The Alternative Minimum Tax and Effective Marginal Tax Rates

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ABSTRACT

This paper examines the impact of the Alternative Minimum Tax on the weighted average marginal tax rates that apply to various components of taxable income. It also considers the impact of various AMT reform proposals on the number of AMT taxpayers and the total revenue collected from the AMT over the next decade. The paper uses the NBER TAXSIM model to project federal personal income tax liabilities as well as AMT liabilities between 2003 and 2013. The projections show that modest increases in the AMT exclusion level have substantial effects on the number of AMT taxpayers, and that indexing the AMT parameters would reduce the number of households with AMT liability from 36 to 14 million in 2010. The presence of the AMT has a modest impact on the average marginal tax rates on most income flows, because some AMT taxpayers face higher marginal tax rates, and others lower tax rates, as a result of the tax.

The Alternative Minimum Tax (AMT) is a provision of the U.S. income tax code that currently affects a modest number of taxpayers, but that promises to become an increasingly important component of the tax system in the coming decade. The minimum tax began in 1970 as a ten percent, and later a fifteen percent, tax on preferences in excess of $30,000. Preferences included accelerated depreciation, oil depletion, and the capital gains deduction. A deduction of one half of regular tax paid was allowed against preferences. This allowance was subsequently increased to allow all regular tax as a deduction. Net operating losses and retirement income received special treatment.

The minimum tax expired in 1981. Before its expiration, however, in 1979, a new "Alternative Minimum Tax" was established with a base that included all the components of Adjusted Gross Income (AGI) and the capital gains deduction in addition to preferences. The new AMT allowed the full amount of regular income tax as a credit. Aside from changes in the treatment of net operating losses and slight changes in the exclusion amount, this is the AMT that is currently in force, and that is scheduled to remain in force indefinitely. When a preferential tax rate for long-term capital gains was established in 1991, care was taken to avoid treating capital gains as a preference.

The AMT has been an active subject of recent tax policy discussion, particularly in the context of tax reform debates in 2001 and 2003. Both the Economic Growth and Taxpayer Relief Reconciliation Act of 2001, and the Jobs and Growth Taxpayer Relief Reconciliation Act of 2003, reduce income tax liabilities for broad classes of taxpayers. The decline in income tax increases the likelihood that these taxpayers will face the AMT, since it raises the chance that AMT will exceed income tax liability. The extent to which the AMT "takes back" these recent tax reductions has been widely debated, and this has led to calls for AMT reform or repeal. Burman, Gale and Rohaly (2003a, 2003b) have been particularly influential in the recent discussion of the AMT. Earlier studies that have recognized the long-run importance of the AMT as a component

of the U.S. tax system include Rebelein and Tempalski (2000), the U.S. Congress Joint Economic Committee (2001), Sullivan (2002), and Tempalski (2002).

In this paper, we use the NBER's TAXSIM program to develop new estimates of the number of taxpayers who will face the Alternative Minimum Tax in future years, and to evaluate the impact of the AMT on incentives to work and to save. Such estimates are necessarily speculative, since they rely on strong assumptions to project the future number of tax returns and the level and composition of income on these returns. Nevertheless, the projections can offer some insight on the likely future course of the AMT relative to the "regular" income tax system.

The paper is divided into five sections. The first describes the basic structure of the Alternative Minimum Tax and contrasts the AMT base with the income tax base. Section two presents our projections of the number of AMT taxpayers for the years 2003-2013, along with estimates of the fraction of taxable income that will be subject to the AMT. We document the distribution of AMT filers across income categories, and show that high income, but not highest-income, taxpayers will account for most of the growth in AMT taxpayers in the next decade. Section three describes the impact of the Alternative Minimum Tax on the weighted average marginal tax rates that apply to wages, interest income, dividend income, and a variety of income tax deductions. The fourth section summarizes a number of potential AMT reform proposals and describes how they would affect the evolution of AMT liabilities. We consider a range of possible reforms, including indexing the AMT exclusion and the break-points in the AMT schedule for inflation, and changing the set of income tax preferences that are included in the AMT base. A brief concluding section suggests several directions for future work.

1. The Structure of the Alternative Minimum Tax

The popular discussion of the AMT has suggested that it is a complex and mysterious tax, leading many to believe that computing AMT liability requires an unusually complicated and burdensome set of calculations. In fact, very few individuals in 2010 will require any data beyond

that on their federal personal income tax return to calculate their AMT liability, and a majority

will have only a subtraction and one multiplication added to their arithmetical burden.

For taxpayers who do not itemize, the AMT calculation in straightforward. The "tentative

AMT" for such a taxpayer is 26 percent of AGI in excess of an exclusion amount. It is paid as an

actual tax liability only to the extent that it exceeds the taxpayer's regular tax liability. For 2010,

the year when the AMT is projected to generate the largest revenue flow, the exclusion amount

equals $45,000 for joint filers, and $33,750 for single individuals. There are some changes in the

structure of the AMT between now and 2010. For example, in years prior to 2005, the zero

bracket amount is added to the exclusion. For 2003 and 2004, the exclusion is $58,000 (for joint

filers) and $40,250 (for single filers). In all years, for incomes above $150,000 for joint returns

and $112,000 for single returns, the exclusion is phased out at the rate of 25 cents for each dollar

of AGI above the threshold. This eliminates the exclusion for joint filers with AGI above

$206,000, and for single filers with income above $189,400. For taxpayers with AGI above

$175,000, the AMT bracket rate is 28 percent.

For itemizers, the arithmetic associated with the AMT calculation is slightly more

complicated. All itemized deductions are available as deductions against alternative minimum

income, except for deductions for state and local taxes, miscellaneous deductions, and deductions

for medical expenses in excess of 2.5% of AGI. The taxpayer must separate out eligible

deductions and subtract them from alternative minimum income. Itemized deductions are not

subject to the phase-out that is present in the regular personal income tax. In rare cases this may

invalidate the usual rule that taxpayers should itemize if itemized deductions exceed the standard

deduction. For a very few, the increased AMT from itemization will compensate for a larger

taxable income.

For most taxpayers with long term capital gains, the AMT is calculated on non-gain

income, and added to 20% of long-term gains. For low income taxpayers with gains, the 10%

capital gains rate is applied to gains that would not push taxable income above the 15% bracket boundary. In the tax forms this is implemented with extensive "cookbook" style instructions, but very few taxpayers are required to perform this calculation. The calculation is straightforward to implement using tax preparation software.

