

# Options for Fiscal Stimulus

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Mr. Chairman and other members of the Committee, thank you for inviting me to testify at this hearing on a stimulus plan that makes sense. A spate of bad news, including a jump in the unemployment rate, a decline in consumer spending and a continued plunge in housing starts, leave little doubt that the economy is weakening. Well-designed fiscal stimulus, in the form of increased government spending or tax reductions, has the potential to help cushion the economic blow.

The key to well-designed stimulus is to ensure that it is *timely, temporary* and *targeted* – the “three T” principles enunciated by economists as diverse as Harvard Professors Lawrence Summers and Martin Feldstein, Federal Reserve Chairman Ben Bernanke and Congressional Budget Office Director Peter Orszag. Three of the options that best meet this test are (1) a refundable tax rebate that is adjusted for family size and phased out for high-income households; (2) a temporary extension and possibly expansion in unemployment insurance benefits; and (3) a temporary increase in food stamps. Policymakers should also consider state fiscal relief implemented as a temporary increase in the federal share of Medicaid costs.

My testimony today has three parts. First it discusses the underlying economic logic that motivates the three principles of fiscal stimulus. Second, it applies these principles to analyze a range of stimulus options. Finally, it includes a more detailed discussion of the design of an individual rebate.

## **The Economic Logic Underlying Fiscal Stimulus**

How best to increase the economy’s productive capacity and thus long-run growth is the most important long-term task for policymakers. But it is also complicated and subject to debate. What is not in real dispute is what to do about an economic slowdown when the economy is not fully utilizing its current capacity. Economists broadly agree that, in principle, both monetary and fiscal policy can increase consumption, investment, government spending, or net exports—thus boosting aggregate demand, which translates into higher GDP and more job growth. To the degree economists sometimes disagree in practice, their differences largely stem from

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<sup>1</sup> The views expressed in this testimony are those of the author alone and do not necessarily represent those of the staff, officers, or trustees of The Brookings Institution or the members of the Advisory Council of The Hamilton Project. Parts of this testimony draw on Douglas Elmendorf and Jason Furman, “If, When and How. A Primer on Fiscal Stimulus,” Hamilton Project Strategy Paper, January 2008. That paper is attached.

uncertainty about economic prospects and the likelihood that the political system will deliver fiscal stimulus in an effective manner.

The Federal Reserve is capable of acting quickly and dramatically to stabilize the economy, as evidenced by Tuesday’s 75 basis point cut in the federal funds rate. But the Fed faces one major limitation: it takes about a year for its interest rate moves to have a major effect on economic output and jobs. While the recent round of interest rate cuts will have some effect on the economy this year, we probably will not see the full impact on the aggregate economy until 2009. Furthermore, although there is little reason to believe that monetary policy has lost its ability to stimulate the economy, turmoil in financial markets has increased the uncertainty about the precise effects. These two considerations provide a motivation for policymakers to use fiscal stimulus as part of a diversified approach to boosting aggregate demand.

Table 1 shows estimates by Douglas Elmendorf and David Reifschneider using the Federal Reserve Board’s large-scale econometric model of the U.S. economy to simulate the effects of alternative economic policies, taking into account the full range of responses by both private actors and Federal Reserve policymakers. These estimates confirm the importance of using the “three Ts” to guide fiscal stimulus.

<b>Table 1</b>			
<b>Elmendorf-Reifschneider (2002) Estimates of the Effect of Alternative Macroeconomic Policies<sup>1</sup></b>			
	Increase in the Level of Real GDP		
	2008-Q2	2008-Q3	2009-Q1
Permanent income tax cut (1% of GDP) <sup>2</sup>	.2	.3	.5
One-time rebate (1% of GDP assuming 20% spent)	.3	.0	.0
One-time rebate (1% of GDP assuming 50% spent)	1.0	1.2	-.2
One percentage point reduction in the federal funds rate	.0	.1	.4

1 These figures apply the dynamic responses reported in the paper to a hypothetical fiscal stimulus implemented in the second quarter of this year.

2 Tax and spending changes cannot literally be permanent without offsetting changes on the other side of the government ledger, or government debt would spiral upward as a share of output. Therefore, the analysis assumed that changes would be sustained for ten years before budget balance was gradually restored. A permanent ten percent investment tax credit was not calibrated to cost exactly one percent of GDP, but its budget implications turned out to be very similar to that of the other policies shown here.

Source: Elmendorf, Douglas W. and David Reifschneider. 2002. “Short Run Effects of Fiscal Policy with Forward-Looking Financial Markets.” *National Tax Journal*, 55(3). September.

- The rapidly evolving downturn provides a motivation for *timely* fiscal stimulus which, if well designed, could raise economic output and create jobs by the middle of 2008—filling in some of the “gap” by acting to add to growth before monetary policy is fully effective.
- Fiscal stimulus should also be *temporary*. Based on current forecasts, the economy does not need a boost in 2009. If Congress and the President give it one, then the Federal Reserve is likely to offset the fiscal stimulus by not cutting interest rates as much as it

otherwise would have. In addition, helping with our short-term weakness should not unnecessarily increase our long-term budget deficit.

