, another technology cluster emerging in Massachusetts. Investment in this area is in the best interests of the United States.

New, innovative energy technology will ease our dependence on foreign oil and help the environment. However, many clean energy solutions are very costly and require significant private sector capital investment. They also depreciate at rates faster than traditional energy capital investments.

In this case, the depreciation structure is chilling investments in renewables, which delays important discoveries and enhancements that would benefit our environment, economy, and national security.

We would urge you to consider at least five recommendations, some of which you have heard: update the seven depreciable categories to better reflect the useful life of an array of technology equipment, like computers, which experts have suggested depreciate twice as fast as traditional assets.

Second, consider partial expensing or reducing the statutory rate to promote more efficient allocation of capital.

Third, allow a 50-percent tax depreciation deduction in the first year of service and the balance over the standard life.

Fourth, grant the Treasury Department flexibility in categorizing assets based on technological capabilities.

Finally, reinstate the bonus depreciation that ended last year.

We look forward to working with the committee to craft a plan that encourages investment in economic growth in a way that reflects the competitive realities of the 21st century economy.

Thank you for your time. I would be happy to answer questions.

[The prepared statement of Mr. Anderson appears in the appendix.]

Senator SMITH. Thank you very much, Mr. Anderson. We appreciate all of you so very much for—both from practical experience and long study, writing, and thinking on these issues—adding much to the Senate record today in our efforts to craft a fair and accurate depreciation system.

But as we contemplate doing this, again, there is no partisan difference in this. We are anxious to do it, to do it right, and in a way that advances the interests of the American economy.

But even if we do it right, I come back to the AMT question. If we do it right, does it not just simply re-raise the specter of AMT, of wiping out any good that we may do here? Does anybody have any comments on that?

Mr. SIMONSON. Absolutely. I think there is a real danger that we take too many partial steps and fail to see the unintended consequences, and the AMT is a great example of that, where it was enacted, of course, to get at a few high-income taxpayers who had made legal use of the tax system, but it just seemed inequitable to lawmakers to allow them to pay no tax. So, a set of complicated rules were drafted and added to, and now we are facing the prospect of tens of millions of ordinary, middle-income taxpayers paying that.

At the same time, corporate AMT has been developed and much less publicized, but it is also a hidden drain on the talent and money of millions of businesses.

Senator SMITH. The truth is, a lot of people would regard depreciation as a loophole, the kind of loophole that AMT was designed to stop. I was not here, fortunately, to vote on such a horrible proposal, but I am sure what AMT was designed to say is, whether you are profitable or not, you ought to pay something.

People were using many kinds of loopholes that deserved to be closed. But, clearly, depreciation reflects—should reflect—reality. But, as we are seeing now, it no longer does, because it is a very antiquated system for a much different world than we live in.

Dr. GRAVELLE. Senator, as you know, in 1997, they did move the depreciation provisions closer together. That was the biggest preference in the corporate Alternative Minimum Tax.

So, certainly, if you want to move in the direction of eliminating or reducing the presence of the Alternative Minimum Tax, further steps in that direction could be taken and they could be taken to different degrees to deal with any revenue costs.

I think you would be very hard-pressed to find economists who thought the AMT was a good idea. But it is also true that, at the time it was enacted, we also enacted Safe Harbor Leasing and some very accelerated depreciation, which caused a public perception that, for example, big corporations were paying less than ordinary individuals.

That was sort of a short-term thing that was fixed in 1982. So, in a sense, one of the things that caused us to embark on this Alternative Minimum Tax has actually disappeared, in any case.

So I think the biggest problem is the revenue. If you were to just repeal it outright, you have all these accumulated credits that firms have that would be very costly in a single year. But if you move depreciation closer together, then it would work its way out slowly over a period of time. So, there are different options for dealing with that.

The other thing is, if you decide to repeal the individual AMT at some point—and certainly there is a lot of concern about the number of taxpayers who are going to be paying the AMT—then that certainly would be a time you would want to look at the corporate AMT, because unincorporated businesses are going to be basing their calculations on the individual AMT.

Senator SMITH. Paying individual rates. Absolutely.

Mr. Mikrut, when you talked about the significant problems with the current tax depreciation system, would you identify the complexity you spoke of as the biggest difficulty, or just its antiquation?

Mr. MIKRUT. Well, I think sometimes these issues go hand in hand. The antiquation of the system creates some of the complexities. If you have a new or emerging industry or a new or emerging technology, they have to classify into whatever class lives they fit, and that is an outgrowth of the outdated system.

I think Dr. Neubig mentioned telecommunications as an example. When the class lives were first set up, there was no such thing as wireless telecommunications, so the wireless systems and all the

underlying assets for wireless have had to fit into the various class lives. Those class lives generally are 10 to 16 years.

Class lives were developed when telecommunications was a regulated business. There was no turnover, there was no competition, so the old class lives do not reflect economic depreciation.

Outside of that, probably the greatest record-keeping or complexity burden is with respect to the AMT. Under the AMT, one must calculate depreciation a second or third time. In addition, one must calculate depreciation on an asset-by-asset basis, as opposed to trying to create a mass asset account where all your assets are treated as one, and to which one depreciation rate applies.

Senator SMITH. Do any of the others have comments on AMT as it overlies this issue of depreciation?

Mr. ANDERSON. Mr. Chairman, I just might add that the technology community typically views its employees as its best assets. And Senator Kerry, I think, is familiar with some of the unintended consequences, when there are stock options, at best, as to what happens to an employees' tax liability that may get caught up under the AMT, so, clearly, there is some interest in reforming or eliminating the personal AMT.

But the corporate AMT is also an inhibitor of growth. If we could try to give some boost to investing in capital assets in an extremely competitive international economy that continues to be more so each and every day, then I think you are on the right track.

This may, as mundane as it might be to most people back home, certainly have an impact on where dollars are invested, how rapidly they are invested, and what kind of jobs resulted from that. So, I think there would be a tremendous amount of interest in pursuing some implementable reform in that regard.

Senator SMITH. I just have one other question, and then I will turn it over to Senator Kerry. That is, are any of you familiar with our foreign competitors and their tax laws on depreciation that represent good models or give them competitive advantages relative to us?

Dr. GRAVELLE. The last I knew, at least the German and Japanese depreciation systems were actually less generous than ours. Britain, for a time, had expensing, but I think they abandoned that at some point.

Senator SMITH. And went back to depreciation?

Dr. GRAVELLE. Went back to depreciation, because they had such technical problems with it.

Senator SMITH. I see.

Dr. GRAVELLE. So everybody is struggling with the same problem of trying to deal with lots of different differentiated assets and still give taxpayers simple enough rules, as Ken puts it, so they do not change constantly. So, they are all struggling.

The Germans and the Japanese originally inherited their depreciation system from ours, which was from the 1950s. I think, for a long time, they did not change it. They might have since then. But I can look into that issue.

Senator SMITH. I would be interested to know. I am obviously anxious to see our businesses be competitive in this global economy.

Senator SMITH. Any other comments?

[No response.]

Senator SMITH. If not, then Senator Kerry?

Senator KERRY. Thank you, Mr. Chairman.

Let me try to see if I can clarify a few things, at least in my own mind. There is a complete consensus here, on this side of the table and that side, that the system is broken.

There is a complete consensus that we need to change the current class designation, life, and the recovery period. What there is not a consensus on—yet, anyway, I think—is who ought to do it, and how it gets done, and what specifically is done.

Mr. Anderson, you mentioned, we have to update the categories. We have to do partial expensing and the 50-percent depreciation in the first year, and so forth. More flexibility to Treasury, which is different from what Dr. Neubig said, which was to basically give all the flexibility to Treasury. Am I correct?

Dr. NEUBIG. Not completely. But a lot of flexibility to Treasury.

Senator KERRY. Where do you draw the line?

Dr. NEUBIG. The way that the advanced depreciation agreement would be set up, it is voluntary. So you would probably see taxpayers and industries only coming in if it was going to shorten the depreciation lives.

Senator KERRY. Well, let me sort of get to the threshold question. Should we be setting about to establish new, specific categories or do we establish general categories? In other words, do we give a class life to a specific area? For instance, I did.

In the last two Congresses, I introduced small business legislation that specifically shortened from 5 years to 3 years the life on computers. So, we specifically took a category, we gave it a life, and said, here it is. Now, that is Congressional designation. Are you for that or against that?

Dr. NEUBIG. I think the legislature should always be able to change policy. I also think that it makes sense to have some administrative flexibility that the Service and Treasury have for all other types of tax issues.

They have flexibility in terms of dealing with valuation issues, with transfer pricing issues, with capitalization issues, and to just wall off class life depreciation does not make sense to me.

Senator KERRY. Well, the truth is, there is a public policy component to class life designation. I would be very wary about giving up to the Treasury Department, no matter whose it is, that ability to fully out-flex the Congress, so to speak. Because the way the system gets gamed, you wind up with a whole bunch of people who start setting up specialized ways of sheltering income or playing games.

How do you prevent that and still have an adequate certitude and rapidity of reaction to the marketplace? I mean, you cannot come back to Congress and change this every 6 months when a raging, new technology comes out that is going to hugely change capitalization and expectations.

So, is there a balance? I am trying to figure out, sort of, what is the best balance? My instinct is, we have to set basic classes. We have to sort of establish what categories, anyway, may fit in and perhaps even establish some guidelines and structure so that Treasury has the flexibility, but without the ability to game the

system. Does that make sense? I see your head nodding, Mr. Anderson.

Mr. ANDERSON. Yes. Actually, you are recognizing the conundrum. I find it difficult to suggest that you should have the responsibility of identifying the classes, unless you want to spend full time overseeing the constantly evolving changes and introduce legislation every few months.

On the other hand, anybody could have reasonable concern about whose Treasury Department it is that has all the flexibility to make changes at will without your involvement.

Senator KERRY. Incidentally, that can wind up being as much of a roulette audit system as anything else. Correct?

Mr. ANDERSON. Correct.

Dr. GRAVELLE. Historically, the Treasury had this administrative authority. I mean, a lot of the depreciation innovations that came about in history were the Treasury. The 1962 guidelines. Some of them were legislative, some of them were regulatory.

Your point is, if you want fine tuning, for Treasury to do fine tuning, then you might want to say, first we have to figure out what our objective is that they are going to match, and perhaps have some kind of oversight authority.

Of course, none of that would preclude explicit legislative changes to enact policy. But as you can see from the effective tax rates that I presented in my study, if you had a policy of making the effective tax rate the statutory rate, you would be lengthening a lot of equipment lives.

But you may not want to do that, so you may just want to have a rule that says, all right, group like assets together. So, do not let a short-lived asset be in a long-lived category when there are other, similar assets. I guess that is one kind of guideline.

But I think it is true, there is a policy issue here. If Treasury is going to be given authority, it has to be within whatever policy you are trying to pursue, whether it is neutrality or some kind of subsidy for certain assets.

Senator KERRY. What are the products and/or categories that most rapidly come to your mind, in some order of priority, that you think are most out of sync right now?

Mr. MIKRUT. I think most of the high-tech assets that have developed since Treasury has done their last studies, so computers, telecommunications, and other applications of computers in various industries.

Mr. ANDERSON. I would agree with that.

Senator KERRY. Do you have a recommendation for what the life ought to be?

Mr. MIKRUT. Not being an economist, no. But I think, to go back to your prior question, a process ought to be set up. I think Treasury has demonstrated the ability to do it.

As Dr. Gravelle has said, they have been the traditional arbiters of determining depreciation allowances. I also believe the Congress should have a significant role in this. Congress, should they give Treasury the authority to change lives, should direct which assets they should review first and give priority to those studies.

I think there should be some sort of Congressional oversight of the Treasury recommendations before they go into effect. That way

you would have the give and take that you traditionally have in these sorts of broad policy matters.

Dr. GRAVELLE. Actually, if you would, let me talk about an asset that is the other way, that has probably been given too short a life—that is from the NIPA depreciation that is in my testimony—which is commercial aircraft. Commercial aircraft are in the short-life class, but they are very long-lived assets.

Senator KERRY. That is what I mean about pushing the system.

Dr. GRAVELLE. Right. Well, at the time that these were assigned, they were mapped into the old ADR guideline lives. So, wherever they were, that is where they fell in the new system.

Senator KERRY. That was a specific economic decision, too, though, to try to increase aircraft sales and make it particularly attractive to people to be able to purchase. The accelerated depreciation on certain aircraft has, indeed, accelerated the sales of those aircraft very significantly.

Dr. GRAVELLE. But if there is a place where the evidence suggests that they are favored, all you have to do is look in the column in Table 3 of my testimony, and if the tax rate is low there, then that suggests they are being——

Senator KERRY. Is there an economic purpose test that we ought to apply also, just as I described? You have an industry, you are trying to help it be competitive. You are prepared to give it an accelerated depreciation because it makes it particularly competitive, even though it does not adequately reflect the life?

Dr. GRAVELLE. No. The economic analysis says, unless you can find some market failure or market imperfection—we call them failures; it is not really a failure, they just do not work well—you should be neutral. But, of course, being neutral, the tax system is kind of hard to come by because we do have some assets, like unoccupied housing, that are very favored, no matter what else we do. So, you are always in a second-best world about what you want to do.

Senator KERRY. My last question, because the light is on: if we were to, say, embrace the broad range of technology assets that we currently know we have—wireless, computers and so forth, hardware, et cetera—is there any guesstimate or estimate as to what the lost revenue would be as a consequence of that? What are we dealing with? What are we looking at budget-wise, fiscally?

Dr. GRAVELLE. Going from 5 years to 3 years, or something like that?

Senator KERRY. Yes, or even less.

Dr. GRAVELLE. That is a lot of money in the short run. I do not know.

Dr. NEUBIG. I have not seen estimates of it. I guess that raises the issue that, where you have assets that have too long of a life, what everybody agrees is too long of a life, and you have Congress enact legislation, it will be scored as losing revenue. That is a big hurdle to overcome.

The conventions of budget scoring would be, if IRS changes the regulation, yes, it would reduce cash flow to the Treasury, but it would not be scored for legislation.

Senator KERRY. Not be scored.

Dr. NEUBIG. So, one of the impediments to trying to correct these technical and factual issues through legislation is, you have this extra hurdle.

Senator KERRY. The scoring beast to get over.

Senator SMITH. If I may.

Senator KERRY. Go ahead. Yes.

Senator SMITH. If it is a short-term hit that CBO has to score, it all washes out in the end. I mean, it is not ultimately really costing anything.

Dr. GRAVELLE. Going from 5 years to 3 years in a 10-year budget horizon will be negligible, I would think.

Dr. NEUBIG. I think it would have a significant revenue effect, because, even though it does switch, as long as the assets are growing, there will be a positive revenue loss associated with it. Clearly, there is a benefit to having 3 years compared to 5 years. It is time value of money, and that shows up in significant differences in effective tax rates.

Senator SMITH. It also shows up in significant additional economic activity.

Dr. GRAVELLE. A bunch of numbers are not discounted, though, so you are not going to pick up budget numbers that discount that.

Senator KERRY. Right. We never get the plus side, we only get the down side.

Dr. GRAVELLE. Right. I mean, I could look into that for you as well, if you are interested, about what, say, switching that particular class from 5 to 3 years might look like. The Joint Tax Committee, of course, is the official revenue estimator.

Senator SMITH. Well, the conundrum that Senator Kerry and Mr. Anderson spoke of, really, is that we have to find some kind of balance between the legislative and executive branch that gives some authority to us, but also the ability, budgetary ability, to make these adjustments in a way that expands the economy without hampering our ability to proceed.

Mr. SIMONSON. Unfortunately, there have been cases where Congress has turned to depreciable lives as a way to raise revenue. Twice, the depreciation period for rental housing and for non-residence structures was lengthened significantly, and that caused a lot of collateral damage, shall we say, for the construction industry, which was geared up to expect a certain level of investment, and then the props were knocked out from under them.

Senator KERRY. Didn't that happen in the 1986 bill?

Mr. SIMONSON. And subsequent bills, yes.

Dr. GRAVELLE. 1993 was when they increased the depreciation period from 31.5 to 39 years for non-residential structures, and I think it was to pay for loosening of passive loss.

Mr. SIMONSON. Correct.

Dr. GRAVELLE. It was during that period when you had very tight budget problems. Not to say that we do not have them now.

Mr. SIMONSON. So, I think to the extent that Congress is willing to let Treasury make adjustments—and I think Tom Neubig's suggestion to have this negotiation or advanced-depreciation agreement process in place, and also something like the IRS's current industry resolution program that allows addressing relatively small, manageable, well-bounded problems administratively—I think that

you can cure some injustices without opening the floodgates to huge revenue losses or wholesale disruptions of the tax system.

Dr. GRAVELLE. It is an asymmetric approach, though.

Mr. SIMONSON. Yes.

Dr. GRAVELLE. You are only going to do it if you want a shorter life. So if your objective is to implement a certain kind of policy, in terms of what kind of effective tax rates you want, what kinds of assets, or who you want to encourage, you have to make something explicit.

Senator KERRY. Picking up on Senator Smith's question earlier, I was not sure if it was the same question or not, but in Europe, in the emerging economies, how are they treating it? Do they have depreciation?

Dr. GRAVELLE. If they have a corporate tax, I am sure they do.

Senator KERRY. On the same balance, though?

Senator SMITH. And how about Estonia, Ireland, and some of these countries that are going to flat rates and things like that?

Dr. NEUBIG. My understanding is that they all have depreciation. Again, the devil is in the details. A number of them have different recovery periods. I have seen some studies that contrast the U.S. versus other countries' treatment of equipment, and there is disparity.

Senator KERRY. Could I suggest to the staff that I think it is going to be impossible for us to do this in an intelligent way, that is sensitive to our economic and competitive structure, without doing a thorough analysis and seeing what the competition is doing abroad.

Mr. ANDERSON. I agree.

Senator SMITH. It would be easy enough to find out, certainly from technology firms, many of which are in Massachusetts, that are thriving in places like Ireland and elsewhere around the world that can capture that information for you, Senator.

Senator KERRY. We need to just make a call.

Senator SMITH. Do you have any other questions, John?

Senator KERRY. No.

Dr. GRAVELLE. There are past studies that I could find. The problem is getting up-to-date information on other countries. But we can certainly look into that for you.

Senator SMITH. That would be very helpful. To do this right, we have to do it in the context of the world in which we live, and that is the globalized world. So, notwithstanding our budget strictures, we have to also keep our eye on what our competitors are doing.

Dr. GRAVELLE. Maybe we could get Ernst & Young's best resources to help us on that.

Senator SMITH. Yes. Get into Ernst & Young's vast treasury, I am sure. [Laughter.]

Ladies and gentlemen, this, to me, has been an interesting hearing, and very helpful. You have added measurably to our Senate record and our understanding, and we recognize the need to do something. It is certainly, I think, a very bipartisan recognition, and we will proceed to that end. You have been helpful, and we are thankful.

We are adjourned.

[Whereupon, at 3:43 p.m., the hearing was concluded.]

APPENDIX

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

Long-Term Growth and Debt Reduction Subcommittee
U.S. Senate Committee on Finance
"Updating Depreciable Lives: Is there Salvage Value in the Current System?"

Testimony of Christopher R. Anderson, President
Massachusetts High Technology Council, Inc.
July 21, 2005

Thank you, Senator Smith for the opportunity to address the Long-Term Growth and Debt Reduction Subcommittee of the Senate Committee on Finance on the issue of Depreciable Lives and the current structure's impact on technology employers. I would like to thank Chairman Grassley and Senator Kerry for this opportunity as well to testify on an issue of importance to technology employers from across the nation.

The Massachusetts High Technology Council was formed in 1977 by technology CEOs with the goal of making Massachusetts the most competitive place in which to create, operate, and expand high tech businesses. That remains our mission today. Council members employ hundreds of thousands of skilled workers in all of Massachusetts's key technology sectors, including computer hardware, life sciences, software, medical products, semiconductor, defense technology and telecommunications. Our members include the executive leadership of tech employers such as EMC, Boston Scientific, Analog Devices, Genzyme, and MITRE.