All tax credits except the foreign tax credit can be credited against AMT liability, as can the taxpayer's regular tax liability. Since tax year 2000, tax credits do not affect the total liability calculation. Prior to that year, the tax forms maintained a distinction between AMT liability, recorded on form 6251, and credits whose value would be fully offset by the AMT if they were taken. These were referred to as "lost credits" and the credit forms included lines to avoid taking such credits.

None of these calculations require any special record keeping beyond what is required by the regular tax. The calculations will be completely automated by tax preparation software. It is true that some taxpayers with net operating losses, or accelerated depreciation or in other similar esoteric situations are subject to additional record keeping, and may be subject to additional AMT by 2010, but there are few such taxpayers. For most taxpayers who will face AMT liability the AMT calculation is not particularly burdensome.

Figure 1 provides information on the pattern of AMT and ordinary income tax liability for a taxpayer filing a joint return with two dependents and claiming the standard deduction. Tax liabilities under both tax schedules are shown at different levels of adjusted gross income. The figure graphs AMT and ordinary income tax liability for both 2003 and 2010, with the taxpayer's real AGI held constant in 2003 dollars. The graphs show that AMT liability exceeds income tax liability for a range of upper middle and "low high" incomes. It also shows that the range of incomes over which AMT exceeds the income tax is wider in 2010 than in 2003. The four lines demonstrate how similar the shapes of the four tax schedules are, so that a small shift leftward in the real AMT schedule shifts much of the income distribution onto the AMT schedule. This

feature is an important contributor to the rapid growth of AMT filers and revenues as 2010 approaches.

2. Projecting Future AMT Liabilities Using TAXSIM

The NBER TAXSIM model is a computer program that calculates federal income tax and payroll tax liabilities for a representative sample of U.S. families. It analyzes data from the Statistics of Income (SOI) Public Use File, a stratified random sample of U.S. taxpayers that oversamples high-income tax returns. Feenberg and Coutts (1993) describe the personal income tax sections of the TAXSIM model in some detail.

The TAXSIM algorithm includes detailed computer code based on the personal income tax system that, based on current legislation, will be in force in future years. To construct households that will face these tax systems, we "age" the most recent publicly available individual income tax return file, the 1999 SOI data file, to each year between 2000 and 2013. This "aging" process relies on forecasts of the growth rate of the aggregate amount of various income components and deduction flows. We age the 1999 data to the years 2003 through 2013 by applying annual growth rates of 1.2 percent to population, 2.2 percent to real incomes and deductions, and 2.5 percent to the price level for all income and deduction items. Long term gains are normalized to 5.6 percent of AGI, which was their average value over the years 1981-1999. To bring our projected revenue into line with official forecasts, we applied a one-time ten percent reduction to all nominal magnitudes in 2003. The reduction applied to the nominal amounts in all subsequent years as well.

Table 1 summarizes the results of our projections with respect to the aggregate importance of the AMT. The table shows the number of individual income tax filers who we estimate will face the AMT in each year between 2001 and 2013, as well as the aggregate revenue generated by the AMT. The revenue calculation shows the incremental tax associated with the AMT, above the tax liability that would be generated by the individual income tax. All of the entries in the table

are projections. The IRS has just released information on individual income tax receipts for tax year 2000. Our table begins with 2001. We focus primarily on comparisons between 2003, the current tax year, and 2010, the year when the AMT collects the largest amount of revenue.

The first column of Table 1 shows that the number of AMT filers will rise rapidly over the next decade if the current tax law remains in effect. We project that 4.3 million taxpayers will face the AMT in 2003. By 2010, however, we project that 36.1 million taxpayers – nearly one in four of all taxpayers -- will pay the AMT. Nearly fifteen million of the AMT payers will have no itemized deductions, no capital gains, no phaseout of the AMT exclusion, and no other preferences.

The third column of Table 1 shows the revenue impact of the AMT. This also peaks in 2010. While the AMT is projected to generate $15.6 billion in 2003, almost exactly double the revenue yield of 2001 ($7.8 billion), its revenue yield rises eight-fold over a period of seven years. During the same period, regular income tax revenue rises by less than fifty percent. For 2010, we project AMT revenues of $122.5 billion, or 8.7 percent of total income tax revenue net of refundable Earned Income Credits.

The number of AMT taxpayers and aggregate AMT revenues are projected to decline between 2010 and 2011 as a result of changes in the personal income tax schedule. Many of the provisions of the 2001 Economic Growth and Tax Relief Reconciliation Act are scheduled to expire in 2010. If these provisions expire as scheduled, the set of taxpayers whose tentative AMT liability will exceed their personal income tax liability will drop for 2011. We project that the number of AMT taxpayers will fall in half, from 36.1 million to 17.3 million, between 2010 and 2011. AMT revenues will decline even more sharply, from 122.5 billion to 37.9 billion. Because the key parameters of the AMT schedule are not indexed for inflation, however, the AMT will continue to increase after this one-time decline. By 2013, we forecast that AMT revenues will again climb to $55.9 billion, representing 2.8 percent of personal income tax revenues.

The set of taxpayers who have the greatest chance of entering the AMT regime are those with adjusted gross incomes between $75,000 and $500,000. At lower income levels, the AMT exclusion makes it unlikely that a taxpayer will face AMT liability. At AGI levels above $500,000, the progressivity of the personal income tax schedule makes it likely that for most taxpayers, personal income tax liability will exceed AMT liability.

Table 2 presents information on the distribution of the number of AMT taxpayers, and the probability that a taxpayer is in the AMT regime, by AGI categories. The income categories in the leftmost column are based on constant 2003 dollars. Thus we are showing the tax liabilities in subsequent years of taxpayers based on where those taxpayers were in the real income distribution in 2003. The table presents information for each year between 2003 and 2012. The upper panel of the table shows the number of AMT taxpayers in each AGI category, while the lower panel shows the probability that a taxpayer with AMT in a given AGI category will pay the AMT. The results underscore the substantial differences across AGI categories in the importance of the AMT. In 2003, for example, the probability that a taxpayer with AGI between $50,000 and $75,000 would face the AMT was 1.7 percent, compared with 12.2 percent for a taxpayer in the $100-200,000 range and 57.9 percent for one in the $200-500,000 category. By 2010, the probability of facing the AMT rises to 57.6 percent for a $50-75,000 taxpayer, and to more than ninety percent for taxpayers with AGI between $100,000 and $500,000.