- Finally, any steps that policymakers take should be *targeted* in two senses: helping those who most need to be protected from the downturn and achieving the maximum bang-for-the-buck in added output for a given budgetary cost. Fortunately, these are complementary, as the households most in need of money are also the families most likely to spend it.

### **An Overview and Analysis of the Options**

The previous section demonstrated the importance of fiscal stimulus being timely, targeted, and temporary. In this section, I use these principles to evaluate some specific stimulus options. Some options that have been discussed would generate effective stimulus, others would be less effective, and some would be ineffective or even counterproductive. This discussion focuses on the approaches to fiscal stimulus that have received the greatest attention. A summary of estimates of the effectiveness of these stimulus options by CBO and Moody's Economy.com, under the leadership of Mark Zandi, are presented in Table 2.

<b>Table 2. The Impact of Various Stimulus Options</b>				
	<b>CBO</b>		<b>Moody's Economy.com</b>	
	Cost-Effectiveness	Time From Enactment to Impact	Cost-Effectiveness <sup>1</sup>	Time From Enactment to Impact <sup>2</sup>
<b>Tax Cuts</b>				
Non-refundable lump-sum rebate	Large <sup>3</sup>	Medium	1.02	Medium
Refundable lump-sum rebate			1.26	Medium
Payroll tax holiday	Large	Medium	1.29	Medium
Temporary across-the-board cut	Small	Short	1.03	N.A.
Accelerated depreciation	Medium	Medium	0.27	Medium/Long
Extend AMT patch permanently	Medium	Long	0.48	Long
Bush tax cuts permanent	Small	Long	0.29	Long
Dividend/capital gains permanent	N.A.	N.A.	0.37	Long
Cut corporate tax rate	Small	Long	0.30	N.A.
Extend operating loss/carryback	Small	Medium	N.A.	N.A.
<b>Spending Increases</b>				
Extending UI Benefits	Large	Short	1.64	Short
Temporary food stamps increase	Large	Short	1.73	Short
Aid to state governments	Medium	Medium	1.36	Short/Medium
Increased infrastructure spending	Small	Long	1.59	Long

1 One year dollar change in real GDP for a given dollar reduction in federal tax revenue or increase in spending. The estimate is for the year the spending/tax takes place, which is not necessarily the year it is enacted.

2 Author's assessments based on the discussion by Moody's Economy.com.

3 CBO's table does not distinguish between refundable and non-refundable rebates but its text states, "Making the rebate refundable would further boost the cost effectiveness of the stimulus."

Source: CBO, *Options for Responding to Short-Term Economic Weakness*, January 2008 and Moody's Economy.com "Assessing the Macro Economic Impact of Fiscal Stimulus 2008," January 2008.

### *More effective options*

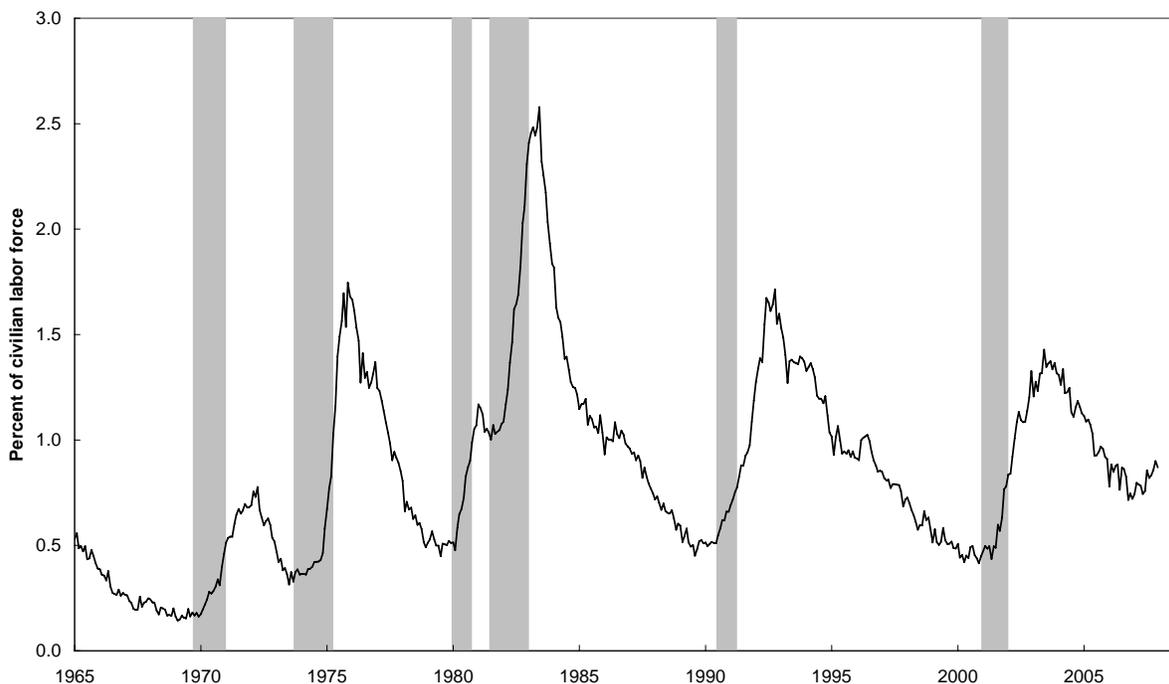
Policymakers designing fiscal stimulus should consider the following policies:

Increase food stamps temporarily. One option is to increase food stamps on a temporary basis; for example, anyone receiving food stamps might automatically receive 20 percent more stamps for six months. This change could be administered easily and quickly by raising the value of electronic benefit cards issued to food stamp beneficiaries. The change would also be well-targeted at families that are very vulnerable to an economic slowdown and that would spend essentially all of the extra income—likely an even higher fraction than any tax policy that is being contemplated.

Extend and possibly expand unemployment insurance benefits temporarily. Unemployment insurance benefits are generally limited to 26 weeks. This limitation is based on a judgment about how to balance the greater protection afforded by additional weeks of unemployment insurance against the greater distortion to people's incentives for finding new jobs. During

economic slowdowns, when new jobs are harder to find, the optimal balance shifts toward longer periods of eligibility. In the past policymakers have recognized this by extending unemployment insurance benefits during recessions. Such action could be even more important this year because, as shown in Figure 1, the long-term unemployment rate was nearly twice as high in the last quarter of 2007 as it was immediately before the 2001 recession.<sup>2</sup>

Figure 1. Long-Term Unemployment Rate



Notes: Percent of civilian labor force unemployed for 27 weeks or longer. Shaded regions show recessions as defined by the NBER.  
Source: BLS (2007)

Temporary, refundable tax credits. The previous two policy options would not involve enough money to represent adequate stimulus on their own. A larger-scale option that could satisfy the three criteria of effective stimulus is a temporary, refundable tax credit. The next section of this testimony discusses some consideration in designing these credits, most importantly that they be refundable so that they benefit the more than 25 million wage-earning households that do not have income tax liability and thus would not benefit from a non-refundable credit. To ensure that the tax credits do not worsen the long-run budget outlook, they should be temporary. The economic evidence, most notably from the 2001 rebate, suggests that households would spend the majority of their rebates—with larger spending increases for low-income households. As a result, a refundable credit that goes to low-income households is estimated to have 24 percent more bang-for-the-buck than a non-refundable credit that leaves out these households, according to Moody’s Economy.com.

<sup>2</sup> Note also that the trough of the long-term unemployment rate in this cycle was well above the troughs in previous cycles.

State fiscal relief, especially a temporary increase in the Federal Medical Assistance Percentages (FMAP). In a recession state budget deficits rise, forcing them to cut back on spending and raise taxes – undoing some of the stimulus federal policymakers are trying to achieve. One way to prevent this is to provide fiscal relief to states, particularly for their operating budgets which, unlike their capital budgets, generally operate under rules requiring balanced budgets. One effective way to accomplish this would be temporarily increasing the FMAP for states that agree to maintenance of effort rules for Medicaid and SCHIP. Such an increase would have some macroeconomic stimulus effect but would also help prevent some of the worst impacts of the downturn by helping to protect families from losing their health insurance.

### *Less effective options*

The following policies are likely to be less effective in spurring economic activity than the policies just discussed, either because the available evidence indicates they do not provide well-timed stimulus or because there is considerable economic and administrative uncertainty about how they might work:

Create temporary investment tax incentives. Temporary tax incentives for business investment, like the bonus depreciation provision enacted in 2003, can stimulate the economy by raising outlays for business equipment and structures. In particular, such incentives can induce businesses to undertake investment immediately that they would otherwise pursue in some future year. But research on this topic has found that the magnitude of this effect is small at best. Moreover, any effect appears to work more slowly in stimulating the economy than household consumption-oriented measures—a distinct disadvantage when a principal rationale for adding fiscal stimulus to monetary stimulus is its potential for more immediate impact. Finally, temporary investment tax incentives provide no direct help for families coping with a temporary economic downturn.

Increase infrastructure investment. Although additional physical and technological infrastructure investments might provide an important boost to long-term growth, they are difficult to design in a manner that would generate significant short-term stimulus. In the past, infrastructure projects that were initiated as the economy started to weaken did not involve substantial amounts of spending until after the economy had recovered. However, this approach might be more useful if policies could be designed to prevent cutoffs in ongoing infrastructure spending (such as road repair) that would exacerbate an economic downturn.