As many of you know, Massachusetts historically has had a reputation for being a high tax state, even earning the derisive nickname of Taxachusetts. But over the past couple of decades Massachusetts leaders have realized that a high tech state like ours needs to maintain a stable, predictable and competitive business cost climate. Because of that attitude shift, we have shed that Taxachusetts moniker for the most part. State leaders recognized that a technology-rich state like Massachusetts needs a tax structure that drives innovation, investment and entrepreneurship.

In recent years Massachusetts passed a competitive Research & Development Tax Credit and made permanent the three percent Investment Tax Credit that rewards companies for making capital expenditures. As a result, as Senator Kerry has cited in testimony on July 6 before the Base Realignment and Closure Commission hearing in Boston, Massachusetts is the top technology state according to the annual rankings by the Milken

Institute. The lesson from Massachusetts is that thoughtful and strategic tax policy can have a positive impact on economic competitiveness.

Despite the ever-evolving nature of technology and growing global reach of innovation firms, investment in capital assets and the cost recovery for those assets are critical to the competitiveness of US employers. According to an April 2005 study led by PricewaterhouseCoopers for the President's Advisory Panel on Federal Tax Reform, in 2002 gross corporate depreciable and amortizable assets were valued at $10 trillion. The depreciation and amortization deductions for the same year totaled $825 billion. By comparison corporate incomes, with all deductions besides depreciation and amortization, came in at $1.4 trillion. This shows that even in an innovation-based economy, capital investment is still king.

As the Committee contemplates the future structure of depreciation, it should consider that while technology, factories and jobs are becoming more and more portable, technology and science oriented research companies strongly want to invest in operations close to their home base. Congress, through this committee, has a unique opportunity to create a system that encourages capital investment and creates jobs for the long term by modernizing the depreciation structure.

I wanted to pass along the story of a midsize precision equipment manufacturer outside of Boston that had a very negative experience due to the current depreciation structure. This company had the type of opportunity that every ambitious tech firm yearns for: the chance to be a sole source global supplier for Intel. This high tech firm of about 200 employees had the expertise and workforce to do the job but needed to make significant capital investments in a short period of time to meet the needs of Intel. The company invested $10 million in real estate and capital equipment to accommodate the new project – a significant capital outlay for a firm its size.

They were able to successfully meet Intel's goals and from a business and technological standpoint the venture was a success, but from a tax standpoint it became a nightmare that lasted for years. The contract with Intel had been for a finite period of time, which the company knew, but in the end had millions of dollars in equipment that they couldn't put back to use right away. They also couldn't expense the assets because of the depreciation schedule unless they were to sell them off, which would prevent reuse. The depreciation schedule did not recognize that some capital investments were destined to be short term or would likely have "unpredictable lives."

So what was at first glance an ideal opportunity for a small precision manufacturer soon became a burden on an otherwise successful company. They had cash flow problems for a few years and as a result bumped up against issues concerning the Alternative Minimum Tax. They were forced to leverage the company's assets, which made for some nervous moments for executives and employees alike. They have since bounced back, but as the President of this Mass. technology firm told me this week: "We were

forced to take our focus away from operational activities and move it to financial activities."

There are many stories like this, many with more damaging outcomes, from across Massachusetts and the nation. It seems that a system which may have made sense decades ago is ripe for an overhaul to reflect the speed and flexible nature of the new economy.

Beyond the economic effects on the economy, the depreciable lives schedule has an unintended effect of suppressing investment in technological areas that would have a direct impact on improving society. One specific example is in the area of renewable energy, another technology cluster emerging in Massachusetts. Investment in this area is in the best interests of the United States by easing its dependence on foreign oil and helping the environment. However, many clean energy solutions are very costly and require significant private sector capital investment. They also depreciate at rates faster than traditional energy capital investments. In this case, the depreciation structure is chilling investment in renewables, which delays important discoveries and enhancements that would benefit our environment, economy and national security.

Mass. High Tech Council would urge you to consider the following recommendations in any efforts to reform the depreciation structure:

- Update the seven depreciation categories to better reflect the useful life of technology equipment like computers, which experts have suggested depreciate twice as fast as traditional assets;
- Consider partial expensing or reducing the statutory tax rate to promote more efficient allocation of capital;
- Allow a 50 percent tax depreciation deduction in the first year of service and the balance over the standard life;
- Grant the Treasury Department flexibility in categorizing assets based on technological capabilities; and
- Reinstate the bonus depreciation that ended at the end of calendar year 2004.

The Massachusetts High Technology Council looks forward to working with the Committee to craft a plan to create a depreciation system that fits with the 21st Century economy.

Thank you.

Questions for the Record From Mr. Christopher Anderson
July 21, 2005

Question from Committee Democrats

In your testimony, you refer to some emerging technology in Massachusetts related to renewable energy. But you also state that the current depreciation rules are holding back advancements in this important area. Can you explain in greater detail the problem with the tax treatment of these emerging technologies?

Anderson response:

Clean and renewable energy technologies are key to the United States' economic future as it reduces our dependency on foreign sources of energy and provides new avenues for products developed at American universities and in small businesses from coast-to-coast. Massachusetts in particular has tremendous potential in developing fuel cell, photovoltaic, wind and ocean power-generation technologies. Developing these new technology requires significant research and development investment, and many of the applications remain expensive and companies find it hard to break into the marketplace.

Over the years, both the federal government and various states have changed the tax code to encourage both the development of new technologies and the citing of related facilities. Massachusetts went as far as to create the Renewal Energy Trust Fund, a $100 million plus public fund to support renewable energy development in New England. These state and federal initiatives speak to both the high capital investment costs of renewables and the importance to our future.

In 1981, Congress passed the Economic Recovery Tax Act (ERTA) which included a provision to accelerate the depreciation of capital for most renewable energy equipment. Since there is precedent for carving out an accelerated schedule for energy technology, perhaps it might be appropriate to review the specific tax depreciation status of 21st Century renewable energy technologies.

Senator Max Baucus
Statement on Depreciation Hearing
July 21, 2005
Subcommittee on Long-Term Growth and Debt Reduction

Mr. Chairman, and Senator Kerry, thank you so much for calling this hearing today to discuss a complex but important issue. Since 1988, we have frozen in time Treasury's authority to revise class lives for assets. While technology has marched forward, we are using a system devised at a time when fax machines were still considered too expensive to be standard business equipment. In 1988, only one in five adults used the Internet and only 14% of households had computers. And yet since then, little research or work has been done to update our asset classes.

We will hear today from a variety of witnesses that the system needs to be reinvigorated. Businesses are often unsure of how to depreciate assets which did not exist in 1988 or have been substantially improved since then. One of the hot movies of 1988 was "Die Hard;" the original, that is. "Die Hard" could also be an apt title for this two-decade old classification system.

We will hear today from our witnesses that a flexible and up-to-date system for cost recovery is greatly needed. I look forward to working with you, Mr. Chairman and Senator Kerry, on legislation to get Treasury back into the process of analyzing and classifying assets for cost recovery. It is time for us to put away those acid-washed jeans and Depeche Mode albums and bring out our blackberry phones and iPods. It is time for American business to have a 21st century cost recovery system.

Statement of U.S. Senator Chuck Grassley
United States Senate Subcommittee on Long-Term Growth and Debt Reduction of the Senate Committee on Finance
"Updating Depreciable Lives: Is There Salvage Value in the Current System?"
July 21, 2005

Mr. Chairman and Senator Kerry, thank you for calling this hearing today to examine the state of our nation's cost recovery system. It would be nice if there was an easy answer to the question of how best to improve our current depreciation system. It's a difficult issue and one that we have considered for some time. Today's hearing will be helpful as you have solicited the input of several witnesses who have considerable background and expertise in this arcane area of the law.

The current depreciation system was built in large part on accounting principles that attempt to mirror economic reality. At times Congress has deviated from that, for fiscal policy reasons or political reasons, but our current system, in large part, attempts to provide economically-realistic asset recovery lives. The principal problem that we have is that our system has not been adequately updated since Congress revoked Treasury's rule-making responsibility in the area in 1988. No matter how well-intentioned, the responsibility for assigning class lives to an ever-growing and evolving population of assets is a tremendous challenge. One could argue that Congress has not managed this challenge well. It is difficult for the legislative branch of government to conduct the high volume of analyses required to continuously update our tax cost recovery system. Seventeen years of that approach has demonstrated the need for a more flexible system. However, history has also shown that we should have congressional involvement, even if our input is not warranted at every step.

Our current tax depreciation system is also extraordinarily complex, and we would do well to simplify that system as part of any fundamental change. Simplification and updating of class lives would go far in reducing the significant number of ambiguities and controversies that arise over the assignment of class lives. Finally, as part of any review of depreciation, we should consider the appropriateness of requiring a different depreciation method for taxpayers subject to the corporate AMT.

I look forward to hearing recommendations from our witnesses on how to amend the current system and provide simplification and updated guidance to emerging industries and new technologies. I also look forward to learning more about the views of our witnesses on the role that depreciation should play in providing fiscal stimulus or encouraging economic growth for particular industries or the U.S. economy at large.

Statement of Jane G. Gravelle
Senior Specialist in Economic Policy
Congressional Research Service

Before

The Committee on Finance
Subcommittee on Long Term Growth and Debt Reduction
United States Senate

July 21, 2005

on
Updating Depreciable Lives: Is There Salvage Value in the Current System?

Mr. Chairman and Members of the Committee, I am Jane G. 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 the issues surrounding tax depreciation policy. Although I discuss options and approaches to revision, please note that the Congressional Research Service takes no position on legislative proposals.

My discussion includes:

- How depreciation policy design affects economic efficiency.
- The development and current status of depreciation policy.
- Rigidity of the current system due to constraints on classification and lack of flexibility.
- Arguments for faster depreciation of equipment or "high tech" assets.
- Potential implications of these issues for legislative options.

Depreciation and Economic Efficiency

One of the objectives of tax depreciation policy is to prescribe rules that lead to economic efficiency, which maximizes output and welfare in the economy. If there are no reasons to favor a particular type of investment, these rules should provide equal effective tax rates across assets, so that assets are allocated in the same fashion with taxes as without taxes.

Under an income tax system, this objective means matching tax depreciation to economic depreciation (or more specifically, matching the present value of tax depreciation to the present value of economic depreciation) so that assets of different durabilities are treated equally.[1] If investment subsidies are provided they should be provided in a form that reduces the effective tax rate for each asset type by the same proportion. Investment subsidies could take the form of accelerated depreciation or investment credits. Aside from explicit subsidies provided, the value of tax depreciation can be reduced as inflation increases nominal interest rates and causes future tax deductions to be more heavily discounted. The effect of inflation on effective tax rates is more pronounced for shorter lived assets where depreciation values are more important.

As the following discussion indicates, conventional estimates of tax burdens suggest there is some favorable treatment of certain types of assets in the current system, although the depreciation rules are more even-handed now than they have frequently been in the past. Some of these differentials arise from policy choices, and others reflect certain rigidities in the present set of tax depreciation rules due to a limited number of categories and lack of administrative flexibility.

One can depart from this rule of neutrality and achieve economic efficiency if there is a market imperfection that causes under-investment in certain types of assets. Arguments, for example, have been made that assets that embody high technology should be encouraged, but this argument is not based on a market imperfection, and economic theory does not support favorable treatment of assets simply because they embody technological advance.

Development and Current Status of Depreciation

The effect of depreciation rules can be shown through construction of effective tax rates which show what fraction of the return for a new investment is paid as a tax. When the present value of tax and economic depreciation are equal, the effective rate is equal to the statutory rate; a rate above or below the statutory rate indicates tax depreciation more or less generous than economic depreciation. These tax rates assume equity finance and consider the tax burden at the level of the firm. (Debt financed assets generally have negative tax rates due to the deduction of interest, when tax depreciation is more generous than economic depreciation.)

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[1] Note, however, that even with tax and economic depreciation equated, which eliminates differentials across business assets of different durabilities, there are other tax differentials in the system, including favorable treatment of owner-occupied housing, and differentials between business sectors (corporate and non-corporate) and types of finance (debt finance is favored).

Before 1954, shorter lived assets (equipment) were taxed more heavily than buildings, but during the period 1962-1985, investment subsidies for equipment reversed that relationship.[2] In 1981, when equipment and structures respectively were largely assigned to a single class, all tax burdens were lowered substantially and equipment investment was actually subject (prospectively) to negative tax rates.

The Tax Reform Act of 1986 produced a more neutral system, although tax rates on structures were still, on average, slightly higher than tax rates on equipment. A decision was made in 1986 not to index the capital income tax for inflation, and therefore depreciation rates were accelerated relative to economic depreciation, but those faster rates roughly offset the effects of inflation. In addition, the 1986 changes still classified assets in a very few categories, so that there was some variation across equipment as well.

The gap between tax rates on structures and equipment subsequently increased, reflecting both legislative changes and a fall in inflation rates. The 1993 tax legislation increased the corporate tax rate by a percentage point, a neutral change, but also increased the tax life of nonresidential structures from 31.5 years to 39 years. These higher overall tax rates were offset by the effects of a decline in the inflation rate, but that decline benefitted equipment relative to structures.

Tables 1 and 2 show the tax rates for equipment and structures, both disaggregated by type, and with equipment aggregated into an average, for 1986 law assuming 5% inflation, for 1993 (current) law assuming 4% inflation, and for 1993 (current) law with lower (2%) inflation).[3] These tables use estimates by Hulten and Wykoff,[4] which were the basic economic depreciation rates that were available during consideration of the Tax Reform Act. Assets in **table 1** are arrayed in order of durability, with the shortest-lived assets at the top. These tables show that some variation remains in equipment tax rates, but most equipment is taxed at rates below the statutory corporate rate of 35%.

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[2] Historical tax rates are presented in Jane G. Gravelle, "Whither Tax Depreciation?" *National Tax Journal*, Vol. 54, Sept., 2001, p. 514.

[3] Details on the construction of these tax rates can be found in Jane G. Gravelle, *The Economic Effects of Taxing Capital Income*, Cambridge, MIT Press, 1994.

[4] Charles Hulten and Frank C. Wykoff. "The Estimation of Economic Depreciation using Vintage Asset Prices: An Application of the Box-Cox Power Transformation," *Journal of Econometrics*, Vol. 5, April, 1981, pp. 367-396.

Table 1: Effective Tax Rates, Tax Reform Act of 1986 and After (by Law, Inflation Rate)

Asset Type	1986 Law, 5%	1993 Law, 5%	1993, 2%
Autos	41	42	35
Office/Computing Equipment	37	38	31
Trucks/Buses/Trailers	35	36	30
Aircraft	35	36	30
Construction Machinery	29	30	24
Mining/Oilfield Equipment	34	35	29
Service Industry Equipment	34	35	29
Tractors	32	33	27
Instruments	33	34	29
Other Equipment	32	33	27
General Industrial Equipment	30	31	27
Metalworking Machinery	29	29	24
Electric Transmission Equipment	38	39	36
Communications Equipment	23	24	19
Other Electrical Equipment	29	30	24
Furniture and Fixtures	28	29	23
Special Industrial Equipment	26	27	21
Agricultural Equipment	26	27	21
Fabricated Metal	34	35	29
Engines and Turbines	40	42	36
Ships and Boats	28	29	24
Railroad Equipment	22	23	18
Mining Structures	12	13	12
Other Structures	41	43	41
Industrial Structures	38	40	36
Public Utility Structures	30	31	30
Commercial Structures	35	37	35
Farm Structures	29	30	29

Source: See text.

Table 2. Effective Tax Rates, by Asset Type (Effects of Law Changes and Inflation)

Year	Equipment	Factory	Office Building	Apartment
1986	32	38	35	34
1993 (5% inflation)	33	41	38	35
1993 (2% inflation)	27	38	35	31

Note: Apartment buildings are assumed to have the same economic depreciation rate as office buildings (2.47 % using a geometric rate). Factory buildings are assumed to have a 3.61 % geometric depreciation rate. The average depreciation rate (weighted by capital stock shares) for equipment is 15%.

Table 2 compares rates for equipment as a whole with specific buildings, and includes residential structures as well. These rates suggest that structures are taxed more heavily than equipment, an argument also made by the Treasury Department.[5] Overall, tax rates on equipment (the top 22 categories in **table 1**) fell from 32% in 1986 to 27%. Residential structures were taxed at slightly lower rates than nonresidential structures, assuming similar depreciation rates, because their slightly shorter (27.5 year) lives were not increased. The tax rate on factory buildings is estimated to be slightly higher than the rate on apartment buildings because factory buildings are estimated to depreciate at a slightly faster rate, but the differences are small.

Some of these economic depreciation rates have been re-estimated and this issue may be important for assets that are changing substantially over time (such as office computing equipment). I defer a discussion of these updated estimates to the section on depreciation of "high tech" equipment.

Rigidities in the Current System

The depreciation system has not been changed since 1993, more than a decade ago, and that change involved only a lengthening of lives for structures largely as a revenue offset measure. The rigidity of the system arises from two interrelated causes: the decision to use only a limited number of classes, and the removal of the authority of the Treasury to assign class lives in 1988. Having a limited number of classes means that, even if assets can be properly assigned to their classes, there will be differences in effective tax rates. As an illustration, consider the first, second, third, and fifth assets in **Table 1**, which are assigned to the five year class. The effective tax rates range from 35% to 24%. The majority of assets fall into the seven year classes which results in a tax rate as high as 29% for mining equipment, but as low as 21% for agricultural equipment. More class lives would permit a

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[5] U.S. Department of Treasury, *Report to the Congress on Depreciation Recovery Periods and Methods*. July 2000.

more uniform set of tax rates. Nor is it likely that adding more classes would add much in the way of complication, since the challenge is how to assign assets, rather than how to calculate depreciation (which is relatively straightforward). At least one reason for retaining the limited number of classes in 1986 might have been a desire not to depart too dramatically from the existing 10-5-3 set of classes for equipment, by simply adding three more categories (7, 15, 20). But there is no obvious reason for not refining the system by adding more classes.

A second problem is the loss of flexibility in the system since the Treasury, with legislation passed in 1988, no longer has the authority to reclassify assets. That problem, and others, including lack of research on depreciable lives, led Neubig and Rhody[6] to argue that the current system is flawed, especially in creating high tax rates for technologically advanced equipment. In particular, they suggest five types of misclassification problems: new assets may be put incorrectly into existing classes, they may be assigned the default class of seven years, they may have changed in a technological sense, they may be assigned incorrect lives because they are classified by industry, and they may be assigned different classes for different taxpayers.

Arguments for More Generous Treatment of Equipment or "High Tech" Assets

A persistent theme in the development of the tax system in the post war period, to which the 1986 Tax Reform Act was an exception, was the tendency to propose and adopt investment subsidies that largely targeted equipment. An example was the investment tax credit. Such proposals were sometimes made for short term stimulus reasons (as were the recent provisions allowing bonus depreciation). But some equipment investment subsidies were enacted on a permanent basis. Arguments and proposals for more generous depreciation of equipment in general, and for "high tech" equipment in particular, are made currently, even though the effective tax rate analysis indicates that equipment is already favored relative to structures.

There are two different types of arguments made to support more generous treatment for these types of assets. The first is an argument that these assets are more "productive" or embody more recent technology, and we need to expand investment of this type to achieve economic growth. But this argument does not stand up to economic reasoning: if assets are more productive, investments will be made in them by private markets to the point (assuming tax neutrality) that their return is equated to those of other investments. Growth models that employ vintages of capital with different embodied technology show the same sort of steady state growth characteristics as other growth models and provide no rationale for favoring assets because they embody more technology.

The other argument is potentially more legitimate: new, "high tech" assets have higher depreciation rates than those depicted in the effective tax rate measures or that guided the setting of depreciation rules in the 1986 Tax Reform Act. Some of these proposals would allow expensing of high tech assets, such as computers, on the grounds that computers must be replaced very quickly.

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[6] Thomas S. Neubig and Stephen E. Rhody. " 21st Century Distortions from 1950s Depreciation Class Lives." *Tax Notes*, May 29, 2000, pp. 1267-1273.

