Deficit Reduction: The Economic and Tax Revenue Effects of the Personal Exemption Phaseout (PEP) and the Limitation on Itemized Deductions (Pease)

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Summary

The Omnibus Budget Reconciliation Act of 1990 (OBRA90; P.L. 101-508) created two provisions, the personal exemption phaseout (PEP) and the limitation on itemized deductions (often called "Pease"), that raised taxes on high-income taxpayers. Many observers complained that these provisions were nothing more than a "back door" tax rate increase. A decade later, the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA; P.L. 107-16) was enacted (part of what became known as the "Bush tax cuts"), which included the phased-in repeal of both PEP and Pease between 2006 and 2009. PEP and Pease were completely eliminated in 2010. Both tax provisions, however, were to be reinstituted beginning with the 2011 tax year, but the reintroduction was postponed until the 2013 tax year by the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (P.L. 111-312). PEP and Pease were reinstated for taxpayers with adjusted gross income exceeding $250,000 for singles, $275,000 for heads of households, and $300,000 for married couples by the American Taxpayer Relief Act of 2012 (P.L. 112-240).

Various criteria have been offered for determining a good tax system, including simplicity, equity, and efficiency. The issues associated with PEP and Pease are how these two tax provisions affect the tax system in meeting these criteria. PEP and Pease affect the tax system along three dimensions. The first is the effect on the complexity of the tax code. The second is how economic efficiency is affected. Last is the effect PEP and Pease have on equity.

The reintroduction of PEP and Pease could increase tax revenues by about $9 billion per year. Both tax provisions, however, have been referred to as back door tax rate increases on higher-income taxpayers that do not appear on any tax table. While these provisions would somewhat increase the complexity of the individual income tax, the burden of this complexity would be eased by the use of paid tax preparers and tax preparation software. These provisions could distort economic decision making, but any distortions would likely be relatively small. PEP and Pease would slightly reduce income inequality, but could affect taxpayers with dependents more than taxpayers without dependents, and thus could be perceived as unfair.

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In the Omnibus Budget Reconciliation Act of 1990 (OBRA90; P.L. 101-508), Congress included two new tax provisions that were projected to raise $28.7 billion between FY1991 and FY1995. President George H.W. Bush, despite his 1988 campaign pledge "Read my lips: no new taxes," signed the bill on November 11, 1990. The two provisions, the personal exemption phaseout (PEP) and the limitation on itemized deductions (often called "Pease"), were targeted to high-income taxpayers and were somewhat controversial. Many observers complained that these provisions were nothing more than a "back door" tax increase.[1]

A decade later, the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA; P.L. 107-16) was enacted (signed by President George W. Bush on June 7, 2001), which phased in the repeal of both PEP and Pease.[2] The phase-in began with the 2006 tax year and PEP and Pease were completely eliminated in 2010. The phased-in repeal of PEP and Pease were estimated to reduce tax revenues by $33.0 billion between FY2006 and FY2011. Both tax provisions, however, were to be reinstituted beginning with the 2011 tax year. The reintroduction of PEP and Pease was postponed until the 2013 tax year by the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (P.L. 111-312) with a projected revenue loss of $20.7 billion.

PEP and Pease were reinstated for taxpayers with adjusted gross income exceeding $250,000 for singles, $275,000 for heads of households, and $300,000 for married couples by the American Taxpayer Relief Act of 2012 (P.L. 112-240). The reinstatement of PEP and Pease will increase tax revenue by about $9 billion in 2013. This report describes PEP and Pease and evaluates the issues surrounding these two provisions.

Description of PEP and Pease

PEP and Pease were reinstated by the American Taxpayer Relief Act of 2012. The income thresholds in inflation-adjusted terms of these two provisions are higher than they were in 2009 (the last year that PEP and Pease were in effect).