### *Ineffective or counterproductive options*

Reduce tax rates. Reducing tax rates would generate less than half as much economic stimulus as flat, refundable tax credits of the same size. Such a tax reduction would give disproportionate benefits to high-income households, which are the households least likely to be hurt by an economic downturn. And the permanence of the tax reduction would likely raise long-term interest rates and crowd out some of the modest direct stimulus.

Make the 2001 and 2003 tax cuts permanent. The tax reductions enacted in 2001 and 2003 expire at the end of 2010. Making those tax cuts permanent would violate all three principles of

effective fiscal stimulus discussed earlier, and it might even hurt the economy in the short run. First, a reduction in income taxes starting in 2011 would provide little or no boost to consumer spending in 2008.<sup>3</sup> Second, the 2001 and 2003 tax reductions offered the largest dollar benefits to the highest-income families, so extending them would provide low bang-for-the-buck in terms of economic stimulus even in 2011. Third, this sort of permanent tax change would increase the long-run budget deficit, likely reducing long-run economic growth. In addition, if making the tax cuts permanent were perceived by forward-looking financial markets as raising the long-run deficit, interest rates would rise today, crowding out investment and reducing GDP in the short run as well.<sup>4</sup>

### **Designing an Effective Individual Tax Rebate**

Policymakers have to consider a number of different questions in designing an effective tax rebate that is timely, administrable, fair, and economically effective in stimulating the economy. A number of these issues are discussed in considerable detail by the Joint Committee on Taxation's (JCT) "Overview Of Past Tax Legislation Providing Fiscal Stimulus And Issues In Designing And Delivering A Cash Rebate To Individuals" issued on January 21, 2008. As JCT explains, a rebate could be computed by the Internal Revenue Service (IRS) based on a formula derived from information on 2007 tax returns and mailed out by the Financial Management Service (FMS) over a five-to-six week period starting in May or June. Although from a macroeconomic perspective it would be preferable that the checks be mailed out sooner, even fiscal stimulus delivered over the summer would likely be helpful in either reducing the depth of a recession or economic slowdown or in speeding a recovery. In addition, it is possible that households would increase their spending in anticipation of refunds, possibly aided by refund anticipation loans through the major tax services.

My testimony provides some further analysis of some of the most important issues, drawing on new estimates from the Tax Policy Center's microsimulation model. After framing the question, I provide a distributional analysis of three potential options: eliminating the 10 percent bracket; providing a fully refundable tax credit; and providing a partially refundable tax credit that phases out for households with higher incomes.

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<sup>3</sup> Consumers who determine their spending based on their expected lifetime income would raise current spending if future taxes were reduced. However, the magnitude of the increase would not be very large if these consumers think there is some chance of a supposedly permanent change being rescinded later, or if they currently think there is some chance of the tax cuts being extended and have already factored that possibility into their consumption plans. Moreover, some consumers are not so forward-looking in their spending decisions, and others may be forward-looking enough to understand that taxes will eventually be raised or outlays reduced in order to satisfy the government's long-run budget constraint. Consumers in these groups would not raise their spending at all today if the tax cuts were extended.

<sup>4</sup> Making the tax cuts permanent could have other short-run economic effects. For example, a rational, forward-looking worker might reduce his or her labor effort today in response to lower tax rates in the future. Extending current provisions for small-business expensing would reduce the pressure on small businesses to make investments before those provisions expire, which could reduce current investment and slow the economy. But extending lower tax rates for S corporations would have the opposite effect, removing an incentive for shifting investment into future periods when deductions would have been more valuable. A complete analysis of these factors lies beyond the scope of this paper; in any event, their total economic effect is unlikely to be large in the short run.

### *Three key issues in designing an individual rebate*

The canonical considerations in designing tax policies are efficiency, equity and simplicity. In the case of the stimulus package, the efficiency consideration is very different from what would be considered in normal tax policy. Typically efficiency is about minimizing the distortions that taxes pose for work, savings, and other behavior. In the current context, however, rebates would be a function of work and savings decisions made in 2007—they would not pose any distortions for this behavior.<sup>5</sup> Instead the key efficiency question here is how much of the rebate households would spend, and thus how much would it stimulate aggregate demand and overall economic performance. These three considerations can be used to evaluate three questions.

***First, should the rebates go to lower-income households?*** From a macroeconomic perspective, a tax rebate would be more effective if it includes the lower-income households who are most likely to spend the money. This is broadly agreed by the economics profession. For example, Federal Reserve Chairman Ben Bernanke testified that “If you’re somebody who lives paycheck to paycheck, you’re more likely to spend that extra dollar.” Fairness also suggests that lower-income households should receive tax rebates. Finally, such rebates could be designed in such a way that they would pose little additional complication for IRS administration.