There are several reasons that these arguments should be greeted with some skepticism. There is on-going research into updated depreciation rates, but in general these studies have not found dramatic differentials between the economic depreciation rates used to formulate the 1986 rules and those that might be appropriate today, even for assets such as computers. Hulten and Wykoff's[7] updated estimates in 1996 showed most rates to be similar, although they did increase the rate for electrical equipment from 0.11 to 0.18; tax rates would rise for these assets (electrical transmission equipment, communications equipment, and other electrical equipment) by about five percentage points. A few other tax rates would rise and fall by about a percentage point, but on the whole the overall effective tax rate was about the same (28% rather than 27%). Oliner's[8] 1996 study of metal working machinery which did account for a later time period, however, found a lower rate of 0.095 for metal working machinery, resulting in a tax rate of 21% for that asset.[9] Fraumeni[10] reports on the economic depreciation rates used in the National Income and Product Accounts (NIPA) which relies heavily on the Hulten and Wykoff numbers, but includes updated estimates where available. The effective tax rates using the original Hulten and Wykoff numbers that were available in 1986 and the NIPA numbers are reported in **Table 3**. Overall these numbers suggest lower effective tax rates, and, in a few cases, some significant changes. Overall, however, effective tax rates for equipment are slightly lower, at 25%, than those based on the original Hulten and Wykoff numbers alone. And while tax rates on office equipment and computers have changed somewhat, the consequences for effective tax rates are minor.

There have been a few updates subsequent to this table, but again, these changes do not dramatically alter the effective tax rate picture, and in some cases lower it. A new study of personal computers indicated a depreciation rate of about 32%, leading to a tax rate of about 34%, or about the statutory rate.[11] Updated NIPA estimates further lowered the depreciation rate for aircraft to 6.6% which would produce an effective tax rate of about 17% and lowered the depreciation rate for light trucks to 19.25%, producing a tax rate of about 22%.

Moreover, to the extent this concern about "high tech" equipment is directed towards short-lived assets, there is an automatic protection from being overtaxed, because the remaining value of the asset (net of salvage value) can be deducted on disposition. For example, suppose an asset lasts for two years and then disappears in value entirely. Simply calculating the effective tax rate using the full five- or seven-year write-off would result in

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[7] Charles Hulten and Frank C. Wykoff, "Issues in the Measurement of Economic Depreciation." *Economic Inquiry*, Vol. 34, Jan., 1996, pp. 10-77.

[8] Stephen D. Oliner, "New Evidence on the Retirement and Depreciation of Machine Tools," *Economic Inquiry*, Vol. 34, Jan.,1996, pp. 57-77.

[9] Hulten and Wykoff's alternative estimates for non-residential structures were about the same as before, 3% for a 36% tax rate. Similar rates were found for structures by Deloitte and Touche, *Analysis of the Economic and Tax Depreciation of Structures,* Washington, D.C., June 2000.

[10] Barbara Fraumeni, "The Measure of Depreciation in the U.S. National Income and Product Accounts," *Survey of Current Business*, Vol. 77, July, 1997, pp. 7-23.

[11] Mark Doms, Wendy Dunn, Stephen Oliner, and Daniel Sichel, "How Fast do Personal Computers Depreciate? Concepts and New Estimates" *Tax Policy and the Economy,* vol. 18 (2004), pp. 37-79. Estimates in Michael J. Geske, Vaklerie A. Ramey and Matthew D. Shapiro, "Why Do Computers Depreciate?" Working Paper Dec. 23, 2004 are similar but somewhat lower.

an effective tax rate of 47% and 61% respectively. However, with a deduction on discard, the effective tax rate for the five-year life would be 39% and for the seven-year life 43%.

Table 3: Comparison of Effective Tax Rates Using Hulten and Wykoff and NIPA Depreciation

Asset	Economic Depreciation Rates	Alternative Depreciation Rates*	Effective Tax Rates	Updated Effective Tax Rates
Autos	0.3333	0.28	35	31
Office/Computing Equipment	0.2729	0.31*	31	33
Trucks/Buses/Trailers	0.2535	0.1725	30	24
Aircraft	0.1818	0.0825**	30	19
Construction Machinery	0.1720	0.1550	24	22
Mining/Oilfield Equipment	0.1650	0.1500	29	27
Service Industry Equipment	0.1650	0.1650	29	29
Tractors	0.1633	0.1633***	27	27
Instruments	0.1473	0.1350	29	27
Other Equipment	0.1473	0.1473	27	27
General Industrial Equipment	0.1225	0.1072	27	24
Metalworking Machinery	0.1225	0.1225	24	24
Electric Transmission	0.1179	0.05	36	23
Communications Equipment	0.1179	0.15	19	22
Other Electrical Equipment	0.1179	0.1834	24	22
Furniture and Fixtures	0.1100	0.1179	23	24
Special Industrial Equipment	0.1031	0.1031	21	21
Agricultural Equipment	0.0971	0.1179	21	24
Fabricated Metal	0.0917	0.092	29	29
Engines and Turbines	0.0786	****	36	****
Ships and Boats	0.0750	.0611	24	22
Railroad Equipment	0.0660	.0589	18	17

* This is a typical rate. Actual rates range from 0.27-0.35 for mainframes, terminals, storage devices and printers; other office equipment is assigned a 0.31 rate. Personal computers are assigned a lower rate of 0.11 but there is some uncertainty about this rate. Photocopy equipment is assigned a life of 0.18.

** Rate for commercial aircraft and business services. Other aircraft are assigned a rate of 0.11.

*** Rate for construction tractors. The economic depreciation rate for farm tractors is slower and the tax rate would be a little lower.

****Two widely disparate rates are reported in this category, 0.0516 for steam engines and 0.2063 for internal combustion engines. Presumably this category is dominated by the former, and for these assets the rate is 31%.

In addition, the investment distortion that arises from potentially overtaxing a very short lived asset is very small because the rate of return is less important to the economic cost of using these assets.[12]

Note, however, that the analysis above concerns broad categories of assets. The discussion does not mean that there are not specific cases of assets that are misclassified, and that might be placed into a more appropriate class with a more flexible system.

Policy Issues

Compared with the depreciation regime that has existed in the past, the current depreciation system is relatively neutral and is functioning well. The expansion of differentials between structures and equipment is due in part to explicit legislative changes. Differentials across equipment types are inevitable when the number of asset classes is limited, but even in these cases, the differentials are not dramatic.

There are two types of options for change in the current system that might be considered. One is to alter the process, by allowing more administrative flexibility on the part of the Treasury Department in the assignment of an asset to a class, or the reassignment of assets to different classes based on ongoing technological and economic developments. If such a change were made, there may be a need to explicitly direct the Treasury Department to undertake studies of economic depreciation to inform the process. Currently, most research that has been undertaken to study depreciation has been done by academics, and there may be a need to ensure some more systematic study. Neubig and Rhody have suggested that such research be undertaken by industry, with Treasury Department review. This approach is somewhat problematic given that the incentives are to find short useful lives, but may be useful in cases where the only data are proprietary. Another agency of the government with a need for reliable economic depreciation rates is the Bureau of Economic Analysis.

Another option is to make explicit legislative changes. These might include provisions to bring the tax rates on structures and equipment closer together by shortening the life for structures (for example, returning to the pre-1993 depreciable lives, or assigning business structures the shorter lives of residential structures). The tax rates could also be brought closer together by increasing the tax lives for equipment. Legislative changes might also include expansion of the number of classes to reduce the variation across equipment categories. They might also reassign assets, based on new evidence about economic depreciation rates, if regulatory authority to do so is not granted.

More dramatic proposals have included those to expense some or all of equipment assets. Expensing of assets is part of a step toward a consumption tax base, which could achieve neutrality across investments of different durabilities by imposing an effective tax rate of zero. But a narrowly targeted expensing provision will expand the differentials

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[12] One can think of the cost as the rent the firm would pay to use the asset. For a short lived asset, (e.g. rental of a car) most of the rent is to cover the return of the original cost, while for a long lived asset (e.g. an apartment rent) which depreciates very slowly, much more of the cost is the return to the asset, or the interest rate.

between equipment and structures. Moreover, expensing provisions will create overall negative tax rates on assets that are financed by debt, since the deduction for interest eliminates the tax at the firm level with economic depreciation (and produces a negative tax at the firm level when inflation is present, because of the deduction of nominal interest). A true move to a consumption tax would require a series of major changes in the tax code, which could be very disruptive and difficult to implement. In order to avoid negative tax rates, interest should not be deducted at the firm level and should not be included in individual income. Other changes would be necessary if a large revenue loss is to be avoided.[13]

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[13] The least radical and least complex set of changes would lead to a system similar to the flat tax. These changes would include in addition to expensing physical investments and eliminating taxes on interest income and deductions the following: eliminating taxes on dividends and on capital gains on the sale of financial assets, taxing the gain on the sale of physical business assets at full rates, and disallowing deductions for the cost of existing assets, inventory, and basis.

Memorandum August 3, 2005

TO: Senate Finance Committee

FROM: Jane G. Gravelle
Senior Specialist in Economic Policy
Government and Finance Division

SUBJECT: Follow-Up Question from Depreciation Hearing

This memorandum responds to a follow-up question from the hearing on "Updating Depreciable Lives: Is there Salvage Value in the Current System?" July 2, 2005.

Question:

Dr. Neubig has outlined an interesting proposal he calls the "Advanced Depreciation Agreement" whereby Treasury would work closely with industry to negotiate new class lives. From your testimony, I note some concerns with this approach. Do you feel that industry would be loathe to share any harmful information about the true life of their products and therefore the research might be biased? Could the same be said, though, about having the tax collector do all the research who would likely want to see the longest life possible?

What role should Congress have in a revised depreciation system which gives Treasury authority to determine class lives and reassign assets?

Can you describe the reasons why this authority was revoked from Treasury in the past and do some of those same reasons exist today?

Answer:

The "Advanced Depreciation Agreement" proposal would have asymmetric effects: since it would be initiated by industry, only assets where a case could be made for a shorter life would come under study. Such an approach would not necessarily serve economic efficiency because it could magnify existing distortions between assets. Economic efficiency is served when all assets face the same effective tax rate. This effective tax rate could be the statutory rate, if the present value of tax depreciation allowances equals economic depreciation.

Industries have direct incentives to minimize their tax liability and therefore would have incentives to prepare studies and present data in a favorable light. There is no reason to believe, however, that many industries would actually falsify data, and Treasury oversight could act as a check. The more serious problem with this proposal is that only industries who have data to make a case for shorter lives would participate in the program. Over time this change would lose revenue because on average, tax lives would be shorter.[1]

Individual researchers in the Treasury Department who would be involved in studies of depreciation do not have the same types of motives to find longer tax lives, and there is much less reason to be concerned about problems with their analysis. Industry review would also act as a check.

In any case, historically, during the period that the Treasury Department had authority to propose class lives (from 1913-1981), there was no consistent tendency to increase lives. From 1913 to 1934, taxpayers chose their own lives, although the Treasury Department published documents with suggested useful lives (referred to as Bulletin F and eventually covering 5,000 assets). It was actually Congress that became concerned (in 1933) that depreciation deductions were much too large, and given revenue needs, proposed a 25% reduction. The Treasury Secretary proposed instead shifting the burden of proof to the taxpayer, and most taxpayers then followed the Treasury useful lives The IRS also, through regulation, allowed the first accelerated depreciation methods in 1942; prior to that time methods had been restricted to straight-line. (Accelerated methods were included in the statute in 1954.) In 1962 Treasury issued a new set of depreciation lives that included fewer categories of assets and significantly shorter lives. Treasury regulations again proposed shorter lives in 1971 (the asset depreciation range, or ADR) through the mechanism of allowing taxpayers to vary lives by 20% in either direction, effectively shortening tax lives. During all of this period of time, Treasury modified lives in some cases and a facts and circumstances option was always available to the taxpayer.

Since 1981, except for the brief period after the enactment of the 1986 Tax Reform Act and before the enactment of the 1988 technical corrections legislation, the depreciation system has been fixed by statute.

If Treasury is to have authority to determine class lives and assign assets, there are several ways in which this change might be made. One approach is to return to the system enacted in 1986. This system did not freely allow the Treasury to set class lives. The statute set up six equipment classes (3, 5, 7, 10, 15, and 20) and assets were assigned to those classes based on their midpoint lives in the ADR system. Virtually all assets would fall into either the 5-year class (assets with midpoints of more than four but less than ten years) or the 7- year class (assets with midpoints of at least 10 but less than 16 years). Treasury could

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[1] Note also that the value of depreciation depends not only on the life but the method so that even if a shorter life could be demonstrated, depreciation might still be overstated because the method is accelerated. To properly reflect the decline in value, both the life and the method should be considered. An asset that exhibits "one hoss shay" depreciation (a constant level of output until being discarded) should actually have depreciation that is slower than straight line and thus much slower than declining balance methods. The value of depreciation is also affected by the inflation rate, which means some degree of acceleration is needed to offset it if the objective is to achieve the present value equivalent of economic depreciation. (Note, however, that overall debt-financed investments benefit from inflation because the firm can deduct nominal interest).

alter the ADR class, but that would often not change the actual depreciation rules. In such a system, of course, Congress always retains the authority to reverse such a change through ordinary legislation, and could provide restrictions on asset lives for particular assets in advance as they did in 1986.

Other sorts of approval mechanisms are possible which may provide more congressional control, although they involve potential restraints arising from constitutional concerns. For example, a joint resolution of approval with expedited procedural rules has been used in the past. Informal agreements such as committee vetoes are also possible.[2] Also, the taxpayer could be allowed to challenge the ADR class life assignment in the courts through a facts and circumstances case.

Finally, you inquired about the reason for the 1988 change. No official reason was given, as the provision was not included in either the House or Senate report. A provision prohibiting the Treasury from lengthening lives was added as part of an amendment on the Senate floor (Amendment 3044 to S. 2238, *Congressional Record*, September 16, 1988, p. 24294, with the specific provision appearing on p. 24228). Although the amendment was formally submitted by Senators Baucus and Packwood, the amendment was part of an extensive set of provisions agreed to in the Finance Committee. The Conference report added the provision that lives could also not be shortened.

Is was generally recognized at the time that the reason for the Senate amendment was a concern about the production of general aviation aircraft. Treasury had been directed in 1986 to undertake depreciation studies and, among other assets, the Office of Depreciation Analysis began a study of aircraft, a reasonable asset to study since there were extensive data. At that time the production of aircraft for general aviation had been in a decline that began during the recession of the early 1980s. The industry continued to decline, although the reason given for the decline is generally product liability costs. The industry has since recovered (although not to the quantity of production in the 1970s), a recovery that may reflect in part legislation passed in 1994 that limited the number of years after manufacture that the producing firm could be sued for aircraft accidents.[3]

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[2] These procedures are discussed in CRS Report RS22132, *Legislative Vetoes After Chadha*, by Louis Fisher. See also Louis Fisher, "The Legislative Veto: Invalidated, It Survives," *Law and Contemporary Problems*, Vol. 56, Autumn 1993, pp. 273-292.

[3] See *FAA Aerospace Forecasts FY2005-2016*, March 2005, Chapter V, for a discussion of the industry, at http://www.faa.gov/data_statistics/aviation/aerospace_forecasts/.

Congressional Research Service

Memorandum August 8, 2005

TO: Honorable John Kerry

FROM: Jane G. Gravelle
Senior Specialist in Economic Policy
Government and Finance Division

SUBJECT: Cost of Changing Computer Depreciable Lives from Five to Three Years

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This memorandum is in response to a discussion at the depreciation hearing on July 21st, regarding the cost over 10 years of changing depreciable lives for computers. At this hearing, I indicated that there would be a significant initial cost in the short run, but not in the long run. As you may recall, Senator Gordon Smith was also interested in this information. Consequently, I have prepared an identical memorandum for Senator Smith.

Please note that these estimates represent general magnitudes and that the Joint Committee on Taxation is the official revenue estimator.

This memorandum presents estimates of the costs for a ten-year period, for calendar years 2005-2014, and assumes all investment in 2005 would be eligible. Computer expenditures frequently fall in nominal terms because of declining prices. Table 1 uses average growth rates calculated from three pre-recession years: 1997, 1998, and 1999, which are respectively 2%, 1%, and -1%.

The depreciation rates are based on double declining balance with a half-year convention.

Table 1: Estimated Revenue Loss from Reduced Tax Lives for Computers (from five to three years), in billions of dollars

Calendar Year	2% Growth Rate	1% Growth Rate	-1% Growth Rate
2005	2.6	2.6	2.5
2006	5.1	5.0	4.9
2007	4.7	4.6	4.4
2008	3.4	3.3	3.0
2009	1.4	1.2	0.9
2010	0.3	0.2	-.2
2011	0.4	0.2	-.2
2012	0.4	0.2	-.2
2013	0.4	0.2	-.2
2014	0.4	0.2	-.2
Total	19.0	17.5	14.9

Source: CRS calculations. Assumes $91.6 billion in expenditures in 2004 based on data reported in http://www.bea.doc.gov/bea/dn/supplementary.htm#GDPfeint, table on "Computer Purchases in Selected Components of GDP." Estimates also assume a 21% tax rate. This tax rate is a weighted average of corporate and non-corporate tax rates based on the shares of depreciation (non-corporate business accounts for 21.8%) reported by the Internal Revenue Service Statistics of Income. It is based on a 20% tax rate for corporations (a weight of 35% and 0% based on the share of depreciation claimed on taxable corporate returns from the Internal Revenue Service Statistics of Income Corporate Sourcebook, 2002). The non-corporate tax rate is set at 24% based on data from the National Bureau of Economic Research series for interest income, http://www.nber.org/~taxsim/marginal-tax-rates/federal.html. Note that individual items do not add to totals because of rounding.

Memorandum August 8, 2005

TO: Honorable Gordon Smith

FROM: Jane G. Gravelle
Senior Specialist in Economic Policy
Government and Finance Division

SUBJECT: Cost of Changing Computer Depreciable Lives from Five to Three Years

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This memorandum is in response to a discussion at the depreciation hearing on July 21st, regarding the cost over 10 years of changing depreciable lives for computers. At this hearing, I indicated that there would be a significant initial cost in the short run, but not in the long run. As you may recall, Senator John Kerry was also interested in this information. Consequently, I have prepared an identical memorandum for Senator Kerry.

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Statement of Senator John Kerry
Senate Finance Subcommittee on Long-term Growth and Debt Reduction
Hearing: Updating Depreciable Lives: Is there Salvage Value in the Current System?
July 21, 2005

I would like to thank the Chairman for holding this hearing to evaluate our depreciation system and whether it needs updating. I agree that our depreciation system has not kept pace with technological advances. There are several industries today that were not even contemplated when class lives that serve as the basis for recovery were assigned in 1981, and some class lives even date back to 1962.

In the 1980's we could not imagine today's reliance on computer and wireless technology. The wireless industry was in its infancy and there was no specifically assigned life for wireless equipment. As a result, today we have what accountants call "audit roulette" with no certainty on how these assets should be depreciated.

All of this matters, because it impacts investment, innovation, competitiveness and ultimately the quality and quantity of jobs in America.

I look forward to hearing from the witnesses on how we can improve the depreciation system to spawn technological advances. I have introduced legislation that would reduce the recovery period for computer equipment and software because these items become obsolete in our fast-changing economy.

We are fortunate to have with us today Chris Anderson, the president of the Massachusetts High Technology Council. Massachusetts is home to a vital tech economy including computer hardware, life sciences software, medical products, semiconductors, defense technology and telecommunications. Mr. Anderson will discuss how our depreciation system does not reflect economic realities in the technology sector.

Our current tax law allows a small business to expense an asset in lieu of depreciation. Through 2007, up to $100,000 a year can be expensed. This provision should be made permanent because it assists small businesses in making the necessary capital investments in order to get the business off and running and it simplifies their taxes.

Small businesses drive our economy, comprising over 99% of all firms and over 50 % of GDP. Two-thirds of all new American jobs are created by small businesses. Small businesses start out small, but they often wind up being leaders in their field and household names. Intel, Hewlett-Packard, and Sun Microsystems are just a few successful companies that started out as small businesses, and some started with assistance from the Small Business Administration.

Chairman Smith mentioned in his opening statement that we are working on legislation to repair our broken depreciation system. I am glad to be part of that effort. One of the suggestions we will hear today is to provide Treasury with the authority to assign or reassign assets to different classes based on ongoing technological and economic developments. I am very interested in hearing views on that idea, because I would rather support comprehensive approach than a piecemeal approach. I also hope that we can make these changes in a thoughtful manner, so that the tax code properly reflects the market, so that we provide certainty to taxpayers, so that taxpayers cannot improperly shelter income, and so that we don't create more debt.