Personal Exemption Phaseout (PEP)

The Tax Reform Act of 1986 (TRA86; P.L. 99-514) dramatically changed the income tax rate structure by reducing the number of tax brackets from 14 to 2 and reducing the top statutory marginal tax rate from 50% to 28%. However, to meet distributional and revenue requirements, a 5% surcharge on the taxable income of certain high-income taxpayers was imposed, effectively creating a third tax bracket at 33%. The surcharge was phased-in and then phased-out as income increased thus creating a tax rate "bubble" with the marginal tax rate actually decreasing from 33% to 28% as income rose. The 5% surcharge was created to recapture the benefits of the 15% tax rate (the lowest tax rate) and personal exemptions from high-income taxpayers. OBRA90

[1] See, for example, J. Andrew Hoerner, "'Pease Plan' Emerges as Key Issue in Debate Over Tax Progressivity," *Tax Notes*, October 29, 1990, pp. 498-500.

[2] The tax cuts enacted by EGTRRA and the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA; P.L. 108-27) are collectively known as the Bush tax cuts. See CRS Report R41393, *The Bush Tax Cuts and the Economy*, by Thomas L. Hungerford.

eliminated the surcharge, instituted three tax brackets, and created the personal exemption phaseout.

In 2013, for most taxpayers, the deduction for personal exemptions is equal to $3,900 times the number of exemptions claimed. For taxpayers with adjusted gross income (AGI) over $250,000 for singles, $275,000 for heads of households, or $300,000 for married couples, the deduction for personal exemptions is reduced; the reduction of personal exemptions is calculated using a short worksheet. Personal exemptions are phased-out by 2% for each $2,500 by which a taxpayer's AGI exceeds a given threshold.[3] For example, a married taxpayer with AGI of $395,000 exceeds the threshold by $95,000 ($395,000 minus $300,000). This excess is divided by $2,500 to yield 38. This is multiplied by 2% to yield the exemption disallowance rate of 76%—the taxpayer's deduction for personal exemptions is reduced by 76% or $2,964 for each exemption. Taxpayers with AGI greater than $122,500 over the threshold cannot take the deduction for personal exemptions.[4]

If this married taxpayer with AGI of $395,000 had two exemptions, the deduction for personal exemptions would be reduced by $5,928 from $7,800 to $1,872. This taxpayer would be in the 33% tax bracket, but because of the personal exemption reduction their effective marginal tax rate would be 35.06%—a 2.06 percentage point increase in the effective marginal tax rate.[5] The percentage point increase in the effective marginal tax rate depends on the number of exemptions claimed. For example, a taxpayer with the same AGI but four exemptions would face an effective marginal tax rate increase of 4.12 percentage points. Taxpayers with AGI over the maximum AGI for taking personal exemptions face an effective marginal tax rate equal to the statutory marginal tax rate (for example, a married taxpayer with AGI of $440,000 faces an effective marginal tax rate of 35% whereas a taxpayer with AGI of $420,000 faces a 37.18% effective tax rate).[6]

Limitation on Itemized Deductions (Pease)

The limitation on itemized deductions included in OBRA90 was drafted by Representative Donald Pease of Ohio, a member of the House Ways and Means Committee, and has subsequently been referred to as "Pease" by tax policy experts. The basic idea of Pease was to increase taxes on high-income taxpayers without explicitly increasing tax rates. Pease only affects taxpayers above the AGI thresholds ($250,000 for singles, $275,000 for heads of households, or $300,000 for married couples) who itemize deductions. For these taxpayers, the total of certain itemized deductions is reduced by 3% of the amount of AGI exceeding the threshold. The total reduction, however, cannot be greater than 80% of the deductions (and the taxpayer always has

[3] The 2005 threshold was $250,000 for single taxpayers, $300,000 for married taxpayers filing joint returns (half this for married taxpayers filing separate returns), and $275,000 for heads of household.

[4] The maximum AGI for taking personal exemptions is $372,500 for singles, $422,500 for married couples, and $397,500 for heads of households.