Table 3 presents information similar to that in Table 2, but it focuses on the aggregate revenues from the AMT, rather than the number of taxpayers in the AMT regime. The upper panel shows the distribution of AMT liabilities across AGI categories, while the lower panel shows the fraction of total tax payments from each AGI category that are accounted for by the AMT. The table shows the central importance of the taxpayers with AGI between $100,000 and $500,000 in contributing to AMT revenues. In 2003, taxpayers with AGI of between $200,000 and $500,000 paid nearly half of the AMT - $7.1 billion of $15.6 billion. In 2010, the year of

peak AMT revenue, taxpayers with AGI between $100,000 and $200,000 are projected to pay

$27.7 billion out of total AMT revenues of $122.5 billion. Taxpayers with incomes between

$50,000 and $200,000 in 2003 account for most of the AMT liability growth. In 2003, for

example, taxpayers with AGI of $50-75,000 are projected to pay $0.4 billion in AMT, compared

with $19.9 billion in 2010. For taxpayers between $75,000 and $100,000 ($100,000 and

$200,000), the overall AMT liability rises from $0.1 billion ($1.7 billion) to $15.8 billion ($39.9

billion).

Table 3 also shows the disparate changes in the ratio of AMT liability to ordinary income

tax liability across income groups. For the $75-100,000 income category, for example, AMT

liability represents only 0.12 percent of aggregate tax liability in 2003. By 2010, this percentage

rises to 9.3 percent. For the $100-200,000 income category, the respective change is from 1.0

percent in 2003 to 12.7 percent. The increase for those in the highest income category, and for

those in lower income strata, is much more modest. For taxpayers with AGI in excess of

$500,000, the AMT share only rises slightly from 2003 to 2010, from 2.6 percent to 3.1 percent.

Figure 2 shows the impact of the AMT on the ratio of tax liability to adjusted gross

income at different points in the income distribution. The plots show average tax rates, with and

without the AMT, in 2002 and 2010. The figure demonstrates that the AMT has its largest impact

on the average tax rate for taxpayers with AGI between $200,000 and $500,000, and that the

AMT has very little impact on average tax rates for households whose 2003 AGI is below

approximately $50,000.

3. The Impact of the AMT on Marginal Tax Rates

The aggregate impact of the AMT on tax revenues is of clear interest for budgetary

discussions, but for most analyses of the incentives created by the income tax system, it is

essential to focus on the marginal tax rates that apply to various sources of income and to various

deductions. The AMT can affect these marginal rates, since the AMT schedule differs from the personal income tax schedule.

To describe the impact of the AMT on marginal incentives, we report weighted average marginal tax rates on a range of different income components. We construct these weighted averages by calculating the incremental tax that a household would pay if one of its income elements or deductions, denoted by k, was one percent greater than the reported value. The tax rate on income of type k for household h, which we denote $\tau_{h,k}$, is then defined as the change in tax liability divided by .01 times the initial tax return entry, i.e., the change in tax divided by the change in income or the change in the deduction amount. We calculate the weighted average marginal rate (τ^*_k) by averaging marginal tax rates across households with weights equal to the share of aggregate income category k received by household h ($s_{h,k}$): $\tau^*_k = \Sigma_h \, s_{h,k} * \tau_{h,k}$. We calculate these marginal tax rates under the assumption that all currently legislated tax rules remain in force unless they are changed by legislation that has already been enacted. We therefore assume that phase-outs of some of the tax provisions that were enacted in 2001 and 2003 will take effect as planned.

Table 4 shows the weighted average marginal income tax rates on four components of taxable income. For each income component, we report both the weighted average marginal tax rate under the current income tax system, which includes the AMT, as well as the marginal tax rate under the assumption that the AMT was repealed. We consider AMT repeal with no associated changes in the personal income tax schedule. In practice, AMT repeal would presumably coincide with changes in the income tax law that would restore at least part of the revenue that is currently collected by the AMT. Because there are many possible ways in which the income tax could be modified to recoup lost AMT revenue, however, we decided not to make an arbitrary choice and report the associated results.

The first two columns present information on the weighted average tax rates for wage income. For 2003, the estimates show very little impact of the AMT on the weighted average marginal tax rate. The estimated average rate with the AMT is 22.24 percent, compared with 22.23 percent without the AMT. The two sets of rates begin to diverge slightly in future years, with a weighted average value of 25.32 percent in 2010 assuming that the AMT is not modified in the ensuing seven years, and 24.01 percent if the AMT is repealed. Because the maximum AMT rate of 28 percent is much lower than the maximum regular bracket rates, it may be surprising that the AMT raises average marginal tax rates. However, the lowest AMT bracket rate of 26 percent is higher than the income tax bracket of 15 percent that a non-itemizing family of four will leave only at $78,500 ($2003), and it is slightly higher than the 25 percent ordinary income tax rate that is in effect through $175,000 of AGI.

The patterns for interest income and for dividends are similar to those for wages. In 2003, the AMT raises the weighted average marginal tax rate on interest by 0.23 percentage points. By 2010, the effect will be larger: 0.98 percentage points. For dividend income, the 2003 impact of the AMT is 0.29 percentage points, rising to 0.45 percentage points in 2010. The distributions of dividend income and interest income are different, and this can be seen from the impact of the AMT on marginal tax rates in 2002. In that year, the AMT is predicted to raise the marginal tax burden on interest income, but to reduce the tax burden on dividends. Because the distribution of dividend income is more skewed toward high-income households, a higher fraction of dividend recipients have marginal income tax rates that are above their marginal tax rate under the AMT.

The last column of Table 4 shows the impact of the AMT on the marginal tax burden on capital gains. The value of τ^* with the AMT is higher than that without the AMT, with the difference reaching its maximum at 0.99 percentage points in 2010. The difference is 0.23 percentage points in 2003. The level of the weighted average marginal tax rate declines between

2002 and 2003, reflecting the reduction in marginal tax rates that was enacted in 2003. For realized long-term capital gains, JGTRRA reduced the weighted average marginal tax rate by about four percentage points. The effect on dividend income was larger, a decline of nearly ten percentage points.