Statement of Senator Jon Kyl for the Record
Hearing of the Subcommittee on Long-Term Growth and Debt Reduction
"Updating Depreciable Lives: Is there Salvage Value in the Current System?"
July 21, 2005

I would like to thank the Chairman for holding this hearing on depreciation. As you know, this is one of the most complicated and least efficient areas of our current tax code, and a good candidate for simplification under comprehensive tax reform. But until the Congress is ready to address our tax code as a whole, there are certain areas where depreciation must be addressed immediately to encourage continued economic growth and job creation.

The first is the depreciation recovery period for new and existing restaurant facilities. Restaurants are high-volume businesses that get more customer traffic and maintain longer hours than the average commercial business—many staying open 7 days a week. This tremendous amount of activity causes rapid deterioration in a restaurant building's systems, from its entrances and lobbies to its flooring, restrooms, and interior walls. Clearly, a 39-year depreciation recovery period, which is what the recovery period will revert to after 2005, does not match the economic life for new restaurant buildings or for improvements to existing structures. I have introduced legislation, S. 419, to set the depreciation recovery period permanently at 15 years for both new restaurant construction and for improvements made to existing restaurants. This would generate an additional $3.7 billion in cash flow for the restaurant industry over the next 10 years, according to the National Restaurant Association. It will also provide certainty in the minds of restaurant owners regarding the future tax-treatment of their investments.

The 15-year recovery period for leasehold improvements, which also expires at the end of this year, is another example of an industry where a shorter recovery period more closely aligns the expenses incurred to construct improvements with the income they generate, in this case over the term of a lease. One of the most important goals of this change was to encourage building owners to adapt their buildings to fit the needs of today's business tenant, and permanency in this area will give leaseholders the ability to plan ahead for the business needs of tomorrow.

We also a need to make the 7-year depreciation recovery period for motor sports complexes permanent. These facilities, which generate significant economic activity, have traditionally been depreciated over 7 years, but there was some uncertainty at the IRS over this treatment. Last year, Congress clarified that the depreciation recovery period for motor sports facilities is 7 years, but only through 2007. Capital expenditures, such as improvements to major tracks or building new tracks, require several years of planning followed by construction, so it is important that we act now to give certainty to this industry that the current 7-year depreciation law will not expire.

Thank you again, Chairman, for the opportunity to address these issues as a Committee. I hope that we can continue to advance legislation that will end uncertainty and appropriately reflect the economic life of assets and investments.

CAPITOL TAX PARTNERS

Testimony of Joseph M. Mikrut
Partner, Capitol Tax Partners

Before the Subcommittee on Long-Term Growth and Debt Reduction
of the Senate Committee on Finance

July 21, 2005
Updating Depreciable Lives: Is there Salvage Value in the Current System?

The Subcommittee should be commended for holding a hearing on the depreciation system under the present-law Federal income tax. Depreciation is one of the most significant deductions found on business tax returns. Expenditures for capital investments are among the most significant factors influencing the U.S. economy. The recovery of these costs through the tax depreciation system, in turn, influences the level of investment. Current law presents issues of competitiveness, currency, equity, and tax complexity. This hearing represents an important step in addressing and resolving these issues.

Cost Recovery, in General

The tax treatment of capital expenditures such as machinery, equipment, and buildings used in the production of income depends upon the base of the underlying tax system. Consumption-based taxes generally do not tax the return on investment and under such systems the cost of capital investments is immediately expensed and deducted. Because the cost of a capital investment is the present value of the expected income to be generated from such asset over time, expensing the cost of the asset is equivalent to exempting from tax the expected return from the investment.

An income tax system generally does not allow an immediate deduction for expenditures for capital investments. Instead, such expenditures must be capitalized and the cost of the property is recovered over a period of time through a system of depreciation or amortization deductions. Depreciation deductions generally are allowed for a taxable year under an income tax to reflect the decrease in the value of underlying property and to match the income produced by, with the cost of, the property for the year.

A cost recovery system that computes an allowance for depreciation with respect to the actual decrease in the value of an asset over time often is referred to as "economic depreciation." Although perhaps theoretically appropriate, economic depreciation has at least one significant practical flaw. The requirement to annually ascertain the value of an asset is costly, time consuming, and subject to disputes between taxpayers and tax authorities. Thus, almost all

income tax depreciation systems developed to date have employed conventions and assumptions to be used in the determination of depreciation. These conventions include a placed-in-service date (when depreciation begins), a useful life or recovery period (the time period over which depreciation is calculated and allowed), the depreciation method (the formula used to calculate the annual allowance), and the salvage value (the non-depreciable portion of the cost of the property).

The most significant conventions that influence the determination of annual depreciation deductions are the useful life and the depreciation method. Useful lives generally are assigned to various types of property by statute or administrative guidance and often correlate to the expected economic useful lives of the subject property. In some instances, a useful life shorter than the expected economic useful life of an asset will be allowed by policymakers in order to encourage investment in the underlying property or to compensate the investor for social benefits provided by the property.

The straight-line depreciation method determines annual depreciation allowances by dividing the cost of property by its useful life. Straight-line depreciation recovers the cost of property ratably over the property's useful life. For example, for an asset that originally cost $1,000 and that has a five-year useful life, the straight-line depreciation allowance would be $200 ($1,000/5) for each of the five years. The straight-line method often is used for financial reporting purposes.

Accelerated depreciation methods (such as the declining balance methods) provide relatively larger depreciation deductions in the early years of a property's useful life. A declining balance method calculates depreciation each year by dividing the unrecovered cost of an asset by its useful life and then multiplying by a factor. For example, depreciation under the 200-percent declining balance method for an asset that originally cost $1,000 and has a five-year useful life would be $400 ($1,000/5x2) in the first year, $240 (($1,000-$400)/5x2) in the second year, $144 (($1,000-$400-$240)/5x2) in the third year, and so on. Accelerated methods of depreciation are appropriate in instances where an asset can be expected to lose value more rapidly earlier in its useful life or to encourage investment in particular assets. Accelerated methods have been the predominant methods for recovering the cost of personal property (e.g., machinery and equipment) for Federal income tax purposes for the past several decades.

Depreciation under Present Law

Depreciation is allowed with respect to tangible real and personal property that is used in a trade or business or held for the production of income and that by its nature is subject to wear, tear, obsolescence or otherwise loses value from natural causes. Specifically, section 167 of the Internal Revenue Code of 1986 (Code) generally allows a depreciation deduction for a "reasonable allowance for the exhaustion, wear and tear (including a reasonable allowance for obsolescence) of property used in a trade or business, or of property held for the production of income." Depreciation is not allowed with respect to tangible real or personal property that is

expected to retain or increase in value. Thus, for example, depreciation generally is not allowed with respect to land and certain works of artwork.

Depreciation begins in the taxable year the property is placed in service in the taxpayer's trade or business or used in the production of income. For this purpose, an asset is placed in service if it is in a condition or state of readiness with respect to its intended use.

A taxpayer computes gain or loss with respect to depreciable property that is disposed of in a taxable transaction before the end of its useful life. The amount of gain or loss is determined by comparing the proceeds realized upon the disposition of the property with the property's adjusted basis (i.e., its uncovered cost). Gain with respect to personal property is treated as ordinary income to the extent of prior depreciation claimed with respect to the property. Any excess is treated as capital gain. Gain with respect to the disposition of depreciable real property generally is treated as capital gain. In the case of an individual, a special 25-percent tax rate generally applies to real estate gains that do not exceed the amount of prior depreciation claimed with respect to the property.

The Modified Accelerated Cost Recovery System

In general

The depreciation deductions for most tangible property placed in service after 1986 are determined under rules specified in Code section 168, known as the Modified Accelerated Cost Recovery System, (MACRS). Less beneficial depreciation allowances generally are used for purposes of computing alternative minimum taxable income.

Under MACRS, property is assigned to various recovery periods (i.e., useful lives) and each recovery period is assigned a recovery method (i.e., a depreciation method). The recovery periods are three, five, seven, ten, 15, 25, 27.5, 39 and 50 years. (These periods are reduced for qualified property used on an Indian reservation.) The recovery methods are the 200-percent declining balance method (for three-, five-, seven-, and ten-year property), the 150-percent declining balance method (for most 15- and 20-year property, certain property used in farming, and property for which the taxpayer elects) and the straight-line method (for all other property, generally buildings and other long-lived property). The MACRS accelerated methods switch to straight-line depreciation at the point in the recovery period that maximizes depreciation deductions.

No distinction is made between new or used property—both are subject to the same recovery periods and the same depreciation rules when placed in service by the taxpayer.

Recovery periods

Property is assigned to a MACRS recovery period in one of two ways. Code section 168 directly assigns certain property to a specific recovery period. For example, Code section 168(e)(3) classifies automobiles and light general-purpose trucks as five-year property. Other property is assigned to a recovery period based on the property's "class life." Class lives for most assets are listed in Revenue Procedure 87-56 and were developed by the Treasury Department pursuant to studies conducted in the mid-20th century and occasionally revised. Certain types of property (such as office equipment) are assigned class lives regardless of the industry in which they are utilized. Most property, however, are assigned class lives depending upon industry classifications. For example, assets used in the production of cement are assigned to the 20-year class life.

Property is assigned to the MACRS recovery periods are as follows:

Three-year property is property with a class life of four years or less; certain horses; and certain "rent to own" consumer durable property.

Five-year property generally is property with a class life of more than four years and less than 10 years; automobiles and light general purpose trucks; semi-conductor manufacturing equipment; computer-based telephone central office switching equipment; qualified technological equipment, including computers and peripheral equipment; property used in the conduct of research and experimentation; and geothermal, solar, wind and biomass energy property.

Seven-year property is property with a class life of 10 years or more but less than16 years; any railroad track; motorsports entertainment complexes; any Alaskan natural gas pipeline; and any property that does not have a class life and is not otherwise classified.

Ten-year property is property with a class life of 16 years or more but less than 20 years; single purpose agricultural and horticultural structures; and any tree or vine bearing fruits or nuts.

15-year property is property with a class life of 20 years or more but less than 25 years; municipal wastewater treatment plants; telephone distribution plants and other comparable equipment used for the two-way exchange of voice and data communications; retail motor fuels outlets; certain leasehold and restaurant improvements placed in service before January 1, 2006; and initial clearing and grading land improvements with respect to gas utility property.

20-year property is property with a class life of 25 years or more, other than certain structures with a recovery period of 27.5 years or more; water utility property and municipal sewers placed in service before June 13, 1996; and initial clearing and grading land improvements with respect to electric utility property.

25-year property is water utility property and municipal sewers placed in service after June 12, 1996.

27.5-year property is residential rental property.

39-year property is nonresidential rental property.

50-year property is railroad grading or tunnel bores.

Other rules

MACRS contains conventions that specify when during the year the asset is deemed placed in service. For most tangible personal property, the half-year convention effectively provides that depreciation begins in the middle of the taxable year of acquisition. If 40 percent or more of property additions for the taxable year are place in service in the last quarter of the year, a mid-quarter convention applies for the year. A mid-month convention applies to real property. Present-law placed-in-service conventions spread the cost of MACRS property over one additional taxable year than indicated by the recovery period (e.g., five-year property is recovered over six taxable years).

No depreciation is allowed in the year of disposition of MACRS property. In addition, MACRS assumes that the salvage value of property is zero, allowing the entire cost of the property to be depreciated.

Depreciation for MACRS property generally is determined on an item-by-item basis. In certain limited instances, special rules allow taxpayers to depreciate all property with the same recovery period and of the same vintage as one asset in a general asset account. The proceeds realized on any disposition of property in a general asset account are included in income as ordinary income rather than offset by the basis of the property.

When originally enacted in 1986, MACRS provided authority to the Secretary of the Treasury to adjust the class lives applicable to any type of property. This authority was repealed in 1988 before it was invoked. From time to time, Congress has instructed the Treasury Department to study the depreciation allowances applicable to specific types of property (e.g., horses, fruit and nut trees, scientific equipment, rental tuxedos, and vehicles) and report their findings to the tax-writing committees.

MACRS does not apply to all tangible property. Motion picture films and videotapes and sound recordings are excluded from MACRS and are depreciated under the income forecast method. The income forecast method generally attempts to match the cost to produce such property with the income generated by the property. MACRS also does not apply to public utility property if the taxpayer does not use a normalization method of accounting. A

normalization method of accounting attempts to spread the benefits of MACRS depreciation among the utility ratepayers serviced by the property.

Alternative Depreciation System

Section 168 also provides an "alternative depreciation system" for property used outside the United States, tax-exempt use property, tax-exempt bond-financed property, and certain imported property. It also may be elected by other taxpayers and is used to calculate corporate earnings and profits. The alternative depreciation system generally uses the straight-line method and longer recovery periods (generally, the property's class life) than regular MACRS and is therefore less beneficial than regular MACRS.

The alternative depreciation system also applies to "listed property" that is not used more than 50 percent in a trade or business. Listed property includes passenger automobiles; other transportation property; property generally used for entertainment, recreation or amusement; computers and peripheral equipment; and cellular phones. Other rules limit the amount of depreciation that may be claimed annually with respect to a passenger automobile regardless of the business use percentage.

Alternative Minimum Tax

The alternative minimum tax (AMT) originally was enacted, and subsequently significantly modified by the Tax Reform Act of 1986, to ensure that taxpayers with significant economic income did not escape taxation on such items of income. To accomplish this goal, the AMT disallows the use of certain permanent items of tax preference (such as tax-exempt interest on certain private activity bonds) and negates the benefit inherent in certain timing items (such as accelerated depreciation under MACRS). Depreciation allowances under the AMT historically have been less beneficial than those allowed under the regular tax.

Under present law, the recovery periods for tangible personal property are the same for AMT and regular tax purposes. However, the 200-percent declining balance method is not allowed; rather, the 150-percent declining balance method is used under the AMT. Depreciation for real property is determined using the alternative depreciation system under the AMT.

Expensing under Section 179 and Other Provisions

Under Code section 179, a taxpayer with sufficiently small annual capital investment may elect, in lieu of claiming depreciation, to expense immediately up to $100,000 of the cost of property acquired in taxable years beginning before 2008 (indexed for inflation and dropping to $25,000 in 2008 and thereafter). The amount eligible to be expensed phases out as the cost of a taxpayer's property additions for the year exceeds $400,000 ($200,000 in 2008 and thereafter). Property eligible for the expensing election under section 179 generally is tangible personal property (and certain computer software for taxable years beginning before 2008).

In addition to section 179, other Code provisions allow full or partial expensing for certain specific types of property (e.g., clean-fuel burning vehicles, tertiary injections, investments in empowerment zones, and certain environmental remediation costs).

Bonus Depreciation

Special rules contained in economic stimulus bills following the events of September 11, 2001, provided additional first-year depreciation ("bonus depreciation") for acquisitions of new property. Pursuant to the Job Creation and Worker Assistance Act of 2002, taxpayers could immediately deduct 30 percent of the cost of qualified property (generally, new tangible personal property) that was acquired after September 10, 2001, and placed in service before January 1, 2005. This "bonus depreciation" was in lieu of depreciation a taxpayer would otherwise claim over the life of the property. Bonus depreciation did not apply if the property was acquired pursuant to a binding contract in existence before September 11, 2001. Self-constructed property qualified for bonus depreciation if construction began after September 10, 2001, and was placed in service by the applicable date.

A special rule applied to property that had a longer production period. Such property was eligible for bonus depreciation if it was placed in service before January 1, 2006, and the 30-percent bonus applied to costs incurred before January 1, 2005.

A provision in the Jobs and Growth Tax Relief Reconciliation Tax Act of 2003 increased and extended the bonus depreciation rules. Under the Act, a taxpayer was allowed to immediately deduct 50 percent of the cost of qualified property acquired after May 5, 2003, and before January 1, 2005 (unless a binding contract was in existence before May 5, 2003), and placed in service before January 1, 2005 (January 1, 2006 for longer production period property). Self-constructed property qualified for the 50-percent bonus depreciation if construction began after May 5, 2003, and before January 1, 2005, and was placed in service by the applicable date.

Prior Law

The Accelerated Cost Recovery System

As the name suggests, MACRS is the successor depreciation system to the Accelerated Cost Recovery System (ACRS). ACRS had been adopted in 1981; the Tax Reform Act of 1986 modified ACRS to produce MACRS.

In format, ACRS was similar to MACRS. Under both systems, property is assigned to a discrete number of recovery periods and a specific accelerated depreciation method applies to each recovery period. However, ACRS utilized less recovery periods than does MACRS and the length of the ACRS periods generally were shorter than the MACRS periods for the same types of property. The recovery periods for ACRS were three, five, ten and 15 years. Most tangible personal property fell into the three- and five- year classifications. Ten-year property generally

consisted of public utility property and 15-year property generally consisted of real property. The recovery period for real property was lengthened to 18 and then 19 years by subsequent revenue acts.

ACRS was enacted as an incentive to invest in depreciable property. The lives and methods provided by ACRS allowed taxpayers to recover the cost of capital investments much more rapidly than would be indicated by the use of economic depreciation. The staff of the Joint Committee on Taxation estimated that the replacement of ACRS with MACRS by the Tax Reform Act of 1986 increased Federal revenues by over $12 billion over a five-year budgetary period.

Facts and Circumstances Determinations

The enactment of the ACRS in 1981 ended the ability of a taxpayer to determine its depreciation deductions on a taxpayer-specific facts and circumstances basis. Under prior depreciation systems, taxpayers were allowed certain leeway in determining useful lives, depreciation methods, salvage value and other conventions for various types of property based on the property's characteristics and the taxpayer's use of the property.

Depreciation deductions have been allowed since the inception of the income tax in 1913. From 1913 to 1934, taxpayers were provided considerable latitude in determining appropriate allowance for depreciation based on their facts and circumstances. In 1934, in order to provide revenue for New Deal public works projects and to offset declines in tax receipts because of the Great Depression, the Treasury Department promulgated rules regarding the burden of proof required for taxpayers to support their depreciation deductions. These rules generally reduced depreciation deductions claimed by taxpayers.

In 1942, Treasury promulgated Bulletin F, which provided guidelines for the useful lives for various types of property. Although taxpayers could still show that shorter lives were appropriate, the effect of Bulletin F was to further slow depreciation.

In 1962, Treasury revoked Bulletin F and provided the "class life" system to assist taxpayers and the IRS in agreeing upon acceptable useful lives to be used in the context of a taxpayer facts-and-circumstances depreciation system. Guidelines for useful lives were intended "to provide taxpayers with a greater degree of certainty in determining the amount of their depreciation deductions and to provide greater uniformity in the audit of these deductions by the Internal Revenue Service." Class life guidelines purposely were set at levels shorter than those reported by most industry participants surveyed in a Treasury study. The class lives were also shorter than the lives previously set forth in Bulletin F. A "reserve ratio test" was developed to ensure that taxpayers were not establishing useful lives that were too short. The reserve ratio test was intended as an objective measure by which the taxpayer's asset retirement and replacement policies were taken into account so that the taxpayer and the Internal Revenue Service could judge whether the taxpayer's chosen useful lives were appropriate.

A later Treasury study indicated that many taxpayers continued to compute depreciation allowances based on their own facts and circumstances rather than the new class life guidelines and that the reserve ratio test contained certain flaws. Consequently, in 1971 the Treasury introduced the Class Life Asset Depreciation Range (ADR) System. The ADR system classified assets based on industry groups and provided useful lives for each group. Taxpayers were allowed to elect depreciable lives that ranged anywhere from 80 to 120 percent of the applicable class life for a group of assets.

The ADR system computed depreciation on a mass asset basis and had specific rules with respect to the use of depreciation methods (both straight-line and accelerated methods were allowed), salvage value, used property, and ordinary and extraordinary retirements. The Treasury Department revised the ADR system over the decade it was in existence—categories were added and deleted, some lives were shortened while others were lengthened. In general, ADR provided taxpayers with more beneficial depreciation than the guideline system promulgated in 1962. The ADR system was effectively repealed by Congress with the enactment of ACRS.