[5] The effective marginal tax rate is calculated by dividing the increase in tax liability due to an income increase by the increase in income. Suppose AGI increased by $2,500. The deduction for personal exemptions would be reduced to $1,716, taxable income (AGI minus personal exemptions minus deductions) would increase by $2,656, and tax liability would increase by $876.48. Dividing $876.48 by $2,500 yields an effective marginal tax rate of 35.06%.

[6] The personal exemption phaseout essentially replaced the surcharge tax bubble with another tax bubble. In the debate over OBRA90, Representative Thomas Downey, a member of the House Ways and Means Committee, reportedly referred to the new tax bubble as the "new bubble or blister or pustule or whatever you want to call it" (J. Andrew Hoerner, "Taxes Raised 'Marginally' On Well-To-Do Filers," *Tax Notes*, November 5, 1990, pp. 599).

the option of taking the standard deduction). The deductions not subject to the Pease limitation are medical and dental expenses, investment interest, and casualty and theft losses.

Itemized deductions and the Pease limitation are both reported and calculated in the Schedule A of the 1040 tax form. The Pease limitation was calculated in a short worksheet. As an example, take a married taxpayer with AGI of $385,400 and $40,000 in itemized deductions before the Pease limitation. Let $4,000 be for medical expenses above 7.5% of AGI and $36,000 in other deductions (i.e., mortgage interest, state and local taxes, and charitable contributions).[7] Of the total deductions, $36,000 will be subject to the Pease limit. The Pease reduction is equal to 3% of $85,400 (the amount of the $385,400 AGI over $300,000) or $2,562.[8] With the Pease reduction, this taxpayer can claim only $37,438 in itemized deductions.

Note that the Pease limitation does not depend on the amount of itemized deductions, only AGI. For a taxpayer affected by Pease, a $1.00 increase in AGI will increase taxable income by $1.03 because itemized deductions have been decreased by $0.03. (An increase of itemized deductions of $1 will decrease taxable income by $1.) Consequently, the effective marginal tax rate will be 3% higher than the statutory marginal tax rate. For example, a taxpayer in the 35% tax bracket faces an effective marginal tax rate of 36.05%—an increase of about 1 percentage point.

Interactions with the Alternative Minimum Tax

Both PEP and Pease increase tax revenues. PEP and Pease affect tax liability under the regular individual income tax system. A parallel tax system, the alternative minimum tax (AMT), however, is not affected by PEP and Pease.[9] Taxpayers subject to the AMT (generally high-income taxpayers) do not have their overall tax liability affected by PEP and Pease.

Table 1 shows how PEP, Pease, and the AMT interact to affect the effective marginal tax rate for stylized taxpayers with different income levels. A taxpayer with AGI of $100,000 is not subject to the AMT and is not affected by PEP or Pease—their effective marginal tax rate is equal to the statutory marginal tax rate of 15%. As AGI increases, taxpayers are affected by PEP and Pease and the effective marginal tax rate under the regular income tax system is greater than the statutory rate (see the second and third columns of **Table 1**). The stylized taxpayers with AGI between $250,000 and $500,000 are affected by the AMT. Although their regular income tax liability is affected by PEP and Pease, it is the AMT that determines their effective marginal tax rate.[10] Furthermore, for two of these taxpayers, the effective marginal tax rate is increased by the AMT exemption reduction.

[7] Medical expenses are deductible only to the extent that they exceed 7.5% of AGI.

[8] The 80% of itemized deductions cap ($28,800 in this case) is not binding.

[9] AMT taxable income includes many tax preference items that are excluded from regular taxable income such as certain tax-exempt interest and various deductions. The AMT is slightly graduated with two tax rates: 26% and 28%. The AMT does include an AMT exemption reduction of 25% of the amount that AMT taxable income exceeds certain threshold amounts, which in effect increases the effective AMT tax rate by 25% (7 percentage points). High-income taxpayers have to calculate regular income tax liability and the AMT; they pay the higher of the two. See CRS Report RL30149, *The Alternative Minimum Tax for Individuals*, by Steven Maguire for more details.