Table 5 presents analogous information on the marginal tax rates that apply to various personal income tax deductions. The first two columns show the marginal tax rate that applies to state and local tax payments. Because these tax payments are not deductible from the income concept under the alternative minimum tax, there is a substantial gap between the weighted average marginal tax rate with and without the AMT. In 2003, for example, the weighted average marginal tax subsidy on state and local taxes was 17.3 percent. If the AMT had not been in force, this tax rate would have been 23.5 percent. The disparity is the result of roughly one third of state and local tax deductions being claimed by taxpayers who are in the AMT regime, and for whom these taxes do not generate a deduction. The disparity between the average marginal tax rate with and without the AMT is projected to grow over the next decade. In 2010, the weighted average marginal tax rate on state and local tax deductions is projected to be 9.1 percent with the current AMT in effect, compared with 26.6 percent if the AMT did not exist. The projections show that expiration of the EGTRRA provisions in 2011 brings the two sets of weighted average marginal tax rates into closer proximity, with the tax rate recognizing the AMT rising from 9.1 to 15.7 percent.

The AMT has a smaller impact on the other weighted average marginal tax rates for the deductions that we consider. In 2003, for example, the weighted average marginal tax rate on medical deductions was 12.0 percent, while it would have been 12.2 percent if the AMT had not been part of the tax code. The negative effect of the AMT on the tax rate at which the medical deduction can be claimed grows until 2010, when it lowers this tax rate by two percentage points (from 14.3 to 12.3 percent). The currently-legislated tax code reversion in 2011 has a smaller

impact on the weighted average marginal tax rate for medical deductions than on the tax rate that applies to state and local tax deductions. The medical tax rate rises from 12.3 percent in 2010 to 14.8 percent in 2011 as a result of the changes in the personal income tax.

The last two columns of Table 5 show the weighted average marginal tax rates on mortgage interest deductions and charitable contributions. The patterns for the two are similar. In both cases, the weighted average marginal tax rate under the current tax system is less than one percentage point higher in 2003 than it would have been if the AMT did not exist. The disparity increases between 2003 and 2010, when the disparity is 1.9 percentage points for the mortgage interest deduction and 0.9 percentage points for charitable contributions. These disparities persist and even grow after the income tax schedule reversion in 2010.

The weighted average marginal capital income tax rates in Table 4 are projections. To provide a base for comparison with both the level and the variation in similar marginal tax rates in the past, Table A-1 presents data for years since 1960 on the weighted average marginal tax rates on wages, several different components of capital income, and several deductions. The data in the appendix represent an updated version of the time series for marginal tax rates in Poterba (2002).

4. Reform Options and Their Impact on AMT Liabilities

The prospective growth of AMT liabilities and the number of AMT taxpayers has generated a number of proposals for legislative reforms that would slow the growth of the AMT. In this section we consider several such proposals and describe their impact on the future path of tax revenues and AMT tax payers.

We consider two broad classes of reform proposals: "parametric" reforms that operate within the current structure of the AMT, but change tax code parameters such as the AMT exclusion, or index the AMT thresholds, and "structural" reforms that involve changes to other elements of the tax system. Structural reforms could include changes to the personal income tax system that affect the AMT liability relative to personal income tax liability.

Table 6 presents results for three parametric reforms of the AMT. The first indexes the AMT exclusion for inflation. The failure to index this component of the AMT is a key contributor to the projected growth of AMT revenues and taxpayers. This can be seen by comparing the entries in the first and third columns of Table 6. If the exclusion is not indexed, we project 36.1 million AMT taxpayers in 2010, compared with 13.8 million if the exclusion is indexed. The impact on revenue is even more dramatic. From $122.5 billion in 2010, the projection declines to $48.4 billion. Indexing the exclusion therefore reduces AMT revenue in our projected peak revenue year by over sixty percent.

The findings on the impact of indexing the AMT underscore the importance of the inflation rate in determining the relative revenue yield of the regular income tax and the AMT. As Figure 1 demonstrated, small changes in the real threshold at which taxpayers are affected by the AMT can have substantial effects on revenues and on the number of AMT filers. By comparison, real growth in the aggregate economy has a much more modest effect on AMT revenue, because real bracket creep raises the regular income tax as well as the AMT base.

Table 7 shows the impact of indexing the AMT on the distribution of AMT taxpayers across income categories. This table can be compared with Table 2, our benchmark projections under the current AMT and income tax rules. The table illustrates that the sharpest decline in AMT participation occurs among those in the lower income strata of the AMT payers. In the benchmark case, for example, there are 10.5 million AMT taxpayers with incomes between $50,000 and $75,000 in 2010. When the AMT is indexed, however, this number drops to 2.9 million, a decline of more than two thirds. By comparison, for those with AGI between $200,000 and $500,000, the number of AMT payers declines from 2.38 to 2.03, a reduction of only 15 percent.

The next two parametric reform options that we consider involve raising the AMT exclusion, first by $1000, and then by $3000. The effect of changing the exclusion depends on

the distribution of AMT liabilities for taxpayers facing the AMT. If there are many taxpayers with low levels of AMT liability, then a small increase in the exclusion can have a substantial impact on the number of AMT taxpayers. The results in columns five and seven provide some insight on this issue. Raising the exclusion by $1000 reduces the number of AMT filers in the peak year, 2010, from 36.1 million to 34.9 million, while an increase by $3000 reduces the number of AMT payers to 30.6 million. The $3000 increase reduces the number of AMT payers by about one sixth, and it has a similar proportional effect on revenue. Increasing the exclusion by $3000 in 2010 leads to a decline in projected AMT revenue from $122.5 to $101.6 billion.

Figure 3 shows the impact of raising the AMT exclusion on number of AMT taxpayers and on the revenue yield of the AMT. The figure shows the impact of larger changes in the exclusion than those considered in Table 6. The key finding that emerges from the figure is that the marginal effect of an incremental increase in the exclusion declines as the exclusion rises. A $10,000 increase in the exclusion in 2010, for example, reduces AMT revenue by nearly fifty percent, and it has a similar proportionate effect on the number of AMT taxpayers. A $20,000 increase reduces the number of AMT filers by 28 million, from 34.8 million to 6.7 million, and it reduces the total revenue generated by the AMT from $121.2 billion to $41.5 billion.

The last three AMT reform proposals that we consider involve structural changes in either the AMT or the personal income tax code. The first allows taxpayers to claim personal exemptions as a debit against alternative income. The third and fourth columns of Table 8 show the effect of such a change on the path of AMT filers and AMT liability. The results show a significant reduction in the role of the AMT. In 2010, the projections suggest a decline in the number of AMT filers to 12.0 million, and total AMT revenue of $50.4 billion. This represents nearly a sixty percent decline in AMT revenue, and this reform therefore has nearly as much impact as indexing the AMT.