Considerations

Experience gained from the practical application of present-law depreciation rules and the lessons learned from prior law provide certain insights that are relevant in the consideration of changes to the current system of income tax depreciation.

Currency and Process

As described above, our current system of depreciation—MACRS—assigns recovery periods and methods to types of property based on the property's class life. These class lives generally were developed by the Treasury Department with respect to guidance issued in the 1960's. Since then, the U.S. economy has undergone significant change. New industries and types of assets have emerged, services once provided by certain industries have merged or converged into other industries (e.g., telecommunications) and the rate of change in some industries (e.g., technology) has been dramatic. These phenomena have created issues under the current depreciation system. New industries find it difficult to "pigeon hole" themselves into the current class system and classification controversies with the Internal Revenue Service often emerge. Other firms believe that the current class lives and assigned recovery periods do not properly reflect the rate of obsolescence and investment turnover within their industry. One oft-cited example relates to computer equipment, which is assigned a five-year recovery period.

Policymakers may wish to consider procedural changes that would facilitate making the depreciation system more current and responsive to change. Legislating changes to depreciable lives and methods can be a cumbersome and piecemeal process. The Treasury Department, when

provided adequate resources and direction, has demonstrated the ability to study depreciation allowances and make appropriate suggestions. Consideration should be given to establishing a process by which Treasury can study the cost recovery system and formulate recommendations. An expedited process, with appropriate Congressional input and oversight, could then bring about needed changes.

Equity

Any depreciation system should promote horizontal equity by providing comparable treatment among different industries and activities and among participant in an industry. This does not mean that the cost of all investment should be recovered in the same manner. Rather, to the extent possible, the relationship between tax depreciation rules applicable to an asset and that asset's economic depreciation should be the same for all property. Thus, for example, comparable cost recovery rules should be available to a type of property whether such property is leased or acquired outright, is acquired new or used, or disposed of before its expected retirement.

The AMT also presents issues of horizontal equity. Under present law, certain industries and certain firms within an industry experience are subject to different depreciation regimes and different costs of capital if the industry or firm is subject to the AMT. Consideration should be given to addressing the implications of the application of the AMT upon discrete segments of the economy.

Complexity

Depreciation deductions are among the most significant items on business tax returns. The calculations and recordkeeping required with respect to depreciation can be significant. Expenditures must be analyzed and characterized as either capital investments or currently deductible costs. Capital investments must be classified to fit into the various depreciation class lives and depreciated accordingly. Different depreciation records must be maintained for financial reporting, regular Federal income tax, AMT, earnings and profits, and State income tax purposes. Dispositions must be tracked and gain and loss computed and characterized based on prior depreciation allowances. Depreciation calculations and the related recordkeeping requirements generally must be done on a property-by-property basis, increasing compliance burdens.

As a result, consideration should be given to simplifying the current depreciation regime and insuring that any contemplated changes do not further increase compliance burdens. Expanding the availability of mass asset accounting is one means by which depreciation compliance can be simplified.

RESPONSES OF JOSEPH MIKRUT, TO QUESTIONS FROM COMMITTEE DEMOCRATS

You have testified that our current schedules are based on studies done in the 1950's, which have been revised over time. With technology changing so dramatically since then, it is easy to see how our current system might be out of date. Do you believe it is possible for a newer product or technology to get plugged into a default category of seven years, when if the proper research was done, it should really be a three or five year life? And, if so, do you have any real-life examples of this?

Over the past half-century, there have been significant technological changes that have rendered the current depreciation classification system obsolete. As pointed out in 2000 by the Treasury Department in its "Report to the Congress on Depreciation Recovery Periods and Method," the cellular telephone industry did not exist when the current asset classes were developed (at p. 81). Neubig and Rhody (Tax Notes, May, 29, 2000) have speculated that some cellular assets may fall into the seven-year default class. The IRS, on the other hand, has attempted to "shoehorn" wireless telecommunications equipment into the class lives developed for wireline communications, resulting in recovery periods in excess of seven years (see, e.g., TAM 9825003). In any event, it appears clear that the rate of technological change and capital investment in the wireless telecommunications industry would support a recovery period of less than seven years for such property.

In your opinion, do you believe that present law allows the cost segregation method of depreciation or is it the result of the Hospital Corporation of America case? Have the courts legislated cost segregation? Do you think it should be an allowable method - used properly, does it accurately reflect income? Should we write legislation to clarify it is an allowable method? Do you think that this method has been abused through cost segregation studies that are a big money maker for tax advisers and engineers? Do you think that this method is used too aggressively and writes-off costs too quickly?

With the adoption of the Accelerated Cost Recovery System (ACRS) in 1981, Congress repealed the ability of a taxpayer to determine depreciation for section 1250 real property pursuant to component depreciation (i.e., determining depreciation for a building pursuant to the depreciation allowed for each component of the building). This prohibition continues pursuant to present-law section 168(i)(6). Thus, under present law, each component of a building is treated identically for depreciation purposes.

Hospital Corporation of America (109 T.C. 21 (1997)) and similar cases highlight a different issue. In *Hospital Corporation of America*, the taxpayer utilized a cost segregation study to identify which portion of its assets with respect to a hospital facility were section 1245 tangible personal property (and subject to relatively short depreciable lives) and which portion was a building or its structural components (and subject to longer depreciable lives). Among the types of property in question were primary and secondary electricity distribution systems, branch electrical wiring and connections and special electrical equipment, wiring and related property items in laboratories and maintenance shops, wiring related to specific types of property (televisions, telecommunications equipment, etc.), carpeting, vinyl wall and floor coverings, kitchen water piping and steam lines, plumbing connections for x-ray equipment, patient handrails, overbed lights, accordion doors and partitions, bathroom participations and accessories, tile ceilings, and steamer boilers and related equipment. The court found some property to be tangible personal property and other property to be structural components of the hospital.

Absent a cost segregation or similar study it is unclear how a taxpayer (or a court) could determine the character of property. Thus, properly utilized a cost segregation study should adequately distinguish tangible personal property from real property and result in the proper reflection of income.

It is clear that taxpayers in situations similar to that of *Hospital Corporation of America* have an incentive to over-allocate or over-identify shorter-lived property. As such, the improper use of a cost segregation study may result in abuse. However, it is unclear how legislation could address this issue. Perhaps an examination of the application of the accuracy-related and tax advisor penalties may be warranted.

Alternatively, Congress may wish to examine whether certain of the assets determined to be section 1245 tangible personal property in *Hospital Corporation of America* and similar cases should be more properly considered to be structural components of a building. Classifying such property as structural components of a building would eliminate the need to undertake a cost segregation study, but may result in the distortion of income as the demonstrable useful life of such property often is less than the life of the building. For example, in *Hospital Corporation of America* the court found that carpeting in the taxpayer's hospitals constituted tangible personal property. The taxpayer replaced such property every 2-1/2 to 7 years, depending on use. Applying the significantly longer recovery period applicable to buildings (39 years) to such carpeting would result in the distortion of income. One way to address this issue would be to classify the property initially placed in service with the building as a structural component of the building, but allow the expensing (or a short recovery period) for any replacement of such property (i.e., similar to the present-law treatment of qualified leasehold improvement property and qualified restaurant property).

In your opinion, how does small expensing differ from expensing for all capital assets?

Expensing for small businesses under section 179 can be distinguished from expensing for all capital assets. First, small business expensing is limited to taxpayers that place in service a relatively small amount of capital additions for the year, applies only to certain types of property (generally, tangible personal property and computer software) and applies only to the extent the taxpayer has taxable income for the year. Expensing of all capital assets would have a much broader scope.

There are also policy reasons for limiting expensing to small businesses. First, the determination of a taxpayer's depreciation deduction can be complicated and requires extensive recordkeeping. Allowing small businesses to expense the cost of qualifying property provides a degree of simplification to and lowers the administrative costs of less sophisticated firms. Second, the tax benefit of expensing represents an interest-free loan from the Treasury to a qualified business. Small businesses often do not have access to public capital markets and thus have higher costs of capital relative to larger firms. Providing expensing to small businesses lowers their costs of capital.

Testimony of Dr. Thomas S. Neubig
Ernst & Young LLP

Submitted to the
Subcommittee on Long-Term Growth and Debt Reduction
of the Senate Committee on Finance
"Updating Depreciable Lives: Is There Salvage Value in the Current System?"

July 21, 2005

Mr. Chairman and Members of the Committee:

I am the National Director of Ernst & Young LLP's Quantitative Economics and Statistics practice.* I was previously the Director and Chief Economist of the U.S. Treasury Department's Office of Tax Analysis. I was responsible for setting up the Depreciation Analysis Division within the U.S. Treasury's Office of Tax Analysis following the 1986 Tax Reform Act.

I appreciate the invitation to testify before the Committee to discuss the current system for assigning tax depreciation class lives and a potential approach to adding new assets and evaluating existing asset class lives.[1] I co-wrote several years ago an article with the title, "21st Century Distortions from 1950s Depreciation Class Lives." That title still applies today to our current system, and the distortions are only going to get worse over time. The current tax depreciation system, particularly the process for keeping class lives current, needs to be reformed to be conducive to economic growth, horizontal equity, certainty and lower compliance costs.

My testimony will focus on the process of keeping the tax depreciation rules current, including incorporating new assets and industries into the tax depreciation system.

The Need for Change

If the United States is going to retain its current individual and corporate income tax, and if our business income tax measurement rules are going to differ from our financial reporting income rules, then we need a tax depreciation system that reflects our dynamic U.S. economy. The modern U.S. economy relies on innovative technologies, new assets and new industries that were not contemplated in 1986 when the MACRS system was designed or in the 1950's when most of the asset class lives were effectively set. As the Treasury Department's 2000 Depreciation Study stated: "It would be unlikely that these useful lives represented a clear and consistent concept of an average useful life even in the fifties." Industries and assets that were in existence 20-50 years ago are experiencing significant change with de-regulation, increased global competition, and technological advancement.

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[1] The views expressed in this testimony are my own, and don't necessarily reflect the views of my firm or clients.

The present law class life tax depreciation classification system is primarily based on a Treasury study of corporate income tax returns from 1959. Although recovery periods were changed and simplified in the 1981 and 1986 Tax Acts, only modest changes to the underlying depreciation class life classification system have been made to the class life classification during the past 45 years. The use of this outdated classification system results in at least five undesirable outcomes:

1) New assets are "shoehorned" to fit within the existing classification system. There is no systematic or economic depreciation analysis to properly classify new assets.
2) New assets that aren't shoehorned into an existing asset class are arbitrarily assigned the default class life of seven years.
3) Assets originally classified correctly may undergo technological or economic changes that result in shorter economic lives. These changes can occur rapidly, and relying solely on a legislative mechanism for adjustments, may not be the most effective.
4) Many assets are classified by industry rather than by the type of asset. Many industries are undergoing significant changes from deregulation, and are now competing with other industries with shorter tax lives on the same assets.
5) Unclear asset classifications can result in recovery periods for the same assets varying across taxpayers and involving costly and lengthy disputes with the IRS.

The result of these misclassifications is that many new assets that have now become commonplace are not consistently classified across taxpayers or industries. For example, the current cellular telecommunications industry was not envisioned when the current system of class lives was developed nor even at the time of the 1986 Tax Act. A 1999 Ernst & Young white paper on "Federal Tax Depreciation of Cellular Assets: The Need for Clarification on Cellular Equipment" noted that "Depreciation guidance for the cellular industry is desperately needed to provide certainty and avoid controversy leading to unnecessary costs to both the government and industry." Six years later that guidance is still needed.

The current tax depreciation system is not conducive to economic growth, simplicity or fairness. New innovative assets and rapidly growing new industries are most likely to suffer from inappropriately long tax lives and tax uncertainty. Inappropriately long tax depreciation lives can significantly increase the cost of capital. An asset with an economic life of five years but assigned a ten year tax recovery period faces an effective tax rate exceeding 42%. An asset with an economic life of three years but assigned a recovery period of five years faces an effective tax rate of 54%. Uncertainty may be an even greater cost given the need of new companies for cash and business focus.

Assets embodying new technologies in rapidly innovating industries are most likely to see rapid economic obsolescence from significant price reductions and capacity increases, as have occurred in computers and telecommunication switching equipment. Assigning a "nascent" asset the same class life as a "mature" asset could be far from reality.

While the current depreciation tax system is simpler than prior systems, the current class life classification process does not allow a timely, periodic or systematic approach to changing class lives. Changes in class lives must be established under statute. This leads to significant delays, uncertainty and dispute, which are major drivers of tax code complexity and compliance and

administrative burden. Finally, the current system is not "fair" in that taxpayers with similar assets are treated differently and placed at a competitive disadvantage.

A Potential Process Change

Short of expensing all capital investment, the depreciation of long-lived assets is neither theoretically nor administratively easy. Administering tax depreciation is a significant cost of having an income tax system for both taxpayers and government, with trade-offs between economic efficiency, simplicity, and fairness. Ideally there would be a comprehensive empirical study of tax depreciation rules which sets class lives to achieve a desired uniform effective tax rate on tangible capital. Such a study was not part of the Treasury's 2000 Depreciation Study, and would take years and a massive resource effort.

In the 1986 Tax Reform Act, the Treasury Secretary was given the authority to prescribe or revise class lives reflecting the anticipated useful life and the anticipated decline in value over time of most assets. A Depreciation Analysis Division was authorized within the Treasury "to monitor and analyze actual experience with all tangible depreciable assets, to prescribe a new class life for any property or class of property when appropriate, and to prescribe a class life for any property that does not have a class life." This authority to set or revise class lives was removed by Congress in 1988,[2] leaving the Depreciation Analysis Division to do studies and report the findings to Congress. After removal of the authority to change lives, the Treasury stopped studying asset depreciation. Studies were no longer done for at least three reasons: depreciation was not a high priority relative to other tax policy issues, the budget cost of staffing the Division was not funded with additional resources, and gathering information for the studies was difficult.

It is important for both taxpayers and the government that the tax depreciation rules are kept current through some greater administrative flexibility. With the removal of Treasury authority to change asset class lives, the primary way to change class lives is through the normal legislative process. Although the legislative process has the advantage of evaluating alternative depreciation proposals against other tax and spending priorities, technical changes based on factual experience of individual assets in most cases may be more quickly, thoroughly and consistently handled by administrative action. In addition, legislative changes involve revenue scoring, which is a further impediment to potential appropriate technical changes.

The Treasury Department's 2000 Depreciation Report cited three alternative mechanisms for adjusting class lives. First, authority and funding to modify depreciation could be returned to Treasury along the lines established in the 1986 Act. Second, Treasury could have the authority and budget resources to conduct asset studies and implement changes as part of a pre-specified regulatory process. Third, Treasury could submit prospective changes in class lives and asset class definitions to Congressional review and veto. There are advantages and disadvantages to

[2] Treasury's authority to prescribe class lives was removed in the Technical and Miscellaneous Revenue Act of 1988. A Senate amendment revoked the Treasury's authority to lengthen lives shortly after the Depreciation Analysis Division began a study of commercial aircraft and other air transport assets. The conference agreement expanded the prohibition to any change in class lives, including assets that did not have class lives.

each of these approaches, but all of these alternatives rely solely on government action and resources.

An "Advance Depreciation Agreement" Approach

I would suggest an additional alternative mechanism for keeping the depreciation system current: expanding on the current successful approach of the IRS to involve taxpayers in resolving, before the filing of a return, the treatment of an issue that otherwise would likely be disputed in a post-filing examination.

The IRS has done this with both "Pre-Filing Agreements" (PFA) and "Advance Pricing Agreements" (APA). IRS Announcement 2005-42 describes the current PFA program and reports a high degree of overall satisfaction of taxpayers participating in the program and the likelihood that participants will recommend the process to other taxpayers. While PFAs and APAs are taxpayer-specific, the IRS's Industry Issue Resolution Program (IIRP), started in 2000, and made permanent in 2002, is designed to provide guidance to resolve frequently disputed tax issues common to a significant number of taxpayers, again to resolve issues prior to the traditional post-filing examination process.

One approach would be to have an "Advance Depreciation Agreement," (ADA) which could be part of the IIRP. Depreciation fits the issues considered most appropriate to the IIRP program (IRS Notice 2002-20):

- There is uncertainty about the appropriate tax treatment of a given factual situation;
- The uncertainty results in frequent, often repetitive examinations of the same issue;
- The uncertainty results in significant taxpayer burden;
- The issue is material and impacts a significant number of taxpayers, either within an industry or across industry lines; and/or
- Factual determination is a major component of the issue.

While the IIRP currently is focused on uncertainty about the appropriate legal tax treatment of an issue, it could be extended to focus on the uncertainty about the appropriate useful life tax treatment of different assets. If the Treasury Department is given the authority to change depreciation class lives as part of an ADA, taxpayers and the Treasury would have an incentive to participate in a program that would resolve the factual issue of appropriate class life.

Similar to the PFA program, the Treasury would have jurisdiction of whether to accept the taxpayers' or associations' request for participation in the ADA program. The criteria for selection would be similar to that of the PFA (IRS Announcement 2005-42) based on:

- The suitability of the issue presented by the taxpayer;
- The direct or indirect impact of an ADA on taxpayers;
- The availability of Treasury resources;
- The ability and willingness of the taxpayer/association to dedicate sufficient resources (and providing the necessary information) to the process; and
- The probability of completing the examination of the issue.

The Treasury/IRS and the taxpayer/association would convene a joint planning meeting to reach agreement on a proposed timeframe, the methodology to be used in the analysis, the data collection process to be used in the analysis, and the process for Treasury review of the data collection and analysis phases. The key difference would be that the taxpayer/association would be responsible for providing the resources to conduct the analysis, subject to Treasury's review and agreement. This would alleviate some, but not all, of the issues that have arisen in the APA program due to insufficient government funding.

Upon completion of the ADA program, Treasury would have the authority to prescribe a new class life for the asset(s) where there is agreement between the taxpayers and Treasury.

This approach would have the advantage of focusing government and taxpayer resources on issues where the economic lives of assets are expected to be significantly shorter than their current tax depreciable lives. The commitment of resources, including the necessary information, would be forthcoming given the expected, but to be confirmed, benefits. Concern about "cherry-picking" and estimation biases would be addressed through the Treasury review and agreement oversight. This approach would also provide the Treasury Department with experience and insight based on the ADA projects to selectively choose other assets to examine if they desire and to present legislative proposals to Congress to address non-ADA assets.

The ADA process could also be used to address assets based on new technologies. One type of ADA agreement could be a temporary asset class for nascent technologies with an expiration data of the temporary asset class, pending a more complete analysis. As the Treasury Department 2000 Study notes: A temporary asset class "may be preferable to current law, because it would avoid placing new assets in an existing asset class, where they may not belong, and would avoid placing new assets permanently in a 'default' class with an arbitrary class life." This would also require that Treasury be given the authority to prescribe class lives for assets where there is an ADA agreement between the Treasury and the taxpayer/association, unlike current law.

Another important dimension of an Advance Depreciation Agreement process would be the acceptable methodology for determining the class life. The 1986 Tax Act's legislative history stated that new class lives should be established by equating the present value of tax depreciation, computed using the straight-line method over the class life, with the present value of the decline in value of the asset in the absence of inflation over all users of the asset. This definition of the class life was deleted from the Code in 1988, along with the Secretary's authority to revise class lives. The 1986's Act "decline-in-value" criterion was never implemented in any class lives.

Although the decline-in-value criteria ideally may reflect economic depreciation, it is important that the definition of class life used in the ADA process be feasible empirically and set a reasonable, consistent standard against which new class lives can be determined. Most current class lives were based on the typical holding period of only the initial holder of the asset. Several other empirical measures of evidence indicative of useful life of property were specified

in the 1986 Tax Act's legislative history, including depreciation practices followed for book purposes, terms for which property is leased, and resale price data.

Conclusion

If the U.S. is going to continue with its current income tax, then it is important that the tax depreciation rules reflect the economic realities of the 21st century. Asset class lives determined in the 1950's are not conducive to economic growth, horizontal equity, or simplicity. Especially for new, innovative, and rapidly changing industries, excessively long tax depreciation class lives can significantly increase the cost of capital and reduce important cash flows. Our tax depreciation rules should not be an impediment to the growth and changes of the underlying economy.