[10] Nevertheless, these taxpayers would have to calculate their exemptions and itemized deductions using the PEP and Pease worksheets.

Table 1. Marginal Tax Rates for Stylized Taxpayers, 2013

(married and filing joint return)

AGI	Regular Income Tax		AMT	Actual Effective Tax Rate
	Statutory Rate	Effective Rate		
$100,000	15.00%	15.00%	-	15.00%
$150,000	25.00%	25.00%	-	25.00%
$200,000	28.00%	28.00%	-	28.00%
$250,000	28.00%	28.00%	32.50%	32.50%
$400,000	33.00%	35.97%	35.00%	35.00%
$500,000	35.00%	36.05%	28.00%	28.00%
$1,000,000	39.60%	40.79%	-	40.79%

Source: CRS calculations using the Tax Policy Center (TPC) tax calculator model.

Notes: It is assumed that earnings are the only source of income, taxpayers live in California, pay $6,000 in property taxes, have $22,000 in mortgage interest and charitable contributions, and itemize deductions. AMT marginal tax rate includes AMT exemption reduction.

Table 2 reports the proportion of taxpayers in various income categories whose regular income tax liability and overall tax liability (including AMT) are affected by PEP and Pease. Among all taxpayers, 3.6% have their regular income tax liability affected by PEP and 6.5% are affected by Pease. But when looking at overall tax liability, only 1.9% of taxpayers are affected by PEP and 4.2% are affected by Pease because a substantial proportion have their overall tax liability determined by the AMT. Over half of the richest 1% of taxpayers have their overall income tax liability affected by PEP and Pease (see the last row in **Table 2**) although the vast majority would have to calculate the PEP and Pease reductions using the worksheets to calculate their regular income tax liability.

Table 2. Percentage of Taxpayers Affected by PEP and Pease, 2013

	PEP		Pease	
Income Category	Regular Income Tax Liability	Overall Tax Liability	Regular Income Tax Liability	Overall Tax Liability
All	2.1	0.5	2.0	0.5
Bottom 80%	0.0	0.0	0.0	0.0
Richest 20%	10.5	2.5	9.8	2.4
Richest 10%	20.9	5.0	19.7	4.7
Richest 5%	41.4	9.9	38.9	9.4
Richest 1%	86.5	34.8	81.2	32.8

Source: CRS analysis of 2007 Internal Revenue Service Statistics of Income Public Use File.

Notes: Income category is based on equivalence-adjusted income (total income divided by the squared root of the number of exemptions).

Economic Evaluation of PEP and Pease

Philosopher and economist Adam Smith argued that a good tax system should meet four criteria:

1. Simplicity—Taxes should be clearly stated, known to all, and not arbitrary;
2. Convenience—Taxes should be collected in a way to minimize the pain of paying taxes;
3. Efficiency—A tax system should minimize the cost of collecting the tax and the economic distortion of the tax; and
4. Equity—Taxes should be based on the ability to pay and the benefits received from the government .[11]

Any economic evaluation of tax provisions should examine the effects on the tax system with regard to meeting these criteria. PEP and Pease affect the tax system along various dimensions, which are analyzed in the following sections. The first is the effect on the simplicity and convenience of the tax code. The second is how economic efficiency is affected. Last is the effect PEP and Pease have on equity.

Simplicity and Convenience

Over the years, many observers have argued that the income tax system has become more complex and is in need of simplification.[12] It has been noted that a complex tax system can reduce

[11] Adam Smith, *The Wealth of Nations*, Cannan ed. (New York: The Modern Library, 1937), pp. 777-779.