The second structural reform we consider is the extension of the EGTRRA provisions that are currently scheduled to expire in the latter half of the current decade. We assume that these provisions would become permanent. The most significant of these provisions would raise the 2010 AMT exclusion by $13,000 for joint filers ($6,500 for single filers) and continue the preferential taxation of dividends. The former greatly reduces the AMT, and the latter reduces both the regular income tax and the AMT by similar amounts. In this case, the number of AMT filers in 2010 drops from 36.1 million under current law to 13.9 million, while AMT revenue falls to $58.0 billion. The AMT revenue with this policy change is less than half of what it would be if the exclusion remained at the current level, $58,000 for joint filers and $40,250 for single filers.

Finally, the last reform that we consider involves changing the relative treatment of married couples and single individuals under the AMT. The 2010 joint taxpayer exclusion of $45,000 under the AMT is substantially less than twice the single taxpayer exclusion of $33,750. In principle, the single exclusion could simply be doubled to $67,500, but that would substantially increase the marriage bonus for couples with non-working spouses. We have therefore modeled a less generous option which offers the couple the greater of the current joint deduction, or the single deduction plus the secondary earner's wages up to the single exclusion. This means that the full $67,500 is offered only to two earner couples, with both earners making more than $33,750. The results of this reform are shown in the last two columns of Table 8. In 2010, the number of AMT filers in this case is 25.2 million, and total AMT revenue is $87.7 billion. Thus the reform leads to slightly more than a 25 percent decline in AMT revenue.

Our analysis of potential reforms underscores the impact of the AMT on the relative tax treatment of single individuals and married couples. The effect of a change in household status on tax liabilities is different when the taxpayers face the AMT than when the face the regular income tax schedule. The growing importance of the AMT may therefore call into question the traditional analysis of the "marriage penalty" and related features of the income tax system.

5. Conclusions and Future Directions

This paper presents new evidence on the growth of AMT liabilities between 2003 and 2010. Our baseline projections confirm a pattern that has been widely documented. Because the AMT parameters are not indexed, there will be rapid growth in the number of AMT taxpayers, and in the amount of revenue collected by the AMT, over the course of the next decade. We find that in spite of this significant shift in the nature of the tax system, the average marginal tax rates on many income components, such as wages and interest income, are affected only modestly. In 2010, for example, we project that the AMT will raise the weighted average marginal tax rate on wage income by 1.3 percentage points relative to what this marginal tax rate would be if the AMT were repealed prior to 2010. For interest income, the effect on the weighted average marginal tax rate is just below one percentage point. These changes conceal larger changes in marginal tax rates for individual households. Some are pushed from marginal tax rates of 15 or 25 percent under the ordinary income tax into the AMT brackets of 26 and 28 percent. Others drop from marginal tax rates above 30 percent in the income tax to the AMT rate of 28 percent.

Our results are based on stylized assumptions about the rate at which aggregate income, population, and the price level will grow over the next decade. All of our analysis uses the same underlying assumptions to "age" income tax records from 1999 through the years until 2013. It would be useful to gauge the sensitivity of our findings to these assumptions, and to explore how differences in growth rates or more importantly in the rate of inflation between 2003 and 2010 would affect the magnitude of AMT liabilities.

Our analysis also ignores any possible behavioral responses that households might engage in as a result of their exposure to the AMT. Strategies such as bunching deductions across years may permit households to reduce their aggregate tax liability over a several year period by strategically affecting the years in which the face the AMT and the regular income tax. We are not aware, however, of any evidence on the extent of such behavior.

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Table 1: Historical Number of Alternative Minimum Tax Returns and Projected Future Returns

Year	Number of AMT Returns	Percent of Returns with AMT	AMT Revenue	AMT Revenue/Total Income Tax Revenue
2001	1.89	1.5	7.79	1.0
2002	3.59	2.7	10.44	1.3
2003	4.25	3.2	15.63	2.0
2004	3.61	2.7	13.96	1.6
2005	14.98	11.0	35.51	3.7
2006	17.06	12.3	47.78	4.6
2007	20.12	14.4	59.00	5.3
2008	27.52	19.4	79.29	6.6
2009	32.05	22.4	96.16	7.3
2010	36.07	24.9	122.48	8.7
2011	17.34	11.8	37.91	2.2
2012	18.99	12.8	46.25	2.5
2013	21.84	14.5	55.86	2.8

Table 2: Distribution of AMT Payers by Adjusted Gross Income, 2003-2012

AGI Class	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Number of AMT Taxpayers by AGI Category (millions)										
< 0	0	0	0	0	0	0	0	0	0	0
0-10K	0.30	0.30	0.32	0.26	0.27	0.27	0.27	0.28	0.28	0.28
10-25K	0.34	0.35	0.35	0.36	0.18	0.18	0.18	0.19	0.38	0.19
25-50K	0.36	0.19	0.91	1.11	2.17	3.56	4.98	6.61	3.74	3.99
50-75K	0.29	0.47	3.18	3.78	4.78	7.52	9.22	10.48	5.21	5.34
75-100K	0.30	0.15	3.28	3.71	3.84	5.63	6.22	6.98	2.34	2.77
100-200K	1.10	0.85	4.83	5.59	6.60	7.93	8.76	8.95	4.28	5.31
200-500K	1.40	1.14	1.95	2.08	2.09	2.23	2.24	2.38	1.05	1.05
> 500K	0.16	0.15	0.15	0.17	0.18	0.19	0.18	0.21	0.06	0.06
TOTAL	4.25	3.61	14.98	17.06	20.12	27.52	32.05	36.07	17.34	18.99
Probability of AMT Payment by AGI Category										
< 0	0.03%	0.06%	0.07%	0.09%	0.09%	0.12%	0.12%	0.12%	0.12%	0.12%
0-10K	1.1	1.1	1.17	0.94	0.94	0.94	0.94	0.94	0.94	0.94
10-25K	1	1	1	1	0.5	0.5	0.5	0.5	1	0.5
25-50K	1.11	0.57	2.7	3.26	6.3	10.21	14.11	18.49	10.35	10.9
50-75K	1.74	2.78	18.57	21.77	27.24	42.3	51.28	57.61	28.28	28.63
75-100K	3.16	1.53	34.17	38.1	39.04	56.47	61.68	68.4	22.68	26.5
100-200K	12.16	9.36	52.28	59.84	69.79	82.88	90.38	91.28	45.89	55.07
200-500K	57.85	46.76	78.74	82.8	82.47	86.85	86.09	90.47	47.44	48.65
> 500K	27.19	25.47	25.1	28.18	28.11	30.89	27.8	32.48	14.27	14.24
TOTAL	3.19	2.67	10.97	12.34	14.38	19.43	22.37	24.87	12.17	13.13