One approach to keeping tax depreciation rules current, similar to how Treasury and the IRS have been successful in addressing many other technical and factual issues, would be to provide the Treasury Department authority to prescribe new or different class lives for depreciable assets which have undergone an Advance Depreciation Agreement between the Treasury and taxpayers/associations. This Agreement would use principally private sector resources, under the review of the Treasury Department, to collect and analyze the information, and for Treasury to determine the appropriate class life of new and existing assets. It is not clear how many assets would be submitted for an ADA, but the potential for reducing high effective tax rates, needless disputes, and uncertainty would be an important flexible option for keeping tax depreciation current, as it has been for other technical and factual tax issues.

That concludes my testimony. I would be happy to answer any questions about my testimony.

Questions for the Record for Dr. Thomas Neubig, July 21, 2005

Question: You have testified that there have been new industries and technologies developed since the 1986 modified depreciation system was implemented. Can you give detailed examples of these recent products and problems that have occurred in trying to fit them into the current classification system?

Answer: The cellular telephone industry is probably the clearest example of a new technology and industry, developed since the 1986 modified depreciation system, where the lack of definitive regulatory and/or legislative action on depreciation recovery has created uncertainty, IRS controversy, higher capital costs and competitive inequities. These issues are laid out in a six-year old study prepared by Ernst & Young for the Cellular Telecommunications Industry Association.

An indication of the significant changes that have occurred in the U.S. economy are the 358 new industries reflected in the new North American Industry Classification System (NAICS) released in 1997, which replaced the Standard Industrial Classification System dating back to the 1930s. A number of these industries provided comments to the Treasury Department prior to their 2000 depreciation study, ranging from telecommunications, electric and gas utilities, printing and information technology.

Congress has enacted several tax depreciation changes since 1986 that have resolved tax controversies over depreciation lives as well as other changes to depreciation lives. These changes might have been addressed more quickly through a more flexible regulatory process and also evaluated based on empirical economic analysis. With the expiration of the bonus depreciation rules, there will be more pressure for depreciation class lives to more accurately reflect the changing economy.

Question: In your testimony, you outline a very intriguing proposal to update the system whereby Treasury would implement an "Advanced Depreciation Agreement" process, which seems to be negotiated rulemaking. You have suggested that taxpayers or associations pay for the research and analysis necessary for Treasury to make its determination. If this was the case, would we only see taxpayers or associations with great resources seeking and gaining depreciation relief?

Answer: Although factually determining an appropriate useful life and recovery period for assets involves time and effort, I would hope that the ADA process could be streamlined so that such studies and IRS review are practicable and cost-efficient. Compared to the potential overtaxation of some assets and industries, the costs of the analysis would be relatively small for industries choosing the ADA process.

Under your "Advanced Depreciation Agreement" process, new class lives would only be implemented upon agreement by the taxpayer and Treasury. Is this

granting too much power to an affected industry as they essentially might have a "veto" over Treasury policy?

Answer: Currently, the Treasury Department has no authority to change depreciation class lives. Under the ADA process, Treasury would have the authority if it can reach a mutual agreement with a taxpayer on an appropriate depreciation class life. The ADA process would give Treasury more flexibility than it currently has. Treasury would have the same ability as under current law to propose depreciation tax law changes, which an affected industry might dislike, to Congress.

Under this type of program would there be a consultation role for Congress? What would happen if Congress disagreed with a conclusion reached by Treasury?

Answer: Similar to other administrative guidance on factual tax issues, the ADA process does not currently envision a consultation role for Congress. If Congress disagreed with a conclusion reached by Treasury, legislation specifying a specific depreciation class life would be possible. Congress has legislated specific depreciation class lives a number of times, including four asset recovery period changes most recently in the Energy Tax Incentives Act of 2005.

In your opinion, do you believe that present law allows the cost segregation method of depreciation or is it the result of the Hospital Corporation of America case? Have the courts legislated cost segregation? Do you think it should be an allowable method – used properly, does it accurately reflect income? Should we write legislation to clarify it is an allowable method? Do you think that this method has been abused through cost segregation studies that are a big money maker for tax advisors and engineers? Do you think that this method is used too aggressively and writes-off costs too quickly?

Answer: I am an economist, rather than a tax lawyer, so I do not have an opinion on the present law treatment of cost segregation studies. I do note that the IRS acquiesced to the ultimate holding, if not the factual findings, of the Hospital Corporation of America v. Commissioner case, thereby permitting taxpayers to rely on authorities of former IRC section 48, related to the repealed investment tax credit. The practical effect of this acquiescence, based on the subsequent IRS response, is to permit an analysis of buildings for purposes of segregating real property from tangible personal property in a depreciation context. The IRS has further supported this approach through issuance of Large and Mid-Size Business division field directives regarding depreciation that generally take an approach highly consistent with the cited case holding and factual findings.

As an economist, it is important to note the trade-offs involved in measuring economic income, including the depreciation of bundled investments where the lump sum cost or purchase price includes multiple components of property (e.g., land, land improvements, buildings, equipment, furniture and fixtures, etc.) Treating such an investment as a single asset subject to a single recovery period would achieve the goal of simplicity but at the

expense of the goals of economic efficiency and fairness. A simple rule classifying some personal property as longer-lived real property would significantly extend depreciation lives beyond their economic lives.

When the IRS has addressed this issue, they have emphasized that the determination of personal (IRC Section 1245) property is "factually intensive and must be supported by corroborating evidence."[1] The IRS has identified what it considers to be a "quality" cost segregation study. They note that "Methodologies that yield accurate cost allocations expedite the Service's review, saving time and resources for taxpayers, practitioners, and Service examiners alike."[2] As noted above, the Large and Mid-Size Business division has issued field directives for efficient examinations of depreciation of tangible property used in a retail or restaurant business.[3]

Ensuring the correct depreciation treatment of bundled investments is factually intensive, so it does require resources of both taxpayers and tax administrators. Agreement up-front on appropriate methodologies and bright-line tests for distinguishing different types of property and quality cost segregation studies, similar to the proposed Advance Depreciation Agreement, can reduce potential future disputes and lower the cost of achieving more economically efficient and fair outcomes.

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[1] Internal Revenue Service, Cost Segregation Audit Techniques Guide, April 30, 2004.
[2] Ibid.
[3] Internal Revenue Service, Field Directives on the Planning and Examination of Cost Segregation Issues in the Retail and Restaurant Industries, December 16 and 27, 2004, respectively.

Testimony of

Kenneth D. Simonson
Chief Economist

on behalf of
The Associated General Contractors of America

Presented to the

United States Senate
Committee on Finance
Subcommittee on Long-Term Growth and Debt Reduction

on the topic of

Updating Depreciable Lives: Is There Salvage Value in the Current System?

July 21, 2005

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Thank you for this opportunity to present views on depreciation on behalf of The Associated General Contractors of America (AGC). I am Kenneth D. Simonson, AGC's Chief Economist. AGC is the largest and oldest national construction trade association in the United States. AGC represents more than 32,000 firms, including 7,000 of America's leading general contractors, and over 11,000 specialty-contracting firms. More than 13,000 service providers and suppliers are associated with AGC through a nationwide network of chapters.

Construction's Role in the Economy and the Tax System

Construction is a major force in the economy. The value of construction put in place—for residential construction, nonresidential building, and nonbuilding construction, or public works—totaled $1.03 trillion, or nearly 9% of gross domestic product (GDP), in 2004. The work was performed by roughly 700,000 construction businesses, employing 7.2 million workers. There were also 2.1 million "nonemployer businesses" in construction, roughly one out of eight such businesses in the country, making construction one of the largest channels for self-employment.

The industry also is a backbone of manufacturing. Census Bureau figures show that shipments of construction materials and supplies totaled $471 billion—nearly 11% of all domestic manufacturing shipments in 2004. Shipments of new construction machinery accounted for $29 billion, or 11%, of all domestic machinery shipments. Construction firms spent billions more on imported and used equipment. They also spent billions on vehicles, computers, and other equipment that are not classified as construction machinery but are integral to their business.

Because equipment, tools, and vehicles are so essential in construction, capital cost recovery rules—depreciation, expensing, tax credits, recapture, etc.—are an important aspect of the taxes contractors must contend with. Getting depreciation right for construction equipment and for assets used by construction firms is vital for all construction-related businesses—contractors, supplier industries, and building owners.

Although construction collectively contributes a lot to GDP and employment, most construction firms are very small. In 2002, more than 91% of construction firms had fewer than 20 employees. Only 1% had 100 or more, and just 457 firms (0.07%) had 500 or more.

Construction is a good route into business for many entrepreneurs, with relatively low barriers to entry. But the industry also has a high rate of exit. Census data prepared for the Office of Advocacy of the U.S. Small Business Administration shows that nearly 79,000 construction firms in 2002 did not have employees in 2001 and were presumably new businesses, while 81,000 businesses closed.

These facts suggest that most construction firms do not have the size or experience to be able to cope with complex or frequently changing tax rules. **A simple, rational, and relatively stable set of tax rules, particularly with reference to capital cost recovery, will enable small contractors to adapt and concentrate on building a strong economy rather than being forced to become tax experts.**

Current and Recent Tax Treatment of Construction Assets

MACRS. The Modified Accelerated Cost Recovery System (MACRS) includes a category called "construction assets," which can be written off over five years. Most other assets used by construction firms also are eligible for five-year write-offs: heavy trucks, such as dump trucks, concrete mixers and pumpers, and mobile cranes; light trucks, such as panel trucks and pickups used to transport plumbing or electrical gear, work crews, and supervisors; and computers and office equipment.

Used property has the same write-off period as new property, with the new owner using the purchase date and amount to start the clock running anew. Usually, write-offs are "front-loaded," or accelerated, to allow larger percentages of the cost or "basis" to be deducted in the early years, using the "double-declining balance" method of depreciation.

Sec. 179 expensing. Under Internal Revenue Code section 179, contractors (and other taxpayers) who buy no more than $400,000 of equipment in a year can expense (immediately deduct) up to $100,000 of eligible property. (Both figures are indexed for inflation after 2003.) This provision, which was raised to the current limits only for investments in 2003-2007, simplifies tax accounting for many small contractors but creates disparate treatment for those

whose investments exceed the threshold. Currently, the expensing option phases out at a rate of $1 for every $1 by which total investment exceeds $400,000, and disappears for investments that total $500,000 or more in a year. Furthermore, the limits will drop from $100,000 and $400,000 (indexed) to $25,000 and $200,000 (unindexed) after 2007, unless Congress extends the current limits.

Bonus depreciation. During 2002-2004, taxpayers of all sizes were allowed to expense 30% (later raised to 50%) of the cost of new equipment placed in service by December 31, 2004. This was known as "bonus depreciation," although the "bonus" actually represented greater acceleration, not an increment beyond the actual cost of the asset. Furthermore, states varied as to whether they allowed all, some, or none of the bonus depreciation on state income tax returns, further complicating recordkeeping and tax calculations.

AMT. Both C corporations and businesses that are taxed at the individual level, such as S corporations, partnerships, and sole proprietorships, must recalculate depreciation for alternative minimum tax (AMT) purposes, using a longer write-off period and/or less accelerated method than double-declining balance. This requirement forces businesses to maintain two depreciation schedules for federal tax purposes.

Taxpayer Views on Current Depreciation Rules

In response to the invitation to testify at this hearing, AGC conducted a quick survey by email. Contractors and their tax advisors were asked to answer four questions:

1) Does the depreciation schedule for equipment affect the amount or timing of your purchases?
2) Did the higher limits for expensing for small investors, or the temporary "bonus" depreciation in effect last year, make a difference in amount or timing of purchases?
3) Should the depreciation schedule ("useful life") be adjusted for any particular class of equipment you use?
4) Do you have any other recommendations or observations [for] the subcommittee?

The answers are summarized below. Verbatim responses are in the Appendix.

Write-off period and method. For the most part, contractors found that the **accelerated five-year write-off is a fair reflection of the life and decline in economic value of major machinery**. However, some contractors found that **hand tools and smaller equipment, such as pumps, generators, and tamps**, tend to be worn out or damaged beyond the cost of repair after less than five years and **should be written off over three years or expensed**. In addition, contractors (like taxpayers in many other industries) reported that their **computers and associated software are obsolete in far less than five years**. A few also recommended shorter write-offs for used equipment. (However, determining the tax treatment of an asset that comprises a mix of new and used components, or the status of an asset that is sold shortly after first being placed in service, could make such a change in law too complex to be desirable.)

Tax influence on investment decisions. Contractors and advisors had a range of answers as to whether depreciation rules affect the amount and timing of investment. Some said investments are based wholly or largely on expected need for business reasons; others said that the after-tax cost is important and depreciation does make a difference.

Influence of bonus depreciation and sec. 179. As for the temporary bonus depreciation, several stated that the bonus had led to more investment; some said it had led them to accelerate purchases to meet the expiration date; others said it had no, or minimal, effect on buying decisions. A few expressed a wish for continuation of the provision. One CPA said that limiting the bonus to new equipment affected clients' decisions whether to buy new or used equipment.

The only respondent who commented specifically on small-investor expensing said his firm had engaged in sale/leasebacks to keep its purchases low enough to qualify for expensing.

Other recommendations. An oft-repeated recommendation was to **eliminate the AMT, or at least the separate depreciation** required for it. Finally, two respondents asked for reinstatement of the investment tax credit.

Capital Cost Recovery for Pollution Control Equipment

Over the next several years, progressively stricter emissions standards will be introduced for new diesel-powered offroad equipment, including construction equipment. However, there is no requirement to phase out use of existing equipment. Because equipment lasts a long time, the

emissions reductions associated with new equipment will be realized slowly unless owners of existing equipment also reduce emissions.

The Environmental Protection Agency (EPA) has developed a Verified Technology List for diesel-powered equipment, which lists devices that achieve a demonstrated reduction in one or more pollutants for specified engine makes and models. But adding these devices, or repowering or replacing a diesel engine, is expensive. Contractors generally receive no financial benefit from the expense of overhauling their equipment.

AGC believes it is appropriate, therefore, to **allow contractors to expense the cost of purchasing and installing pollution-reducing devices** listed on the Verified Technology List. Such tax treatment would be consistent with that provided under Code sec. 179A (deduction for clean-fuel vehicles and certain refueling property) and sec. 179B (deduction for small refiners for capital costs incurred in complying with EPA sulfur regulations). By limiting the deduction to items on the EPA list, the environmental benefits would be maximized and the revenue loss minimized.

Depreciation and the Demand for Construction Services

Contractors seldom own the real property they construct. But they can be significantly affected by changes in depreciation rules meant to affect owners and developers. For instance, the introduction of the original Accelerated Cost Recovery System in 1981, which greatly shortened and front-loaded the write-off periods for buildings as well as equipment, helped instigate a speculative building boom. The boom turned to a bust after passage of the Tax Reform Act of 1986, which hit real property especially hard, bankrupting contractors as well as building owners.

Since 1986, Congress has continued to adjust the depreciation period for several types of real property. When these changes are undertaken not to achieve neutrality in investment decisionmaking, but to raise revenue, contractors are likely to suffer more than investors. Many investors can readily find alternative uses for their funds, but contractors who purchased equipment, hired and trained personnel, and undertook managerial expenses in the expectation of a certain volume of business, cannot switch as easily.

AGC therefore recommends that Congress **avoid stretching out the cost recovery for real property**. Conversely, temporary enhancements of real-property depreciation should be left in place for an extended period to be effective and to allow contractors to adjust. For instance, the shortening of write-off periods for leasehold improvements and restaurant property (from 39 to 15 years) that is due to expire at the end of 2005 should be extended for several years, not just one year at a time, as is frequently done with expiring provisions.

Cost Recovery and Tax Restructuring

The comments above have addressed the effect of current or recently expired tax provisions on construction. But this Committee may soon consider much more sweeping changes to the tax code. How should the concerns and recommendations above fit into either small-scale tax adjustments or a major overhaul of the system?

First, change is costly, especially for small businesses. Time that owners must spend learning about a revision in the law, evaluating their new options or requirements, and executing changes is time taken away from running a business. Furthermore, many businesses are too small and/or unprofitable to take advantage of tax "opportunities" or "incentives," particularly short-lived ones. Therefore, **Congress should resist most short-term changes or ones for which complexity outweighs the benefit delivered**.

Second, changes often have unintended consequences. Construction firms have incurred enormous expense complying with "percentage of completion" accounting rules. These tax rules were enacted to match income and expense for extremely long-lasting defense and aerospace contracts but were written in a way that applies to ordinary construction jobs that span more than one year. Because the projects are typically finished within two years, changes in tax liability quickly "wash out" in the second year, but not before contractors have paid a lot to their accountants. **Congress should allow parties time to comment on proposed tax changes before enacting them, so that the consequences can be anticipated as widely as possible and taxpayers are given time to adjust**.

Third, the after-tax cost of assets does make a difference. For instance, reducing emissions from existing construction equipment provides a benefit to the public but not directly

to the owner. **Congress should compensate owners who provide that public benefit by reducing the cost of emissions-reducing capital.**

Summary

The current five-year, accelerated cost recovery method for most property used by construction firms is appropriate in the context of an income tax. Exceptions for which shorter lives, or expensing, are appropriate include: computers and related software; small tools and equipment that tend to wear out in less than five years; and pollution-control devices added to existing equipment.

Short-term incentives have a high cost in terms of requiring small businesses to spend precious managerial or owner's time learning, choosing, and adapting to the new "opportunity." Most incentives should be enacted on a long-term basis. An added reason to eschew short-term depreciation changes is that states increasingly have "decoupled" or only partially adopted the federal changes, adding further complexity and confusion to an already over-complex system.

The alternative minimum tax causes expense and misery for millions of corporate and individual taxpayers. Elimination of this dual system should be Congress's ultimate goal. Most contractors would effectively be removed from the burden of the AMT if the separate depreciation calculation were eliminated. If that cannot be accomplished quickly, small taxpayers should be granted relief by steeply and regularly raising the floor for the AMT.

Appendix

Answers to AGC's Informal Survey Regarding Capital Cost Recovery for Construction

AGC asked contractors and their tax advisors, via email, to answer the following questions:

1) Does the depreciation schedule for equipment affect the amount or timing of your purchases?
2) Did the higher limits for expensing for small investors, or the temporary "bonus" depreciation in effect last year, make a difference in amount or timing of purchases?
3) Should the depreciation schedule ("useful life") be adjusted for any particular class of equipment you use?
4) Do you have any other recommendations or observations [for] the subcommittee?

Verbatim answers are as follows:

Contractors' responses

1) Not really
2) Not really
3) Yes, depreciation periods for computers and buildings should be shortened.

1) No
2) No
3) Currently, we have no problems with the useful life

1) NO 2)NO 3)NO 4)NO

My answer to your question number three, is that in the medical field, the rules stipulate a five year useful life for DME (durable medical equipment). My experience with acute care hospitals and private physicians since 1993 is that the market value (and therefore useful life) of DME declines by about 50% to 80% in the first 24 months. Similar to the computer you use at work every day, medical equipment technology advances at an incredibly rapid rate. Does the device still have utility? Yes. But, a year from now, it won't perform as well as newer units with more advanced technology. As a result the value of almost-new DME plummets within a very short time. For example, one year ago, an ophthalmologist might have paid $125,000 for a new retinal camera. Here we are a year later, if that physician had to sell that camera today, he would be lucky to get $50,000 for it. Same for items like phacoemulsifiers and so on. Technology improves constantly, and nobody in a high-tech industry wants old technology. Especially when old technology means a higher risk of misdiagnosing a patient.

1 & 2) Equipment investment decisions in our business are based primarily on business/project needs; the depreciation schedules and the existence of bonus depreciation is only a distant secondary consideration. The tax depreciation schedules for equipment are relatively short and bonus depreciation is only shifting the write-off between years. If Congress wants to do something significant to encourage equipment investment it should consider the old investment tax credit.
3) The useful life classes for equipment are generally reasonable.
4) Tax Simplification!!!!
Congress needs to do something about AMT. The "normal/average" business or individual should not have to figure their taxes two ways. If we can't afford the loss of the AMT revenue, we need to adjust the regular tax rates to cover the loss. A business should have to figure its tax depreciation only one way - period. Our whole tax system is based on voluntary compliance; I believe simplification would increase compliance.

