

**Testimony of Dr. Thomas S. Neubig  
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**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.<sup>1</sup> I co-wrote several years ago an article with the title, “21<sup>st</sup> 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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<sup>1</sup> 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,<sup>2</sup> 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

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<sup>2</sup> 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 date 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 21<sup>st</sup> 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.