Table 3: Distribution of AMT Liability by Adjusted Gross Income, 2003-2012

AGI Class	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Revenue from AMT Taxpayers by AGI Category ($ billions)										
< 0	0	0	0	0	0.01	0.01	0.01	0.01	0.01	0.02
0-10K	0.18	0.19	0.21	0.23	0.24	0.26	0.28	0.30	0.26	0.28
10-25K	0.09	0.08	0.07	0.05	0.04	0.03	0.02	0.01	0.04	0.09
25-50K	0.14	0.27	0.98	1.30	1.85	3.04	5.21	8.28	3.55	5.09
50-75K	0.38	0.49	2.79	4.40	6.24	9.50	14.19	19.86	5.33	6.93
75-100K	0.10	0.04	3.22	5.08	6.98	9.87	12.63	15.76	2.68	3.45
100-200K	1.72	1.59	10.61	14.56	19.14	26.30	32.39	39.92	12.65	16.10
200-500K	7.07	5.38	11.39	14.90	16.85	21.39	22.59	27.71	7.29	7.84
> 500K	5.95	5.91	6.24	7.25	7.66	8.89	8.83	10.63	6.11	6.46
TOTAL	15.63	13.96	35.51	47.78	59.00	79.29	96.16	122.48	37.91	46.25
Share of Total Tax Payments Accounted for by AMT, by AGI Category										
< 0	1.37%	1.51%	2.57%	2.77%	2.97%	3.21%	4.13%	4.46%	4.65%	4.92%
0-10K	-2.13	-2.15	-2.28	-2.43	-2.5	-2.58	-2.74	-2.83	-2.78	-2.98
10-25K	-0.83	-0.8	-0.92	-0.96	-1.28	-2.13	7.35	0.66	0.14	0.3
25-50K	0.17	0.3	0.92	1.12	1.45	2.2	3.45	5.02	1.64	2.15
50-75K	0.4	0.47	2.32	3.39	4.43	6.22	8.47	10.81	2.4	2.87
75-100K	0.12	0.04	2.86	4.19	5.33	6.97	8.08	9.26	1.35	1.62
100-200K	1.05	0.86	5.11	6.49	7.89	10	11.23	12.74	3.93	4.65
200-500K	4.82	3.41	6.55	8	8.46	10.06	9.84	11.34	3.43	3.43
> 500K	2.58	2.41	2.4	2.65	2.64	2.9	2.67	3.06	1.94	1.93
TOTAL	2	1.62	3.68	4.61	5.27	6.59	7.32	8.65	2.55	2.85

Table 4: Weighted Average Marginal Tax Rates on Various Income Components, With and Without AMT,

Year	Wages		Interest		Dividends		Realized Long-Term Capital Gains	
	With AMT	Without AMT	With AMT	Without AMT	With AMT	Without AMT	With AMT	Without AMT
2001	24.08	24.16	24.33	24.21	27.38	27.77	18.16	17.93
2002	24.01	24.08	24.31	24.14	27.36	27.70	18.30	17.95
2003	22.24	22.23	21.21	20.98	17.49	17.20	14.13	13.90
2004	23.17	23.10	22.28	22.01	17.69	17.36	14.13	13.84
2005	23.68	23.37	22.64	22.39	18.08	17.49	14.33	13.86
2006	23.92	23.47	23.01	22.40	18.32	17.43	14.36	13.73
2007	24.31	23.64	23.12	22.46	18.20	17.42	14.42	13.73
2008	24.63	23.67	23.41	22.60	18.18	17.34	14.31	13.59
2009	25.06	23.91	24.05	23.23	25.99	25.68	14.21	13.36
2010	25.32	24.01	24.18	23.20	26.17	25.72	14.16	13.15
2011	27.76	27.78	27.26	26.88	29.55	29.88	13.04	12.45
2012	28.03	28.10	27.30	26.92	29.74	29.93	13.03	12.46
2013	28.33	28.32	27.29	26.67	29.95	30.07	13.00	12.47

Notes: Without AMT scenario assumes repeal of the AMT, but no other changes to income tax law.

Table 5: Weighted Average Marginal Subsidy Rates on Various Deductions from AGI, With and Without AMT

Year	State Taxes		Medical Deductions		Mortgage Interest		Charitable Contributions	
	With AMT	Without AMT	With AMT	Without AMT	With AMT	Without AMT	With AMT	Without AMT
2001	24.20	27.79	12.74	13.13	22.51	22.38	22.03	21.80
2002	22.23	27.36	12.65	13.14	22.41	22.14	21.77	21.48
2003	17.22	24.58	12.02	12.15	20.79	20.43	19.13	18.47
2004	17.35	23.50	12.74	12.70	20.99	20.28	19.16	18.21
2005	12.04	21.85	12.22	12.63	21.80	19.01	19.84	17.24
2006	11.36	22.72	12.16	12.64	22.25	19.50	20.63	18.20
2007	10.42	22.48	11.92	12.93	22.49	19.37	20.79	18.12
2008	9.64	24.03	11.26	13.06	23.18	20.44	21.11	19.01
2009	9.34	24.54	12.22	13.81	23.79	20.93	22.14	20.06
2010	9.08	26.55	12.32	14.26	24.33	22.42	22.61	21.71
2011	16.14	23.25	15.00	16.76	23.74	21.47	21.47	19.47
2012	15.41	23.17	15.26	17.00	23.88	21.60	21.78	19.53
2013	14.64	23.06	15.33	17.14	24.42	21.81	21.69	19.51

Notes: Without AMT scenario assumes repeal of the AMT, but no other changes to income tax law.