1) Yes 2) yes 3) Yes, computer servers

I always consider timing, any potential bonus depreciation and other tax rules when we purchase pieces of iron. Yes, indeed, it does make a difference. We try to look at the economics of any acquisition first, but, tax consequences are a close second. One suggestion I have is that small pieces (I would define them as costing less than $5K such as small pumps, generators and the like) should be depreciated over three years, not five. They simply don't last five years under tough conditions.

We used bonus depreciation for the purchase of a 210 tn crane. I think it would be useful if they took a look at simply expensing and eliminate depreciation for tax purposes. It would certainly have a positive short term effect. The long term tax would be the same.

1) The normal "long term – 7-10 year" depreciation is too long. Realistically our heavy equipment should be 5-7 years. Although the equipment will last longer, the productivivty and cost effectivnes falls off dramatically after 5 years. In addition there is more efficient equipment coming on the market; that makes our current fleet not as efficient as compared to the newer "stuff" out there. As a result we cycle our equipment out on a much shorter life than the depreciation life. This costs more, we have paid for it, but not been able to fully depreciate it.
2) ABSOLUTELY! The accelerated depreciation allowed us to buy probably $2,000,000 more equipment than we would have bought with out it.
3) AS stated above, yes. I think used equipment should also be afforded a reduced depreciation rate, say 20-30%.

The bonus depreciation helped considerably and did have an effect on our timing of purchases. We could better afford to purchase equipment by taking advantage of the accelerated depreciation expense at the end of the year. We would liked to have seen it last a little longer!

Well, first of all there is no question that the post-911 bonus depreciation had a huge effect on the timing and quantity of equipment purchases. I can speak specifically of my own experience at Ghilotti Bros. who are big equip purchasers and we accelerated many purchases and probably purchased more due to the bonus depreciation available. As far as the useful life affecting depreciation, certainly a more accelerated write off would have some effect, but with the current 5 year double-declining balance method available on most construction equipment, there probably isn't a whole lot more you could do there. I think the two biggest factors congress should look at are:
1) the impact of the alternative minimum tax. As I said previously, the 5 year DDB method provides a very reasonable economic recovery of asset cost that is not inconsistent with maintaining a productive fleet of equipment, but the fact that much of it can and does get stripped away when the AMT is imposed, can take a lot of the benefit away.
2) I still have fond memories of the old investment tax credit days. It seems to me that better than bonus depreciation and more accelerated depreciation methods the ITC is an ideal way to incentivize (is this a word) contractors because it is a permanent benefit not merely a timing difference. I wonder how many relatively unsophisticated contractors have been or will be hit with large tax liabilities once the bonus depreciation runs out and they realize in a year or two that they don't have any depreciation deductions left and, if their book income is down, will find themselves without the cash to pay the taxes due.

Yes.
IRS 5 year life on Computers is ridiculous. It should be half that useful life (24-36 mos).

The accelerated depreciation (ie. 50% in year purchased for new equipment) was the major reason that we purchased over 1.5 MILLION in new equipment in the last couple of years. I feel that this depreciation law had a lot to do with keeping our economy moving forward and also was a contributing factor to the success of many equipment suppliers and manufacturers. My company is just one of millions of small businesses that made investments in new equipment because of enhanced depreciation laws.
In most cases we finalized purchases of equipment prior to our 12/31 year end.
It would be beneficial to small business as well as to the United States economy to keep accelerated depreciation in place.

1) It was a consideration, but just one of several factors we look at
2) Yes, Since we typically exceeded limits, we did a sales/leaseback on enough of our equipment purchases during the year, so that we could take advantage of it.
3) Not a big concern

1) yes 2) yes 3) leasehold improvements should be more closely tied to the term of the lease - not 39 years.

1) Minimal impact
2) Yes
3) In current depreciation guidance, there seems to be no consideration given to whether a piece of equipment is acquired new or used. The "useful life" of a used dumptruck, backhoe, etc should be less than the 5 year asset class.

Capital Acquisitions are driven much more by anticipated need and expected utilization. Only at year end do we accelerate or defer acquisitions of assets for a temporary timing. The bonus Depreciation, has marginal impact on decision buying.
According to the most recent Construction Financial Management Association data, General Contractors, maintain a 1.7% margin before tax. For large capital acquisitions, utilization and justification of future need for the asset are much more important factors when deciding on a major acquisition.
Asset lives for most construction equipment are reasonable and acceptable. Larger heavy iron certainly has a much longer anticipated life than the 5 years allowed by the IRS, however, for contractors wishing to account for the longer life, different lives for tax and financial books would be an option that would allow for a more reasonable (longer) financial life for book while maintaining accelerated tax advantages allowed under current law.
The only real class of assets that the life seems unreasonable are Computer Hardware. The current 5 year life is far too short for an asset that becomes obsolete within three. As contractors get more automated and sophisticated, this continues to be an issue shared with the rest of the country.

Tax Advisors' Responses

1) yes
2) yes
3) leasehold improvements useful life should be reduced. 39 yrs is not reasonable, particularly when lease terms often do not exceed 10 years. The 15 year life for LHI put in place by AJCA 2004 is much more reasonable, but is too temporary (placed is service dates between 10/22/04 and 12/31/05)
4) Continue increased section 179 limits. Is there anything they can do on the federal level to make it appealing for states to not decouple from the federal rules? The increased section 179 and bonus depreciation were great, but the states decoupling from these rules created accounting headaches.

The construction industry is effected by the useful lives that owners have for the commercial, residential and factory buildings they build. Lives of 39 years are not generally consistent with the useful economic lives of most buildings today. Too many changes are occuring that obsolete uses of buildings in a shorter period Accelerated methods align a proper matching of costs to revenues. Granted the physical facilities will most likely be there, but their use will most likely have changed. In short, real estate should have shorter, accelerated lives to match the economic use of the facilities-without penalty for using shorter or accelerated lives.

It is certainly my experience that bonus depreciation was a significant motivator in allowing many of my contractor clients to make purchases of equipment that they would not have not made at the time due to other economic concerns.

In answer to your questions, I believe the useful lives of computers should be reduced to 3 years. Rarely does a desktop or server last longer than that before it is obsolete.

As a CPA, I see several contractors, so would like to reply to your questions on behalf of them:
1) Yes - we consult with our contractors on a regular basis regarding the cost/benefits of equipment purchases including amount, timing and structure of transactions.
2) Yes - we have numerous contractors purchase equipment in order to take advantage of the bonus depreciation. We considered the cost of the equipment after taxes in order to evaluate the true cost of the equipment including the timing of the acquisition.
3) Not that I am aware of.
4) The impact of Alternative Minimum Tax resulting from depreciation methods for the small businesses.

1. The tax depreciation schedule does not affect the amount or timing of purchases.
2. Bonus depreciation did not affect purchase decisions.
3. Nearly all construction equipment is depreciated over a 5 year life, which is fair.
4. Eliminate AMT preference for construction equipment depreciation. Both methods use a 5 year life but AMT is based on 150% declining balance method and regular tax depreciation uses double declining balance

As a CPA working with a number of homebuilders and developers I can offer the following answers to your questions.
Yes, business owners do decide to make purchases to take advantage of certain depreciation incentives. The higher limits do and did make a difference in terms of both the timing and amounts of purchases that were and will be made.
Computer and technology equipment should have a shorter life than 5 years. 3 years would be more appropriate.
They should not use real property depreciation lives as a mechanism for balancing out revenue. Lets stick with the current system of 39 years commercial and 27 years residential.

I can provided some quick thoughts based on what I know my clients have considered. Some quick thoughts.....
1) It is a consideration and is planned when the company has a need for replace or add to it's operating equipment base
2) Absolutely. Certain companies made decisions to acquire assets as a result of this bonus depreciation and the pending expiration date .
3) Small equipment items and or hand tools that are required to be capitalized have a life that far exceeds it's utility in most cases. Those assets are generally required to be depreciated over 5 years and often the asset is not useable for more than 1 or 2 years.
4) Eliminate depreciation AMT adjustments. In other words keep the methods and lives for deprecation purposes that same for AMT vs. Regular income tax

1) Minimal impact
2) Yes
3) In current depreciation guidance, there seems to be no consideration given to whether a piece of equipment is acquired new or used. The "useful life" of a used dumptruck, backhoe, etc should be less than the 5 year asset class.

My thoughts are that the depreciation system is a record-keeping nightmare. Between books, tax, AMT, ACE, State, etc., my clients are paying a lot of money to someone to account for what is essentially a very simple process. Not sure if that fits in with your discussion, but wanted to pass that along.

1) Based on our client experience, the answer is yes. If a client is debating on whether or not to purchase a piece of equipment, the depreciation benefits are definitely a factor and in some cases, the main factor in determining when to purchase something.
2) Yes, this affected the decision of whether to buy new or used. Obviously, used equipment was taken out of the bonuse depreciation equation. Also, the fact that they received the accelerated depreciation was also a huge consideration, as to whether or not to buy a piece of equipment. The 6, 000 lb original rule for vehicles in relation to no limit was very effective in getting many large SUV's, Hummers, etc on the road in the last couple years. Obviously, that has now been minimized. The real benefit for the

bonus depreciation was for equipment intensive businesses (i.e. heavy highway contractors, etc) that could now benefit, whereas they generally are not allowed to use the Section 179 because they purchase in excessive of the annual limits.
3) The useful life for most assets appears reasonable.

I am a CPA in public practice and am responding in relation to how my clients reacted regarding the new depreciation rules, etc.

Other Responses

Tax credits with equipment and with real estate are very helpful to stimulate the economy. Cost segregation is a good example of how important the fast write off is to businesses/ Also, sec/ 179 and the extra 50% for 168 focus on these issues. [professor]

1) It certainly does. Long depreciation times are risky -- I know how business is now, but not how it will be in 5, 7 or 10 years. An item that can be depreciated fully the first year reduces our taxes by 41.4%. The net present value of the same item depreciated over ten years is 28.5%. On a $100,000 equipment purchase, the difference eats up $13,000 that could be invested in my business.
2) Yes, both.
3) Computers and programming are ridiculous. We should get to expense them instead of depreciating them. Shorter is better for everything, though.
4) This is extremely important to small business, especially. In Kansas, it saves us on state income taxes, too. [supplier]

On your questions, no to all three. [supplier]

This is not a majority view, but in my small business with about $1.5 million annually in revenue, I would prefer a permanent tax change to be able to expense everything in the year I buy it. Amortization and depreciation just do not make sense for small business. You should be able to take the full purchase price as a cost in the year you buy it. The fact it is rendering value in subsequent years is much overstated, as technological obsolescence negates much of that. Furthermore, business is either booming (when you buy) or doing nothing, and in those do nothing year you don't need to take the costs of prior year purchases becasue they are not offsetting any revenue. [consultant]

COMMUNICATIONS

NATIONAL ASSOCIATION OF
REAL ESTATE INVESTMENT TRUSTS®

Statement of the

National Association of Real Estate Investment Trusts®

to the

Subcommittee on Long-Term Growth and Debt Reduction
Of the Senate Committee on Finance

Regarding the Hearing Held July 21, 2005 on

Updating Depreciable Lives: Is There Salvage Value in the Current System?

◆ ◆ ◆

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The National Association of Real Estate Investment Trusts® (NAREIT) respectfully submits these comments in connection with the hearing of the Subcommittee on Long-Term Growth and Debt Reduction of the Senate Finance Committee held on July 21, 2005 regarding tax depreciation. NAREIT thanks the Chairman and the Subcommittee for the opportunity to provide these comments.

NAREIT is the representative voice for United States real estate investment trusts (REITs) and publicly traded real estate companies worldwide. Members are REITs and other businesses that own, operate and finance income-producing real estate, as well as those firms and individuals who advise, study and service these businesses.

EXECUTIVE SUMMARY

By way of background, the American Jobs Creation Act of 2004 (Jobs Act) shortens the depreciation recovery period with respect to qualified leasehold improvements placed in service before January 1, 2006 from 39 years to 15 years. NAREIT appreciates Congress' leadership in enacting this important legislation. However, because of certain tax rules applicable to REITs, particularly concerning the calculation of "earnings and profits" (E&P), the intended benefits associated with the shortened recovery period will not be passed on to REIT shareholders. Additionally, REITs may face the possibility of failing to meet the distribution requirement to maintain their REIT status. Accordingly and as further described below, NAREIT respectfully requests that Congress consider a conforming modification to the calculation of E&P to allow 15-year leasehold depreciation treatment to flow through to REIT shareholders and to avoid the risk of REITs' failing to meet the distribution requirement.

DISCUSSION

Background

In general, depreciation is determined under the modified accelerated cost recovery system (MACRS) as provided under § 168 of the Internal Revenue Code of 1986, as amended (the Code). Prior to the Jobs Act, § 168 provided that leasehold improvements were depreciated over 39 years for tax purposes, regardless of whether the improvements were made by the lessor or the lessee or whether the recovery period for the improvement was longer than the term of the lease.

A 39-year recovery period for leasehold improvements extends well beyond the useful life of the investments, and leases of commercial real estate typically are shorter than the 39-year recovery period. Therefore, the Jobs Act shortens the recovery period for qualified leasehold improvement property that is placed in service before January 1, 2006 to a more realistic period of 15 years because Congress believed that taxpayers should not be required to recover the costs of certain leasehold improvements beyond the useful life of the investment. Although lease terms differ, a uniform period of 15 years for recovery of qualified leasehold improvements was chosen in the interests of simplicity and ease of administration. *See* H.R. Rep. No. 548, 108th Cong., 2d Sess.

122 (2004). NAREIT strongly supported this provision and believes it should be made permanent.

Issue

A REIT is a corporation or business trust combining the capital of many investors to own, operate or finance income-producing real estate, such as apartments, shopping centers, offices and warehouses. Congress created the REIT structure in 1960 to make investments in large-scale, significant income-producing real estate accessible to investors from all walks of life. The shareholders of REITs unite their capital into a single economic pursuit geared to the production of income through commercial real estate ownership. REITs offer distinct advantages for smaller investors: greater diversification through investing in a portfolio of properties rather than a single building and expert management by experienced real estate professionals.

REIT shareholders may receive income from investments in real property without the income being subject to taxation at the entity level. However, REITs are required to comply with several investment and operational requirements in order to maintain REIT status. For example, REITs are required to distribute at least 90% of their taxable income to their shareholders pursuant to § 857 of the Code and must pay tax on any taxable income that they do not distribute. C corporations have no such distribution requirement. REIT shareholders are particularly conscious of the REIT distribution requirement and the benefit of REIT dividends. In fact, over the last 20 years, dividends have represented approximately 2/3 of the REIT industry's annual compound total return, as measured by the NAREIT Equity REIT Index.

Because a REIT is not itself a pass-though entity (*e.g.*, REIT losses cannot be passed through to shareholders), the only mechanism for obtaining the pass-through effect is the deduction for dividends paid by the REIT. In general, only distributions of money or property out of accumulated or current E&P are included in the dividends paid deduction.[1]

For purposes of determining the amount of a distribution that constitutes a dividend and, thus, the amount eligible for the dividends paid deduction, REITs generally are required to calculate their E&P pursuant to § 312.[2] In many instances, REITs make distributions at or above their current E&P levels (as well as above their current taxable income) in order to minimize entity-level federal tax liability and to meet shareholder investment-return expectations. Hence, it is typical for REITs to have little or no accumulated E&P.

While REITs are entitled to depreciate qualified leasehold improvement property over the shortened recovery period of 15 years, the corresponding recovery period for E&P purposes was not shortened by the Jobs Act beyond 39 years.[3]

This difference in recovery periods for qualified leasehold improvement property could, if the 15-year life of such property is extended as we believe it should be, potentially have a negative

[1] *See* §§ 562 and 316.
[2] *See* Treas. Reg. § 1.856-1(c)(6) and (7).
[3] §§ 312(k)(3)(A), 168(g)(3)(B). *See also* § 168(e)(3)(E)(iv).

effect on REIT shareholders and prevent the intended benefits associated with the shortened recovery period from being realized.

For example, a REIT claims depreciation deductions on qualified leasehold improvement property over 15 and 39 years, respectively, in determining its taxable income and E&P. The potentially negative effect of not conforming taxable income and E&P depreciation deductions can be illustrated by the effects that may occur during years 1-15 of the depreciation recovery period and years 16-39 of the depreciation recovery period, respectively, as set forth below.

Years 1-15: Shareholders' Taxable Dividends May Exceed REIT's Taxable Income

Excluding other E&P adjustments, the REIT will have less taxable income than its E&P during the first 15 years due to the shorter recovery period for taxable income. Because the taxability of distributions to shareholders is based on E&P which has a much longer recovery period of 39 years, essentially, REIT E&P will be "artificially" high, thereby resulting in the shareholders' paying tax on an amount of income that exceeds the amount of income earned by the REIT. Thus, REIT shareholders will not realize the intended benefits associated with the shortened recovery period of 15 years.

Years 16-39: Possible Failure to Meet 90% Distribution Test/ Shareholders' Taxable Dividends May Continue to Exceed REIT's Taxable Income

When such qualified leasehold improvement property is fully depreciated after 15 years, the REIT's taxable income subsequently will be greater than its E&P because of continuing depreciation deductions for E&P purposes that are no longer occurring for purposes of calculating taxable income. To the extent the difference caused by the different recovery periods is substantial, the REIT that typically distributed in excess of taxable income in the past (thereby eliminating its E&P in such years) may face a situation in which its E&P is less than 90% of its taxable income. Because its deduction for dividends paid is limited by its E&P, the REIT may fail to have a deduction for dividends paid equal to at least 90% of its taxable income.[4]

Furthermore, the effect on REIT shareholders noted above could continue: REIT E&P could be "artificially" high, thereby resulting in the treatment of an "artificially" greater portion of shareholders' distributions as taxable dividends.[5] Thus, in a worst case scenario, the difference

[4] Section 857(d)(2) provides that a REIT will always be treated as having adequate earnings and profits to make distributions as dividends sufficient to avoid the excise tax under § 4981. The rules for determining the "required distribution" for purposes of avoiding the excise tax under § 4981 are complicated, but they basically require a distribution as a dividend of 85% of the REIT's ordinary income and 95% of the REIT's capital gain net income. Because § 857(d)(2) only ensures sufficient earnings and profits to avoid the excise tax and does not provide sufficient earnings and profits to meet the 90% distribution test under § 857(a)(1), it is possible that the REIT could fail the distribution test due to the depreciation of tenant improvements.

[5] If the increased depreciation of tenant improvements for earnings and profits purposes in years 16-39 require a REIT to invoke § 857(d)(2) so that it would have enough earnings and profits to avoid the excise tax under § 4981, this effective disallowance of depreciation would cause the REIT shareholders to report artificially high dividend income in those years. In addition, there is an alternate view that no deductions for depreciation are permissible against E&P in years 16-39 due to the application of § 857(d)(1) (which prohibits reducing E&P for any taxable year by an "amount" not "allowable" in computing taxable income for such year). If this view were correct, the REIT should not fail to meet its 90% distribution requirement. On the other hand, a REIT shareholder would be placed in

in recovery periods may cause a REIT to lose its REIT status and be subjected to tax at both the entity and shareholder levels.

Proposed Solution

When Congress enacted the shortened 15-year depreciation period for leasehold improvements last year, it is unlikely that the effects on REITs and their shareholders described above were intended or contemplated.

Accordingly, we respectfully request that any further extension of the 15-year recovery period for qualified leasehold improvement property be accompanied by an amendment to Code § 168(g)(3)(B) to provide a corresponding 15-year recovery period to qualified leasehold improvement property for E&P purposes.

NAREIT thanks the Subcommittee for the opportunity to submit these comments on this important issue.

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an even worse position with the 15-year depreciation period than it is in with a 39-year depreciation period. Under this view, E&P would be reduced in years 1-15 based on a 39-year depreciation recovery period, but E&P would not be reduced at all in years 16-39, thereby greatly increasing the taxable portion of the REIT's distribution in the latter years. Thus, the shareholder could end up paying tax on income that greatly exceeds the income that is earned by the REIT.

The Real Estate Roundtable

TESTIMONY

TO

SENATE FINANCE COMMITTEE

HEARING ON

"UPDATING DEPRECIABLE LIVES: IS THERE SALVAGE VALUE

IN THE CURRENT SYSTEM?"