***Second, should the rebates go to higher-income households?*** The same macroeconomic considerations that apply to lower-income households apply here, but in reverse. As Bernanke put it, “If you’re somebody who has lots of financial assets and you receive an extra dollar, you may not change your spending much.” Phasing out a rebate for higher-income households would increase the overall cost effectiveness of a stimulus package. It would enable policymakers to either have a larger rebate for low- and middle-income households or reduce the budgetary cost of the rebate.

***Third, should the rebates be adjusted for family size?*** Some proposals would give a fixed amount based on household status, for example \$800 for a single household and \$1,600 for a married couple filing jointly. Other proposals would include a family size adjustment that provides additional funds for households with additional children. Although either approach would be effective macroeconomic policy, the latter approach has the potential advantage of corresponding more closely to family needs, which are a function of family size.

Table 3 provides a series of illustrative options that show the budgetary cost of alternative approaches to refundability for low-income households and phase-outs for high-income households. The base option is an \$800 tax credit for singles and \$1,600 for married couples filing jointly.

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<sup>5</sup> An exception, which could be important in some circumstances, would be if rebates lead households to change their filing behavior in order to maximize their rebates.

	Revenue Cost (billions of dollars)	Number Benefiting (millions)	Tax Filers with Zero Benefit (millions)	Earners with Zero Benefit (millions)
Limited by income tax	\$99	88	38	35
Fully refundable to all filers	\$161	127	0	2
Limited to income tax plus 15 percent of earnings	\$147	122	5	2
Limited to 15 percent of earnings	\$137	114	13	2
<i>Memo: Changes to the above from</i>				
Phased out for AGI greater than \$75K/\$110K	-\$19	-11	-11	-10
Phased out for AGI greater than \$100K/\$200K	-\$7	-5	-5	-4

Source: Tax Policy Center microsimulation model

Some of the key points from this table:

- A tax credit of \$800 for singles and \$1,600 for married couples (which is similar to a policy that eliminated the 10 percent tax bracket) would benefit 88 million tax units but leave 35 million wage-earning tax units with no benefit.<sup>6</sup>
- Making this tax credit fully refundable to all filers would benefit all filers, 127 million in total (although 2 million wage-earning tax units would still be left out for administrative reasons, largely because they did not file taxes). The added benefit for these households, however, would raise the total price tag by \$62 billion. Alternatively, the credit amount could be scaled down to about \$375/\$750 to keep the price tag the same while benefiting more households.
- Alternatively, policymakers could limit rebates to income taxes plus 15 percent of earnings, including both wages and self-employment income. This would deliver benefits to most of the tax filers and wage earners left out of a nonrefundable credit. But because the refundability is more limited, the added cost would fall to \$48 billion. An even more restrictive refundability would limit benefits to 15 percent of earnings; this would bring the cost down but at the expense of leaving out tax filers with capital income.
- Finally, phasing out the rebate in the same manner as the child tax credit (starting at \$75,000 for singles and \$110,000 for married couples earners would lose 5 percent of benefits) would reduce the cost by \$19 billion while eliminating benefits for 11 million higher-income households. Adopting the higher phaseout rates of \$100,000 for singles and \$200,000 for married couples would raise the cost by \$7 billion and eliminate benefits for 5 million higher-income households.

<sup>6</sup> Note not all tax filers have wages. And not all wage earners are tax filers. But the bulk of these groups of 38 million filers and 35 million earners consist of the same households.

### *Three illustrative options for rebates*

The following presents a summary of three illustrative options for one-time rebates that would total approximately \$100 billion in 2008. A complete set of distributional tables for these options are provided in the Appendix. The options are:

- **Eliminate the 10 percent tax bracket (\$101 billion).** This option would provide a rebate equal to the difference between a household's regular income taxes and their taxes assuming that the 10 percent tax bracket was zero. This would provide a rebate of \$800 for singles and \$1,600 for married couples, providing they had sufficient tax liability. In sum, 30 million households with earnings have no tax liability and thus no benefit from this proposal.
- **Provide a fully refundable rebate with no phase-out (\$105 billion).** This option would provide a rebate of \$450 for singles, \$900 for married couples, and \$225 for each additional dependent. As a result, a family of four would get \$1,350. This amount would be fully refundable for all tax filers and would not be phased out. As a result, all tax filers would get the full benefit and same total amount. Larger families would get larger rebates.<sup>7</sup>
- **Provide a partially refundable rebate phased out for higher-income households (\$104 billion).** This option would provide a maximum rebate of \$550 for singles, \$1,100 for married couples, and \$275 for each additional dependent. As a result, a family of four would get a maximum rebate of \$1,650. The rebate would be limited to the amount a family paid in income taxes plus 15 percent of earnings, effectively limiting the rebate to income plus payroll taxes. In addition, the rebate would be phased out like the child tax credit; that is, starting at \$75,000 for singles and \$110,000 for married couples. As a result of these limitations, 17 million tax filers and 13 million earning households would get no benefit—of which 11 million are high-income households for whom the rebate would be phased out.