Table 6: Effect of Various Parametric Reform Proposals on Number of AMT Taxpayers and AMT Liabilities, 2003-2013

Year	Status Quo		Index AMT Exclusion		Add $1000 to AMT Exclusion		Add $3000 to AMT Exclusion	
	AMT Filers	AMT Liability	AMT Filers	AMT Liability	AMT Filers	AMT Liability	AMT Filers	AMT Liability
2003	4.25	15.63	2.95	13.15	3.69	14.88	3.09	13.77
2004	3.61	13.96	2.30	11.46	3.20	13.60	2.73	12.69
2005	14.98	35.51	7.78	21.74	13.11	32.86	10.33	27.62
2006	17/06	47.78	8.92	26.30	16.17	44.32	13.20	37.63
2007	20.12	59.00	9.90	29.08	19.98	55.20	16.08	46.96
2008	27.52	79.29	11.51	36.37	25.39	74.85	20.79	64.11
2009	32.05	96.16	12.36	39.27	30.67	91.43	25.28	78.22
2010	36.07	122.48	13.77	48.43	34.92	117.08	30.59	101.63
2011	17.34	37.91	2.53	14.65	14.75	37.28	11.31	31.15
2012	18.99	46.25	2.57	15.55	17.21	44.94	13.93	37.60
2013	21.84	55.86	2.61	16.52	20.01	54.09	16.46	45.48

Note: Filers are measured in millions, liability in billions of dollars.

Table 7: Distribution of AMT Payers by Adjusted Gross Income, 2003-2012 Indexing AMT

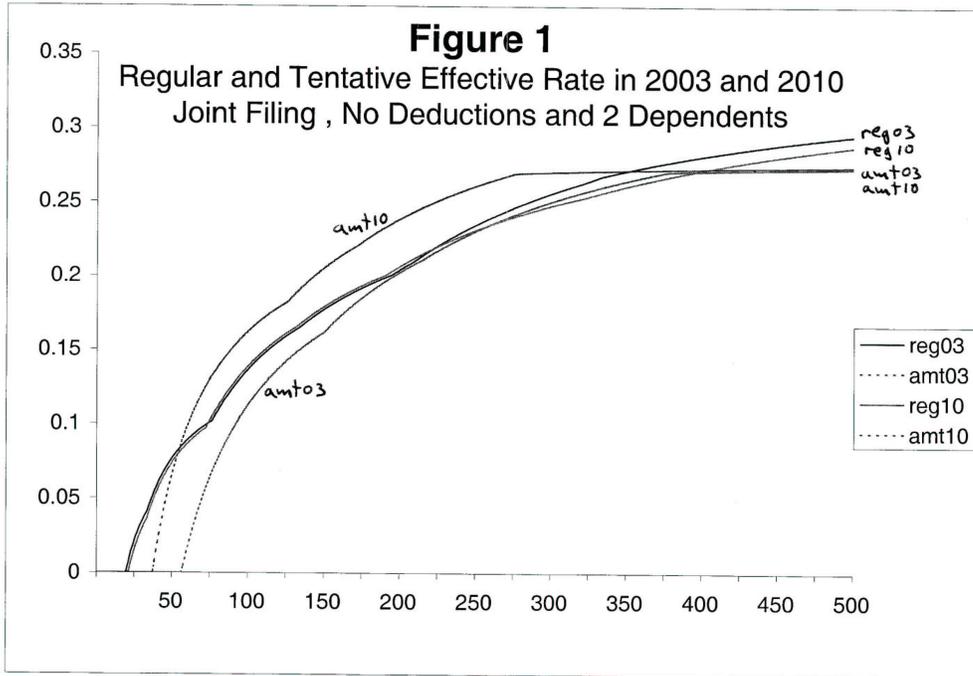| AGI Class	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Number of AMT Taxpayers by AGI Category (millions)										
< 0	0	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
0-10K	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
10-25K	0.50	0.48	0.46	0.44	0.41	0.38	0.34	0.32	0.12	0.11
25-50K	0.16	0.18	0.49	0.55	0.60	0.75	0.92	1.18	0.30	0.32
50-75K	0.16	0.16	1.19	1.38	1.68	2.00	2.41	2.93	0.48	0.50
75-100K	0.21	0.17	1.41	1.71	1.94	2.16	2.28	2.43	0.37	0.36
100-200K	0.71	0.41	2.58	2.98	3.33	4.07	4.29	4.57	0.69	0.71
200-500K	0.94	0.63	1.38	1.59	1.65	1.85	1.84	2.03	0.37	0.38
> 500K	0.17	0.15	0.15	0.17	0.17	0.19	0.17	0.21	0.08	0.08
TOTAL	2.95	2.30	7.78	8.92	9.90	11.51	12.36	13.77	2.53	2.57
Probability of AMT Payment by AGI Category										
< 0	0.03%	0.03%	0.07%	0.07%	0.07%	0.07%	0.09%	0.12%	0.12%	0.12%
0-10K	1.1	1.1	1.1	0.87	0.94	0.94	0.94	0.94	0.94	0.94
10-25K	1	1	1	1	0.5	0.5	0.5	0.5	0.5	0
25-50K	1.11	0.57	1.11	1.11	1.11	1.64	1.64	2.73	0.58	1.14
50-75K	1.74	1.74	5.68	6.65	9.78	10.82	12.19	18.23	2.2	1.04
75-100K	0	0	6.39	12.62	11.94	17.88	17.88	20.48	1.14	1.14
100-200K	5.42	3.09	27.28	31.53	33.37	42.49	42.33	46.25	7	7
200-500K	44.54	28.4	60.54	69.32	73.17	79.28	76.43	84.01	25.07	24.48
> 500K	27.16	25.1	25.07	27.64	26.2	30.01	26.02	31.05	14.21	13.84
TOTAL	2.27	1.68	4.97	5.94	6.36	7.78	7.87	9.51	1.81	1.66

Table 8: Effect of Structural Reform Proposals on Number of AMT Taxpayers and AMT Liabilities, 2003-2013

Year	Status Quo		Remove Personal Exemptions from AMT Preferences		Make Expiring EGTRRA Provisions Permanent		Marriage Tax Relief	
	AMT Filers	AMT Liability	AMT Filers	AMT Liability	AMT Filers	AMT Liability	AMT Filers	AMT Liability
2003	4.25	15.63	2.10	12.47	4.06	15.55	3.18	13.75
2004	3.61	13.96	1.87	11.50	3.49	14.16	2.85	12.79
2005	14.98	35.51	3.80	17.85	4.29	16.65	9.47	26.31
2006	17/06	47.78	4.72	22.75	5.66	22.16	11.64	34.64
2007	20.12	59.00	5.75	26.85	7.13	26.89	14.36	42.26
2008	27.52	79.29	7.75	34.86	9.51	37.06	18.53	56.73
2009	32.05	96.16	9.42	40.15	11.55	44.18	21.75	68.27
2010	36.07	122.48	11.98	50.39	13.91	58.00	25.18	87.73
2011	17.34	37.91	2.94	17.74	16.16	68.71	10.19	29.23
2012	18.99	46.25	3.47	20.09	19.05	81.63	11.82	34.38
2013	21.84	55.86	4.10	22.91	22.26	96.95	13.94	40.54

Note: Filers are measured in millions, liability in billions of dollars.