JULY 21, 2005

Summary

The estimated value of the nation's depreciable real estate is in the several *trillion* dollar range. Therefore, the method by which the federal tax system allows building owners and investors to compute tax depreciation is of critical importance to real estate and its contribution to the overall economy.

The current tax depreciation system uses a modified composite approach for real estate. This means that structures, even though they are comprised of several component assets, are depreciated as one composite asset. Nonresidential structures are depreciated over 39 years, straight line and rental residential structures are depreciated over 27.5 years, straight line. The modification to this composite approach was enacted last year when Congress passed, as part of the American Jobs Creation Act of 2004 ("Jobs Act"), a law allowing 15 year depreciation for leasehold improvements (walls, ceilings, plumbing, lighting, flooring, electrical, communication and computer wiring and ports).

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The Real Estate Roundtable (the "Roundtable")[1] supports generally the modified composite approach with three caveats:

1. Current real estate depreciation lives (especially 39 years for nonresidential property), are longer than the actual rate of economic depreciation experienced by buildings. These overall composite lives should be shortened.

2. 15 year leasehold improvement depreciation should be a permanent part of the Tax Code.

3. A conforming modification should be made to allow 15 year leasehold depreciation treatment to flow through to REIT shareholders.

Background

Real estate generates $2.9 trillion our nation's GDP – nearly one-third of total GDP. It accounts for about 23 percent of the total income, property and sales tax collected by all levels of government, is responsible for over 9 million jobs and contributes about 12 percent of the gross domestic product. Privately owned, non-residential buildings are worth about $5 trillion, including 4 billion square feet of office space, 13 billion square feet of industrial property, almost 6 billion square feet of shopping center space and 4.4 million hotel rooms. The value of privately owned residential structures is over $15 trillion and includes 33 million square feet of rental apartment space.

A depreciation system should be designed to equalize tax burdens on different types of assets. If the tax burden is unequal, capital flows could be skewed towards assets with the lowest tax burden. The Congressional Research Service Report entitled "Depreciation and the Taxation of Real Estate" May 12, 1999 by Jane Gravelle cites depreciation treatment of structures as a reason for the tax burden on real property being higher than that on equipment. While difficult to quantify, this higher tax burden creates an un-level investment playing field in favor of equipment.

Building owners and investors are not the only ones to bear the burden of this impact. It clearly has an effect on a building owner's ability to provide business tenants with the most suitable, modern and efficient build outs of their space. This affects productivity, particularly of small businesses whose dynamic growth patterns result in frequent changes in their space needs. The construction trades also suffer when capital flow is diverted from real estate to other assets for tax reasons. Architects, brokers and building managers, likewise are negatively affected.

Therefore, we are pleased that the Committee is holding this hearing to examine the depreciation system and we appreciate the opportunity to provide comments. Recovery periods for structures (27.5 years for rental residential and 39 years nonresidential) are long and the depreciation methods relatively slow by historical standards.

According to Congressional Research Service Economist Jane Gravelle, the resulting tax burden on structures is higher relative to other income producing assets such as equipment. Ms. Gravelle notes in her 1999 study that, "Shortening tax lives for structures to 20 years, or perhaps a little less, or adopting double declining balance and shortening of all tax lives to the current life allowed for residential structures (or perhaps a little less) would bring effective tax rates on structures and equipment into line…". (Page 11)

A U.S. Department of Treasury study entitled: "Depreciation Recovery Periods and Methods" July 2000 reached a similar conclusion. The study noted that, "Assuming straight line depreciation, a 30 year recovery period would give nonresidential structures about the same marginal effective tax rate as implied by estimates of economic depreciation. Straight line depreciation over 20 years would give nonresidential structures about the same marginal effective tax rate as currently faced by equipment." (Page 89)

Similar conclusions were likewise noted in a Deloitte & Touche study entitled "Analysis of the Economic and Tax Depreciation of Structures" June 2000 commissioned by the Roundtable and several real estate trade associations. The Deloitte study improves upon prior depreciation studies of structures in measuring their economic life. Those prior studies looked at the date a structure was placed in service and the date it was taken out of service in measuring economic life. They did not account for the fact that a significant amount of post-construction capital expenditures are made throughout the life of a building that extend its life.

The Deloitte study accounts for post-construction capital expenditures. The most significant of these expenditures are leasehold improvements followed, in no particular order, by roofing, HVAC, escalators and elevators. The Deloitte study concludes that if a new building was placed in service and no post-construction capital expenditures were made, it would generally have an economic depreciation range between 18 and 23 years. (Page 39)

The Roundtable is not advocating a specific composite useful life for structures at this time. We do maintain, however, that 39 years and 27.5 years are longer than the economic life ranges concluded by the three studies discussed above and depreciation reform should narrow this differential.

Recent History of Depreciation of Buildings

Prior to the adoption in 1981 of the composite depreciation life for structures, depreciation laws distinguished between the building shell, which was assigned a relatively long life, and its components, which were assigned lives generally in line with their actual lives. The rules also differentiated among property types as well as new and used property. Additionally, accelerated recovery methods were permitted.

The Economic Recovery Tax Act of 1981 eliminated these distinctions and in their place provided a 15 year life for all structures but maintained the ability to use accelerated depreciation. Since 1981, the 15 year life has increased incrementally to 27.5 for residential real estate and 39 years for nonresidential real estate and the accelerated method eliminated. However, the distinctions that existed prior to 1981, by and large, were not reinstated. This has created a disparity between the tax depreciation treatment of structures and their actual economic depreciation and resulted in the current need to reexamine the depreciation treatment of structures. A modified composite depreciation approach that adopts a limited number of component classes (such as leasehold improvements) would result in a more accurate reflection of the economic useful life of structures.

Roundtable Criteria for Real Estate Depreciation

We believe a properly designed tax depreciation system should equalize tax burdens on different types of assets and take into account the underlying factors limiting useful life. These factors include the following:

1. **Physical deterioration** evidenced by wear and tear, decay, dry rot, cracks or structural strain.

2. **Functional obsolescence** due to technological change, design improvements, outmoded or poor planning, changing standards of required or desired accommodation and inadequate building style.

3. **Economic obsolescence** due to changes in neighborhood economic factors such as the development of new properties inharmonious in use to existing properties, changes in zoning, environmental conditions and access or egress conditions.

Remedial action, such as repairs or renovation, often corrects loss of value caused by physical deterioration or functional obsolescence. Economic obsolescence, however, and many aspects of functional obsolescence, are incurable within the context of an individual project. The ultimate measure of depreciation in any asset, whether due to physical deterioration, functional factors or economic obsolescence, is its loss of value.

An asset's useful life expires when the amount of the obsolescence it has experienced is equal to the original cost of the asset. This point is reached when the fair market value of the land is equal to the economic value of the project. The penalty of delay in redeveloping the land to its highest and best use will result in a negative economic value and lost opportunities. The prudent landowner, responsive to economic opportunities, would replace existing obsolete improvements with the higher and better use from which greater economic benefit can be derived.

Modified Composite Depreciation Approach

The component method of depreciation, which allows different elements of a building to be depreciated over different periods of time, more accurately reflects the factors of useful life described above. Structures are not monolithic assets but are instead composites of several different assets such as the structural shell, leasehold improvements, heating, ventilation and air conditioning (HVAC) units, mechanical systems, elevators and escalators, communications and electrical wiring, plumbing and roofing. A single recovery period (39 years) for commercial structures of all different types, whether new or used, and a single recovery period for all rental residential structures (27.5 years) regardless of type and age simply does not measure economic depreciation as accurately as component depreciation.

Regardless of its shortcomings, the current composite depreciation system has appeal because it is simple, and is fairly easy to comply with and administer. We recognize and appreciate the past administrative difficulties associated with the pre-1981 component depreciation system and do not advocate returning to it. We also recognize the deficiencies of this approach discussed in the Congressional Research Service Report entitled "Depreciation and The Taxation of Real Estate." We do not wish to introduce any more complexity into the Tax Code than is necessary to achieve fair taxation. However, the lives of building components need to be factored into real estate depreciation. At a minimum, the composite depreciation life for structures should reflect a weighted average of the lives of building components.

While we do not recommend returning to full component depreciation, we believe it is appropriate to modify the current composite system to allow a limited number of component classes. This would provide a more focused view of the real estate asset. As described further below, leasehold improvements certainly would qualify as a separate component class. Other potential component classes include HVAC, elevators and escalators, roof coverings and communication and data systems.

Leasehold Improvement Component Depreciation

Permanent 15 Year Leasehold Depreciation Urged

The Real Estate Roundtable urges the Committee to make permanent, or at a minimum extend, Internal Revenue Code Section 168(e)(3)(E)(iv) which provides 15 year depreciation for qualified leasehold improvements. This law enjoys broad, bipartisan support among the Senate Finance Committee and the entire Senate as well but expires at the end of 2005. S. 621, bipartisan legislation introduced by Senators Kent Conrad and Jon Kyl would make 15 year leasehold depreciation permanent. House companion legislation is H.R. 1663 (Shaw-FL).

Background

Leasehold improvements are the improvements that a building owner makes to a tenant's leased space so the space can fulfill the business needs of the tenant. They consist primarily of internal walls, ceilings, partitions, plumbing, lighting, floor coverings, electrical and communication outlets and computer data ports.

Until the enactment of the American Jobs Creation Act of 2004 ("Jobs Act"), leasehold improvements were depreciated over 39 years as part of the structure. Typically, lease terms for commercial property average less than 10 years. Determined on a percentage of floor space, 77 percent of retail leases, 83 percent of office leases and 95 percent of industrial and other leases are for primary terms of 10 years or less.

At lease end, these improvements often are removed. The primary reason for removal is that the improvements made to suit a business tenant's particular space needs often are not suitable for the next tenant. Physical wear and tear, as well as functional or economic obsolescence also factor into the replacement decision. The bottom line economic reality is that leasehold improvements have an average useful life of less than 10 years.

The cost burden created by 39 year depreciation for these shorter lived assets diminishes the ability of building owners to be responsive to the modern space needs of their tenants. A lessened ability to provide the most modern, desirable and efficient leasehold improvements impairs the vitality and viability of buildings and, in turn, the neighborhoods and communities in which they are located.

Small businesses, in particular, feel the affect because they have a dynamic growth rate and their space needs change along with their growth. The right leasehold improvements are critical to that work space being the best suited for their business productivity and efficiency. Overly burdensome tax treatment jeopardizes the ability of real estate owners to achieve that outcome for tenants.

15 Year Leasehold Depreciation Boosts Growth

The temporary 15 year depreciation for leasehold improvements enacted by the Jobs Act largely alleviates the growth hampering effect caused by 39 year depreciation. This new law, (IRC Section 168)(e)(3)(E)(iv)) broadly supported by the real estate industry and among its highest tax policy priorities, is a shining example of good tax policy. Like the recently expired 30 and 50 percent bonus depreciation provisions, it is having a positive impact on motivating leasing activity and creating efficient, modern work environments. Permanent 15-year depreciation is needed to help continue to foster this productive result.

Almost $250 billion is invested in commercial real estate improvements annually -- with $15 billion of that amount going to leasehold improvements. The impact of this investment on the economy doubles to $30 billion as it filters through the economy primarily because it increases the output and employment of construction companies, building material suppliers and construction-related services.

This kind of capital investment is something our economy sorely needs. Real estate is fueling, and will continue to fuel, the engine of economic growth. There are more than 10 million people involved in virtually every aspect of the real estate business. Real estate accounts for approximately 20 percent of the nation's gross domestic product and contributes well over $1 trillion to it annually.

REIT Conforming Modification

A technical conforming change is needed to the rules governing the taxation of Real Estate Investment Trust (REIT) distributions to allow the intended shortening of leasehold depreciation to benefit REIT shareholders.

A REIT is not taxed provided it distributes 90 percent of its taxable income to shareholders. In calculating taxable income, the REIT is entitled to use 15 year leasehold depreciation. Since the REIT doesn't pay tax, the benefit of this shorter depreciation should flow through and be reflected at the shareholder level. However, shareholders calculate the amount of REIT distribution that is taxable as a dividend and the amount not taxable as a return of capital based on the earning and profit calculation rules (Section 312). Those rules were not amended by the Jobs Act and still require that leasehold depreciation be calculated at 39 years for shareholders.

Denying 15 year depreciation to REIT shareholders clearly was not intended by lawmakers when enacting the Jobs Act. To clarify and conform the law, Section 312 should be amended to provide that REIT shareholder earning and profits calculation uses 15 year leasehold depreciation.

Publicly traded REITs have a total equity market capitalization of $307 billion. Tens of thousands of individual investors own shares of REITs.

Conclusion

Three recent depreciation studies each conclude that straight line depreciation of 39 years for nonresidential structures and 27.5 years for rental residential structures is substantially slower than the rate of economic depreciation experienced by structures. The CRS and Treasury studies conclude that economic depreciation of structures equates to about a 30 year depreciation life. The Deloitte study concludes the economic life of structures ranges between 18-23 years. This difference is attributable to the fact that Deloitte accounts for the fact that post-construction capital expenditures extend a property's useful life. The other studies do not account for post-construction expenditures and instead look at placed in service and out of service dates.

Furthermore, all three studies note that building lives must be shorter than economic life to put buildings on an equal tax footing with equipment. The Roundtable believes the differential between current law depreciation lives and the useful lives discussed in these studies needs to be bridged so that real estate is taxed more fairly and that the flow of investment capital is not skewed away from real estate by tax law.

Permanent 15-year leasehold depreciation will have a positive impact on motivating leasing activity. Approximately $15 billion worth of leasehold improvements are made annually. The impact of this investment on the economy doubles to $30 billion as it filters through the economy primarily because it increases the output and employment of construction companies, building material suppliers and construction-related services. Allowing it to expire would not be

good tax policy and would serve as a significant tax increase on real estate owners, tenants and contractors.

If you have any questions, please contact Steve Renna, Roundtable Senior Vice President and Counsel. Thank you.

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[1] The Real Estate Roundtable is a federal policy organization comprised of real estate industry leaders. Its members are the Chairmen, Presidents or Chief Executive Officers of the nation's 100 leading commercial and multifamily firms, and the Managing Directors of major financial institutions. The Roundtable also includes the elected membership leaders of Washington's major real estate trade organizations. It serves as the vehicle through which industry leaders come together to identify, analyze and advocate policy positions on issues important to real estate. Collectively, Roundtable members hold portfolios containing over 5 billion square feet of developed property valued at more than $700 billion.

Statement of the U.S. Chamber of Commerce

ON: UPDATING DEPRECIABLE LIVES: IS THERE SALVAGE VALUE IN THE CURRENT SYSTEM?

TO: SENATE FINANCE COMMITTEE
SUBCOMMITTEE ON LONG-TERM GROWTH AND DEBT REDUCTION

DATE: JULY 21, 2005

BY: MARTIN A. REGALIA, PH.D.
VICE PRESIDENT AND CHIEF ECONOMIST

STATEMENT
on
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for submission to the
SENATE FINANCE COMMITTEE
SUBCOMMITTEE ON LONG-TERM GROWTH AND DEBT REDUCTION
On behalf of the
U.S. CHAMBER OF COMMERCE
By Martin A. Regalia, Ph.D.
Vice President and Chief Economist

July 21, 2005

My name is Dr. Martin A. Regalia, and I am Vice President, Economic and Tax Policy, and Chief Economist of the U.S. Chamber of Commerce. The U.S. Chamber is the world's largest business federation, representing more than three million businesses and organizations of every size, sector and region. This breadth of membership places the Chamber in a unique position to speak for the business community. Mr. Chairman, Senator Kerry and Members of this Subcommittee, we appreciate this opportunity to express our views on the issue of depreciation, and we commend you for holding these hearings.

DEPRECIATION OF ASSETS

A taxpayer is allowed to recover the cost of certain property used in a trade or business or for the production of income. This is usually accomplished through annual depreciation deductions. The deduction allowed with respect to tangible property is generally determined under the modified accelerated cost recovery system ("MACRS") through which different types of property are assigned applicable recovery periods and depreciation methods. Depreciation of an asset begins when the asset is placed in service.

Special cost recovery rules operate as exceptions to the foregoing general rules. Examples include, but are not limited to: luxury autos; alternative depreciation system ("ADS") property used outside the U.S.; certain tax-exempt use property; liberty zone property; leasehold and restaurant improvements; and section 179 "small business" assets. Furthermore, in calculating alternative minimum tax, taxpayers are generally required to calculate depreciation for certain assets under modified rules.

SOME PROBLEMS WITH THE CURRENT SYSTEM – AND SOME SUGGESTIONS FOR IMPROVEMENT

Depreciation allowances are important elements of the true economic cost of an investment and of incentives to invest. The rate of depreciation directly influences the effective tax rate on capital income and, consequently, affects cash flow, saving, and investment.

A significant problem with the depreciation system is that it restricts the recovery of asset investment. Spreading recovery of this cost over time has the effect of diluting it, as each successive year's depreciation allowance loses value to inflation. Inflation, in turn, increases the marginal effective tax rate. Accelerating depreciation allowances can help reduce these problems. In the alternative, indexing depreciation deductions for inflation would help serve this purpose. Expensing of capital assets would be an even simpler, straightforward solution.

The current system provides different benefits for holders of different forms of capital, thus distorting investment and production decisions. The efficient allocation of capital requires that investment be taxed equally – if not, capital will be allocated inefficiently. This fact supports expensing of capital assets as a remedy for inequities caused by the Internal Revenue Code's depreciation methodology.

The tax system's complexity incorporates a multitude of depreciation methods and deemed asset lives, often imposing numerous calculations on a single taxpayer. This burden is often compounded by the necessity of having to perform several additional computations for purposes of calculating the alternative minimum tax. Consequently, the recordkeeping requirements for asset cost recovery can become mind-numbing. Administration and compliance often prove onerous both for the taxpayer and the government. Expensing of assets would greatly simplify these processes.

CONCLUSION

Converting to a system of expensing capital assets would have many benefits. As the Treasury Department's Report to the Congress on Depreciation Recovery Periods and Methods (2000) stated:

> Expensing would offer the potential for both benefits and costs compared to the current tax system. A benefit of expensing is that it would lower marginal effective tax rates, thereby improving incentives to save and invest. It also would reduce differences in taxes on alternative investments, thereby improving the productivity of our nation's capital stock. Expensing would effectively index cost recovery (and capital gains) on qualified investments for inflation, because all of the investment's cost would be recovered immediately and would have a present value independent of the future rate of inflation. It may simplify the tax system by eliminating the compliance and other administrative costs associated with determining proper tax allowances for depreciation.

The U.S. Chamber of Commerce has long supported movement away from the existing depreciation system to one of more rapid cost recovery of productive capital assets – and, ultimately, one of immediate cost recovery, i.e., expensing. We believe that this would solve many of the problems embodied in the current U.S. tax code and go a long way toward achieving the simplification of the U.S. tax system that the President and Congress is seeking. We urge Congress to consider incorporating broader expensing provisions in its upcoming efforts to reform the Internal Revenue Code.

The U.S. Chamber of Commerce is the world's largest business federation, representing more than three million businesses and organizations of every size, sector, and region.

More than 96 percent of the Chamber's members are small businesses with 100 or fewer employees, 70 percent of which have 10 or fewer employees. Yet, virtually all of the nation's largest companies are also active members. We are particularly cognizant of the problems of smaller businesses, as well as issues facing the business community at large.

Besides representing a cross-section of the American business community in terms of number of employees, the Chamber represents a wide management spectrum by type of business and location. Each major classification of American business -- manufacturing, retailing, services, construction, wholesaling, and finance – is represented. Also, the Chamber has substantial membership in all 50 states.

The Chamber's international reach is substantial as well. It believes that global interdependence provides an opportunity, not a threat. In addition to the U.S. Chamber of Commerce's 102 American Chambers of Commerce abroad, an increasing number of members are engaged in the export and import of both goods and services and have ongoing investment activities. The Chamber favors strengthened international competitiveness and opposes artificial U.S. and foreign barriers to international business.

Positions on national issues are developed by a cross-section of Chamber members serving on committees, subcommittees, and task forces. More than 1,000 business people participate in this process.