[12] See, for example, Charles E. McLure, Jr., "The Budget Process and Tax Simplification/Complication," *Tax Law Review*, vol. 45 (1989-1990), pp. 25-95; Deborah L. Paul, "The Sources of Tax Complexity: How Much Simplicity Can Fundamental Tax Reform Achieve?," *North Carolina Law Review*, vol. 76 (1997-1998), pp. 151-221; Leonard Burman and William G. Gale, *A Golden Opportunity to Simplify the Tax System*, Brookings Institution, Policy Brief no. 77, Washington, DC, April 2001; and U.S. Congress, Joint Committee on Taxation, *Study of the Overall State of the* (continued...)

voluntary compliance, increase compliance costs for both taxpayers and the Internal Revenue Service (IRS), reduce perceptions of fairness of the tax system, and increase the difficulties in administering tax laws.[13] For example, the IRS estimated that the average taxpayer in 2005 filing the form 1040 plus various other forms and schedules (e.g., for itemized deductions and capital gains) spent 27.5 hours preparing their tax return. This, however, does not directly translate into perceptions of unfairness. Since 2000, about 60% of the individuals responding to a Gallup poll indicated that the amount of tax they expect to pay is fair—about the same proportion as in 1946 when the income tax was much less complex.[14]

Sources of Complexity

Among the various sources of complexity in the income tax system, tax preferences (or tax expenditures) have been identified as "the single biggest cause of complexity."[15] Charles McLure argues that many "back-stop" provisions that are intended to prevent (1) the abuse of tax preferences or (2) the appearance of inequity add considerably to the complexity of the tax system.[16] Both PEP and Pease reduce the appearance of inequity in the tax system by raising taxes on higher-income taxpayers.

The limitation on itemized deductions or Pease increases the effective marginal tax rate of higher-income taxpayers who itemize. In essence, it increases the tax rate of taxpayers who have reduced their taxable income by itemizing deductions. The George W. Bush Administration noted that while personal exemptions are not considered a tax preference or tax expenditure, they could be viewed as "a component of the income support policies effected through the income tax."[17] PEP reduces exemptions of high-income taxpayers. As back-stop devices, PEP and Pease increase tax receipts but at the expense of adding complexity to the tax code.[18]

About one-third of taxpayers itemize deductions, which requires filing Schedule A of the form 1040. Schedule A, in 2005, was a 29-line form for listing deductions.[19] In some cases, taxpayers have to complete other forms to determine the proper value of some deductions. About 13% of itemizers had income high enough to require calculation of the Pease reduction (line 28 on the

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Federal Tax System and Recommendations for Simplification, Pursuant to Section 8022(3)(B) of the Internal Revenue Code of 1986, committee print, prepared by the Staff of the Joint Committee on Taxation, 107th Cong., 1st sess., April 2001, JCS-3-01 (Washington: GPO, 2001).

[13] U.S. Congress, Joint Committee on Taxation, *Study of the Overall State of the Federal Tax System and Recommendations for Simplification, Pursuant to Section 8022(3)(B) of the Internal Revenue Code of 1986*, committee print, prepared by the Staff of the Joint Committee on Taxation, 107th Cong., 1st sess., April 2001, JCS-3-01 (Washington: GPO, 2001), p. 101.

[14] See Gallup, Inc. http://www.gallup.com/poll/1714/taxes.aspx. In 1946, most taxpayers filed a 10-line tax form with four pages of instructions.

[15] Paul R. McDaniel, "Federal Income Tax Simplification: The Political Process," *Tax Law Review*, vol. 34 (1978-1979), pp. 48.

[16] Charles E. McLure, Jr., "The Budget Process and Tax Simplification/Complication," *Tax Law Review*, vol. 45 (1989-1990), pp. 25-95.

[17] Office of Management and Budget, *Budget of the United States Government, Fiscal Year 2003*, Analytical Perspectives, Washington, DC, 2002, p. 96.

[18] PEP and Pease limit what could be considered tax preferences or tax expenditures, but both have been listed as tax expenditures (that gain revenue) by the Joint Committee on Taxation since 2008.

[19] For the 2010 tax year, the schedule A was a 30-line form.

2005 schedule A)—the added complexity due to filling out the Pease worksheet affected a relatively small minority of itemizers.