### **Conclusion**

Ultimately the biggest economic challenges this country faces are how to promote strong and inclusive long-run growth. Doing this will require a range of responses from health reform to a new energy policy to curbing the long-run deficit. As important as these problems are, they are also complicated. In the short-run, however, the most immediate challenge is helping the economy to fully utilize its current potential. Fortunately, this is a much easier task and hopefully policymakers can move from agreement in principle to working out detailed provisions that are consistent with these principles: timely, temporary and targeted.

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<sup>7</sup> Note that this option could pose a challenge for tax administration because it would encourage more households to file additional tax returns. If such additional returns were not desirable, policymakers could limit the rebates to households who filed for tax year 2006.

**Reduce 10-Percent Individual Income Tax Rate to 0 Percent**  
**Distribution of Federal Tax Change by Cash Income Level, 2007 Income Levels<sup>1</sup>**  
**Summary Table**

Cash Income Level (thousands of 2006 dollars) <sup>2</sup>	Percent of Tax Units <sup>3</sup>		Percent Change in After-Tax Income <sup>4</sup>	Share of Total Federal Tax Change	Average Federal Tax Change (\$)	Average Federal Tax Rate <sup>5</sup>	
	With Tax Cut	With Tax Increase				Change (%) Points)	Under the Proposal
Less than 10	1.6	0.0	0.0	0.0	0	0.0	4.0
10-20	27.0	0.0	0.8	3.1	-122	-0.8	3.5
20-30	59.6	0.0	1.8	8.3	-408	-1.6	7.9
30-40	77.6	0.0	2.2	10.1	-658	-1.9	12.0
40-50	88.4	0.0	2.3	10.5	-866	-1.9	14.6
50-75	95.5	0.0	2.2	24.3	-1,141	-1.8	16.7
75-100	97.7	0.0	1.9	17.7	-1,345	-1.5	18.5
100-200	94.7	0.0	1.3	22.7	-1,359	-1.0	21.4
200-500	44.8	0.0	0.3	2.5	-550	-0.2	25.1
500-1,000	38.9	0.0	0.1	0.4	-528	-0.1	27.1
More than 1,000	64.0	0.0	0.0	0.4	-941	0.0	31.9
All	62.5	0.0	1.3	100.0	-668	-1.0	20.2

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 1006-2).

Number of AMT Taxpayers (millions). Baseline: 3.7 Proposal: 5.3

(1) Calendar year. Baseline is 2008 current law assuming extension and indexation for inflation of the 2007 AMT patch. Proposal provides a tax rebate equivalent to a reduction in the bottom tax rate from 10 percent to 0 percent, based on income reported on 2007 tax returns.

(2) Tax units with negative cash income are excluded from the lowest income class but are included in the totals. For a description of cash income, see <http://www.taxpolicycenter.org/TaxModel/income.cfm>

(3) Includes both filing and non-filing units but excludes those that are dependents of other tax units.

(4) After-tax income is cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); and estate tax.

(5) Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, and the estate tax) as a percentage of average cash income.

**Reduce 10-Percent Individual Income Tax Rate to 0 Percent**  
**Distribution of Federal Tax Change by Cash Income Percentile, 2007 Income Levels<sup>1</sup>**  
**Summary Table**

Cash Income Percentile <sup>2,3</sup>	Percent of Tax Units <sup>4</sup>		Percent Change in After-Tax Income <sup>5</sup>	Share of Total Federal Tax Change	Average Federal Tax Change (\$)	Average Federal Tax Rate <sup>6</sup>	
	With Tax Cut	With Tax Increase				Change (%) Points)	Under the Proposal
Lowest Quintile	8.4	0.0	0.2	0.5	-16	-0.2	3.2
Second Quintile	43.6	0.0	1.4	8.1	-271	-1.3	5.8
Middle Quintile	79.1	0.0	2.2	20.6	-688	-1.9	12.4
Fourth Quintile	95.6	0.0	2.2	34.5	-1,155	-1.8	16.9
Top Quintile	86.2	0.0	0.8	36.3	-1,213	-0.6	24.5
All	62.5	0.0	1.3	100.0	-668	-1.0	20.2
<b>Addendum</b>							
80-90	97.2	0.0	1.7	20.6	-1,377	-1.3	19.5
90-95	94.6	0.0	1.2	10.2	-1,363	-0.9	21.9
95-99	59.4	0.0	0.4	4.7	-778	-0.3	24.4
Top 1 Percent	40.7	0.0	0.1	0.8	-561	0.0	30.2
Top 0.1 Percent	64.3	0.0	0.0	0.1	-952	0.0	32.7

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 1006-2).