Table A-1: Weighted Average Marginal Tax and Subsidy Rates, 1960-2002

Year	Wage Income	Interest Income	Dividends	Realized LT Gains	Mortgage Interest	Pension Income
1960	21.86	n/a	41.64	18.99	n/a	n/a
1962	22.11	25.55	42.03	17.53	n/a	n/a
1964	20.52	23.18	39.37	17.43	-20.08	n/a
1966	20.11	22.39	37.09	17.73	-19.74	n/a
1967	20.46	22.61	37.86	17.81	n/a	n/a
1968	22.89	25.76	40.94	20.27	-22.80	n/a
1969	23.90	26.88	41.34	20.92	n/a	n/a
1970	22.89	25.99	38.52	18.08	-22.37	n/a
1971	22.01	25.07	37.16	17.98	n/a	n/a
1972	22.46	25.43	36.87	17.86	-22.50	n/a
1973	23.33	26.58	38.00	17.89	-23.43	n/a
1974	24.17	27.53	39.31	18.17	n/a	21.35
1975	24.86	26.62	39.03	17.35	-24.73	21.97
1976	25.71	27.52	41.12	18.24	-25.72	24.70
1977	26.73	27.87	41.23	20.00	-27.62	22.81
1978	28.09	29.06	42.61	19.57	-28.50	23.88
1979	28.22	29.74	43.04	18.34	-28.23	24.03
1980	29.78	31.42	43.01	17.38	-29.12	26.15
1981	30.90	32.15	41.33	18.86	-29.99	27.54
1982	28.86	28.69	35.44	19.18	-27.14	25.89
1983	26.96	26.22	34.04	16.88	-24.83	23.77
1984	26.39	26.56	32.86	17.38	-24.36	24.18
1985	26.59	26.71	32.74	17.35	-24.99	24.10
1986	26.74	25.62	30.95	17.97	-24.82	23.73
1987	23.92	23.16	27.35	24.52	-23.08	n/a
1988	22.47	22.10	24.91	25.51	-22.36	22.80
1989	22.55	22.72	25.04	25.08	-22.44	22.31
1990	22.58	23.55	25.15	24.95	-22.26	22.52
1991	22.55	22.63	25.50	23.89	-21.80	22.22
1992	22.55	22.11	25.28	24.33	-21.63	22.43
1993	23.32	23.56	27.10	25.79	-22.41	22.87
1994	23.61	24.33	27.41	26.11	-22.71	24.02
1995	23.90	25.23	27.85	26.56	-22.77	24.48
1996	24.04	25.09	28.02	26.58	-23.08	25.33
1997	24.46	25.93	28.84	20.34	-23.23	26.08
1998	24.72	26.09	28.75	19.82	-23.26	26.53
1999	25.07	26.47	29.04	19.80	-23.42	27.03
2000	24.99	26.22	28.83	18.53	-23.15	26.82
2001	24.06	25.09	27.90	18.36	-22.32	25.65
2002	24.00	24.99	27.69	18.45	-22.49	25.59

Figure 1
Regular and Tentative Effective Rate in 2003 and 2010
Joint Filing , No Deductions and 2 Dependents

Figure 2
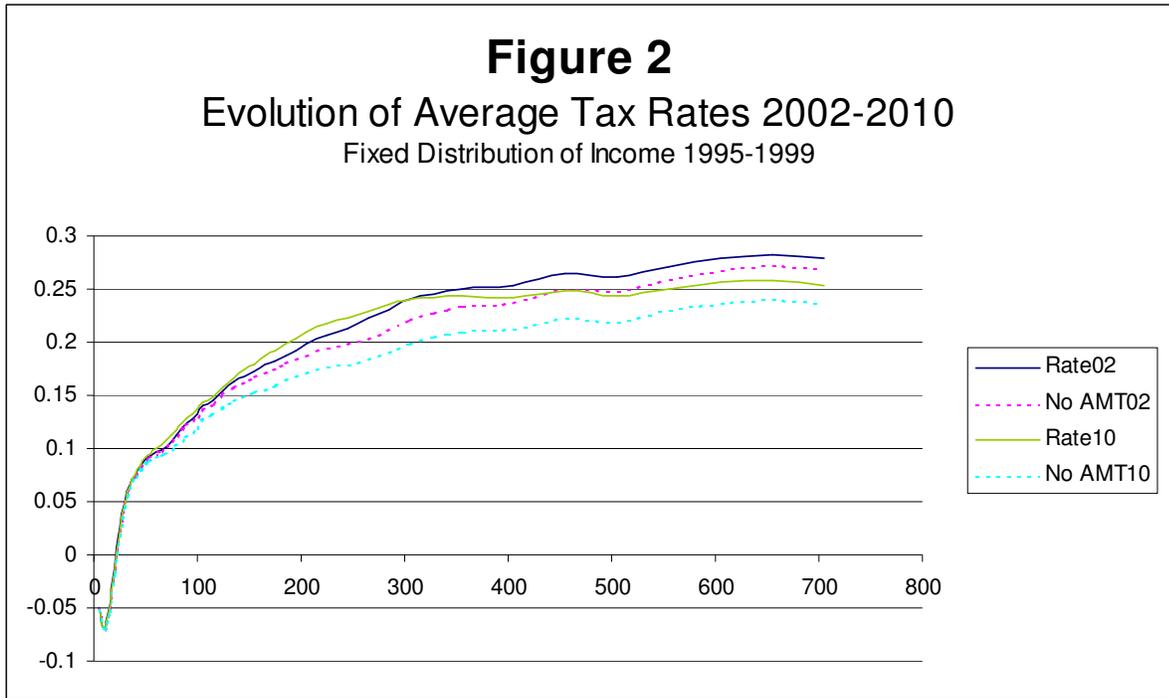## Evolution of Average Tax Rates 2002-2010
Fixed Distribution of Income 1995-1999

Figure 3
Effect of Raising Exclusion in 2010