Use of Paid Tax Preparers

The increasing use of paid tax preparers has been cited as evidence of the increasing complexity of the tax system.[20] **Table 3** shows that the proportion of taxpayers using paid tax preparers increased from 47% in 1988 to 60% in 2003 and then fell to 57% in 2010. Research suggests that taxpayers with more complex tax returns (i.e., with more required forms and schedules) are more likely to use paid tax preparers.[21] In addition, research has shown that increases in the IRS audit rate and frequency of penalties increases the demand for professional tax preparers.[22] Between 1990 and 2008, the proportion of tax returns examined by the IRS increased from 0.8% to 1.0%. It is unlikely that instituting PEP and Pease significantly contributed to the increased use of paid tax preparers since the percentage of taxpayers using paid preparers increased by only 3 percentage points in the first five years after the passage of OBRA90. More likely sources of increased complexity since 1990 would be the increased number of tax brackets (from two to six), the increased proportion of taxpayers affected by the AMT (from 0.4% in 1995 to 2.8% in 2010), reduced and multiple tax rates on capital gains and dividends, and the proliferation of tax expenditures since the passage of TRA86.

Table 3. Percentage of Taxpayers Using Paid Tax Preparers, Various Years

Tax Year	Percentage
1988	47%
1990	48%
1996	51%
1999	55%
2003	60%
2005	60%
2008	58%
2010	57%

Source: Joint Committee on Taxation (1990 and 1999); IRS Statistics of Income Public Use File (1996), IRS, Taxstats, Estimated Data Line Counts (2003, 2005, 2008, and 2010), Ashley and Segal (1988).

[20] U.S. Congress, Joint Committee on Taxation, *Study of the Overall State of the Federal Tax System and Recommendations for Simplification, Pursuant to Section 8022(3)(B) of the Internal Revenue Code of 1986*, committee print, prepared by the Staff of the Joint Committee on Taxation, 107th Cong., 1st sess., April 2001, JCS-3-01 (Washington: GPO, 2001), p. 104. In addition, most taxpayers file their tax returns electronically using tax preparation software. In 2008, two-thirds of all tax returns and two-thirds of returns with Schedule A were filed electronically.

[21] Terry Ashley and Mark A. Segal, "Paid Tax Preparer Determinants Extended and Reexamined," *Public Finance Review*, vol. 25, no. 3 (May 1997), pp. 267-284; Charles W. Christian, Sanjay Gupta, and Suming Lin, "Determinants of Tax Preparer Usage: Evidence from Panel Data," *National Tax Journal*, vol. 46, no. 4 (December 1993), pp. 487-503; and James E. Long and Steven B. Caudill, "Tax Rates and Professional Tax Return Preparation: Reexamination and New Evidence," *National Tax Journal*, vol. 46, no. 4 (December 1993), pp. 511-517.

[22] Jeffrey A. Dubin, Michael J. Graetz, and Michael A. Udell, et al., "The Demand for Tax Return Preparation Services," *Review of Economics and Statistics*, vol. 74, no. 1 (February 1992), pp. 75-82.

The increased use of paid tax preparers and use of tax preparation software could ameliorate an argument against reintroduction of PEP and Pease—any added tax preparation burden does not fall directly on the taxpayers but rather on paid tax preparers, many of whom use tax preparation software.[23] While the burden of increased complexity due to PEP and Pease is considerably eased by the use of paid tax preparers and tax preparation software, the increased complexity could complicate taxpayers' decision-making process by blurring the tax consequences of economic decisions.