Number of AMT Taxpayers (millions). Baseline: 3.7 Proposal: 5.3

(1) Calendar year. Baseline is 2008 current law assuming extension and indexation for inflation of the 2007 AMT patch. Proposal provides a tax rebate equivalent to a reduction in the bottom tax rate from 10 percent to 0 percent, based on income reported on 2007 tax returns.

(2) Tax units with negative cash income are excluded from the lowest income class but are included in the totals. For a description of cash income, see <http://www.taxpolicycenter.org/TaxModel/income.cfm>

(3) The cash income percentile breaks used in this table are (in 2006 dollars): 20% \$13,944, 40% \$26,887, 60% \$47,151, 80% \$83,902, 90% \$123,792, 95% \$174,283, 99% \$425,614, 99.5% \$663,650, and 99.9% 1,925,007.

(4) Includes both filing and non-filing units but excludes those that are dependents of other tax units.

(5) After-tax income is cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); and estate tax.

(6) Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, and the estate tax) as a percentage of average cash income.

**Fully Refundable Tax Rebate of \$450 (\$900 For Couples) Plus \$225 Per Dependent  
Distribution of Federal Tax Change by Cash Income Level, 2007 Income Levels<sup>1</sup>  
Summary Table**

Cash Income Level (thousands of 2006 dollars) <sup>2</sup>	Percent of Tax Units <sup>3</sup>		Percent Change in After-Tax Income <sup>4</sup>	Share of Total Federal Tax Change	Average Federal Tax Change (\$)	Average Federal Tax Rate <sup>5</sup>	
	With Tax Cut	With Tax Increase				Change (%) Points)	Under the Proposal
Less than 10	58.9	0.0	5.5	6.2	-298	-5.2	-1.2
10-20	68.4	0.0	2.7	11.2	-392	-2.6	1.7
20-30	84.9	0.0	2.3	11.6	-514	-2.0	7.4
30-40	91.4	0.0	1.9	9.8	-578	-1.6	12.2
40-50	96.3	0.0	1.7	8.5	-629	-1.4	15.1
50-75	99.3	0.0	1.4	17.5	-737	-1.2	17.4
75-100	99.9	0.0	1.2	12.4	-846	-1.0	19.0
100-200	100.0	0.0	0.9	16.8	-907	-0.7	21.8
200-500	100.0	0.0	0.4	4.6	-918	-0.3	25.0
500-1,000	100.0	0.0	0.2	0.8	-912	-0.1	27.0
More than 1,000	100.0	0.0	0.0	0.4	-903	0.0	31.9
All	86.1	0.0	1.2	100.0	-603	-0.9	20.3

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 1006-2).

Number of AMT Taxpayers (millions). Baseline: 3.7 Proposal: 3.7

(1) Calendar year. Baseline is 2008 current law assuming extension and indexation for inflation of the 2007 AMT patch. Proposal provides a fully refundable tax rebate available to all individual income tax filers of \$450 (\$900 for married couples filing a joint return) plus \$225 per dependent.

(2) Tax units with negative cash income are excluded from the lowest income class but are included in the totals. For a description of cash income, see <http://www.taxpolicycenter.org/TaxModel/income.cfm>

(3) Includes both filing and non-filing units but excludes those that are dependents of other tax units.

(4) After-tax income is cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); and estate tax.

(5) Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, and the estate tax) as a percentage of average cash income.

**Fully Refundable Tax Rebate of \$450 (\$900 For Couples) Plus \$225 Per Dependent  
Distribution of Federal Tax Change by Cash Income Percentile, 2007 Income Levels<sup>1</sup>  
Summary Table**

Cash Income Percentile <sup>2,3</sup>	Percent of Tax Units <sup>4</sup>		Percent Change in After-Tax Income <sup>5</sup>	Share of Total Federal Tax Change	Average Federal Tax Change (\$)	Average Federal Tax Rate <sup>6</sup>	
	With Tax Cut	With Tax Increase				Change (%) Points)	Under the Proposal
Lowest Quintile	60.3	0.0	4.1	10.3	-317	-3.9	-0.6
Second Quintile	78.0	0.0	2.4	15.3	-462	-2.3	4.9
Middle Quintile	92.1	0.0	1.8	19.4	-584	-1.6	12.7
Fourth Quintile	99.4	0.0	1.4	24.8	-747	-1.2	17.5
Top Quintile	100.0	0.0	0.6	29.8	-897	-0.4	24.7
All	86.1	0.0	1.2	100.0	-603	-0.9	20.3
<b>Addendum</b>							
80-90	99.9	0.0	1.1	14.5	-876	-0.9	20.0
90-95	100.0	0.0	0.8	7.6	-913	-0.6	22.2
95-99	100.0	0.0	0.5	6.1	-926	-0.4	24.3
Top 1 Percent	100.0	0.0	0.1	1.5	-909	-0.1	30.1
Top 0.1 Percent	100.0	0.0	0.0	0.2	-904	0.0	32.7

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 1006-2).