Efficiency

How a tax system affects economic efficiency is generally measured by how economic decisions are distorted. With regard to the income tax, the primary economic decisions considered involve work effort (or labor supply) and taxable income. It is often argued that increasing tax rates will reduce work effort, especially by high-income taxpayers.[24] For most taxpayers, the majority of income is from labor earnings or wages. Income taxes affect after-tax incomes and after-tax wages. A rise in the tax rate will reduce after-tax wages and, it is argued, work effort (i.e., labor supply).[25] A large empirical literature shows that men's labor supply is insensitive to changes in wages.[26] Additionally, a body of empirical work also suggests that men's labor is insensitive to changes in tax rates.[27] Recent research shows that even the labor supply of high-income men is insensitive to changes in tax rates.[28]

It had been argued that taxes can affect a married woman's labor supply directly by changing her after-tax wages and indirectly by changing her husband's after-tax wages. Early evidence showed that women's labor supply was more sensitive to wages than men's. Recent evidence, however, shows that married women's labor supply after 1990 was considerably less sensitive to their own wages and their husband's wages than before 1990—women's labor supply decisions were becoming more like men's.[29]

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[23] Any increased burden on paid tax preparers would indirectly be shifted back to taxpayers through higher tax preparer fees.

[24] See, for example, Martin Feldstein, "Tax Rates and Human Behavior," *Wall Street Journal*, May 7, 1993, p. A14; and N. Gregory Mankiw, "I Can Afford Higher Taxes. But They'll Make Me Work Less," *New York Times*, October 9, 2010.

[25] Economic theory suggests that the effect of earnings changes on labor supply is ambiguous. An earnings decrease has a price effect (substitution effect) and an income effect, which sum to the total effect. Earnings can be thought of as the price of leisure (that is, what is given up to increase leisure). If the price of leisure falls (due to a tax rate increase, for example), then an individual will purchase more leisure (i.e., work less), holding income constant. But if earnings fall then income also falls. This, by itself, leads an individual to purchase of all normal goods including leisure. The substitution and income effects thus work in opposite directions. Without additional information, the total effect cannot be determined.

[26] Robert McClelland and Shannon Mok, *A Review of Recent Research in Labor Supply Elasticities*, CBO working paper 2012-12, October 2012. The evidence comes from many studies using different data sources and different statistical specifications.

[27] See, for example, Costas Meghir and David Phillips, "Labour Supply and Taxes," in *Dimensions of Tax Design: The Mirrlees Review*, ed. Stuart Adams and others (Oxford: Oxford University Press, 2010), pp. 202-274; Robert A. Moffitt and Mark O. Wilhelm, "Taxation and the Labor Supply Decisions of the Affluent," in *Does Atlas Shrug? The Economic Consequences of Taxing the Rich*, ed. Joel B. Slemrod (Cambridge, MA: Harvard University Press, 2000), pp. 193-239.

[28] Robert A. Moffit and Mark O. Wilhelm, "Taxation and the Labor Supply Decisions of the Affluent," in *Does Atlas Shrug?*, ed. Joel B. Slemrod (Cambridge, MA: Harvard University Press, 2000), pp. 193-239.

[29] Francine D. Blau and Lawrence M. Kahn, "Changes in the Labor Supply Behavior of Married Women: 1980-2000," (continued...)

While income from labor supply may not be very sensitive to taxes, taxable income may be sensitive to tax changes. Taxpayers may be able to reduce taxable income by taking more deductions, deferring compensation, excluding income by contributing more to individual retirement accounts and 401(k) plans, or taking income in another form (e.g., as capital gains instead of earnings). High-income taxpayers typically have more opportunity to respond to tax changes and reduce taxable income through these methods.

Several studies have investigated the sensitivity of taxable income to tax rates. Most studies find that taxable income is more responsive to tax rate changes than labor supply, though the empirical estimates suggest that a 10% increase in tax rates could reduce taxable income by 1.2% to 4%.[30] Furthermore, the results generally show that high-income taxpayers are more sensitive to tax rate changes than lower-income taxpayers, and itemizers are more sensitive than nonitemizers (itemizers tend to be higher-income taxpayers). The empirical results suggest that much of the sensitivity of taxable income to tax rate changes comes from deductions and exemptions.[31]

Equity

Discussions of equity in a tax system generally center on two concepts: horizontal equity and vertical equity. Horizontal equity is primarily concerned with fairness—those with equal ability to pay taxes should pay equal taxes. The other concept, vertical equity, is concerned with how the taxation of taxpayers in different positions should differ. Vertical equity is commonly concerned with the progressivity of a particular tax (i.e., how the average tax rate changes as income increases).

Changes in tax provisions can affect after-tax income inequality (the redistributive effect of taxes). Income inequality can change because the gap between the poorest and richest taxpayers has changes (that is, vertical equity is affected) or because taxpayers are moved above or below other taxpayers in the income distribution (that is, horizontal equity is affected). Recent research suggests that PEP and Pease reduce income inequality by about 0.2% by making the income tax more progressive (affects vertical equity) without affecting horizontal equity.[32]

Because PEP depends on both AGI and the number of exemptions, the question arises as to whether or not taxpayers with and without dependents are affected differently. For 2013, it is estimated that about 45% of taxpayers calculating the PEP reduction claim exemptions for dependents.[33] Of these taxpayers, about half had their tax liability affected by PEP (the other half were unaffected primarily because of the AMT). Of the taxpayers affected by PEP, those with no

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Journal of Labor Economics, vol. 25, no. 3 (2007), pp. 393-438; Bradley T. Heim, "The Incredible Shrinking Elasticities: Married Female Labor Supply, 1978-2002," *Journal of Human Resources*, vol. 42, no. 4 (Fall 2007), pp. 881-918; and Kelly Bishop, Bradley Heim, and Kata Mihaly, "Single Women's Labor Supply Elasticities: Trends and Policy Implications," *Industrial and Labor Relations Review*, vol. 63, no. 1 (October 2009), pp. 146-168.

[30] See Emmanuel Saez, Joel B. Slemrod, and Seth H. Giertz, "The Elasticity of Taxable Income with Respect to Marginal Tax Rates: A Critical Review," *Journal of Economic Literature*, vol. 50, no. 1 (March 2012), pp. 3-50.

[31] Seth H. Giertz, "The Elasticity of Taxable Income over the 1980s and 1990s," *National Tax Journal*, vol. 60, no. 4 (December 2007), pp. 743-768.

[32] Thomas L. Hungerford, "The Redistributive Effect of Selected Federal Transfer and Tax Provisions," *Public Finance Review*, vol. 38, no. 4 (July 2010), pp. 450-472.

[33] The figures cited in this paragraph are based on CRS analysis of the 2007 IRS Statistics of Income Public Use File.

dependent exemptions are projected to pay $1,400 more in taxes because of PEP and Pease; those with dependent exemptions are projected to pay $4,900 more in taxes because of PEP and Pease. It appears that taxpayers with dependents may be more burdened by PEP than taxpayers with no dependents, which could violate the principles of horizontal equity.[34]

Concluding Remarks

The reintroduction of the personal exemption phaseout and the limitation on itemized deductions could increase tax revenues by about $9 billion per year. Both tax provisions, however, have been referred to as back door tax rate increases on higher-income taxpayers that "are not directly reflected on any tax table."[35] While these provisions would somewhat increase the complexity of the individual income tax, the burden of this complexity would be eased by the use of paid tax preparers and the use of tax preparation software. These provisions could distort economic decision making, but any distortions would likely be relatively small. PEP and Pease would slightly reduce income inequality, but could affect taxpayers with children more than taxpayers without children, and thus could be perceived as unfair.

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[34] There is no consensus on how the tax burden should be adjusted for differences in family size. For a recent analysis of this issue, see Julie-Anne Cronin, Portia DeFilippes, and Emily Y. Lin, "Effects of Adjusting Distribution Tables for Family Size," *National Tax Journal*, vol. 65, no. 4 (December 2012), pp. 739-758.

[35] Leonard Burman and William G. Gale, *A Golden Opportunity to Simply the Tax System*, Brookings Institution, Policy Brief no. 77, Washington, DC, April 2001, p. 6.