Number of AMT Taxpayers (millions). Baseline: 3.7 Proposal: 3.7

(1) Calendar year. Baseline is 2008 current law assuming extension and indexation for inflation of the 2007 AMT patch. Proposal provides a fully refundable tax rebate available to all individual income tax filers of up to \$450 (\$900 for married couples filing a joint return) plus \$225 per dependent.

(2) Tax units with negative cash income are excluded from the lowest income class but are included in the totals. For a description of cash income, see <http://www.taxpolicycenter.org/TaxModel/income.cfm>

(3) The cash income percentile breaks used in this table are (in 2006 dollars): 20% \$13,944, 40% \$26,887, 60% \$47,151, 80% \$83,902, 90% \$123,792, 95% \$174,283, 99% \$425,614, 99.5% \$663,650, and 99.9% 1,925,007.

(4) Includes both filing and non-filing units but excludes those that are dependents of other tax units.

(5) After-tax income is cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); and estate tax.

(6) Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, and the estate tax) as a percentage of average cash income.

**Tax Rebate of up to \$550 (\$1,100 For Couples) Plus \$275 Per Dependent  
Phased Out for Upper Income Taxpayers  
Distribution of Federal Tax Change by Cash Income Level, 2007 Income Levels<sup>1</sup>  
Summary Table**

Cash Income Level (thousands of 2006 dollars) <sup>2</sup>	Percent of Tax Units <sup>3</sup>		Percent Change in After-Tax Income <sup>4</sup>	Share of Total Federal Tax Change	Average Federal Tax Change (\$)	Average Federal Tax Rate <sup>5</sup>	
	With Tax Cut	With Tax Increase				Change (%) Points)	Under the Proposal
Less than 10	51.2	0.0	5.3	5.3	-287	-5.0	-1.0
10-20	61.6	0.0	3.2	12.1	-472	-3.1	1.1
20-30	80.5	0.0	2.8	13.1	-649	-2.6	6.9
30-40	88.1	0.0	2.5	11.5	-755	-2.1	11.7
40-50	93.5	0.0	2.2	10.0	-826	-1.8	14.6
50-75	98.0	0.0	1.9	21.1	-993	-1.6	16.9
75-100	95.8	0.0	1.6	14.4	-1,100	-1.3	18.8
100-200	63.8	0.0	0.7	11.8	-708	-0.5	21.9
200-500	6.0	0.0	0.0	0.3	-56	0.0	25.3
500-1,000	6.3	0.0	0.0	0.1	-62	0.0	27.1
More than 1,000	2.1	0.0	0.0	0.0	-23	0.0	31.9
All	74.4	0.0	1.3	100.0	-670	-1.0	20.1

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 1006-2).

Number of AMT Taxpayers (millions). Baseline: 3.7 Proposal: 3.7

(1) Calendar year. Baseline is 2008 current law assuming extension and indexation for inflation of the 2007 AMT patch. Proposal provides a tax rebate of up to \$550 (\$1,100 for married couples filing a joint return) plus \$275 per dependent. The rebate would be limited by the sum of individual income tax liability (if positive) and 15 percent of earnings (defined as wages plus self-employment income, if positive). The rebate would be phased out at a rate of 5 percent of AGI in excess of the thresholds for the child tax credit phaseout (\$75,000 for singles, \$110,000 for couples).

(2) Tax units with negative cash income are excluded from the lowest income class but are included in the totals. For a description of cash income, see <http://www.taxpolicycenter.org/TaxModel/income.cfm>

(3) Includes both filing and non-filing units but excludes those that are dependents of other tax units.

(4) After-tax income is cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); and estate tax.

(5) Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, and the estate tax) as a percentage of average cash income.

**Tax Rebate of up to \$550 (\$1,100 For Couples) Plus \$275 Per Dependent  
Phased Out for Upper Income Taxpayers  
Distribution of Federal Tax Change by Cash Income Percentile, 2007 Income Levels<sup>1</sup>  
Summary Table**

Cash Income Percentile <sup>2,3</sup>	Percent of Tax Units <sup>4</sup>		Percent Change in After-Tax Income <sup>5</sup>	Share of Total Federal Tax Change	Average Federal Tax Change (\$)	Average Federal Tax Rate <sup>6</sup>	
	With Tax Cut	With Tax Increase				Change (%) Points)	Under the Proposal
Lowest Quintile	52.4	0.0	4.2	9.7	-331	-4.1	-0.7
Second Quintile	72.8	0.0	3.0	17.1	-573	-2.8	4.4
Middle Quintile	88.9	0.0	2.4	22.7	-762	-2.1	12.2
Fourth Quintile	97.9	0.0	1.9	30.0	-1,004	-1.6	17.1
Top Quintile	60.5	0.0	0.5	20.4	-682	-0.3	24.8
All	74.4	0.0	1.3	100.0	-670	-1.0	20.1
<b>Addendum</b>							
80-90	88.3	0.0	1.3	16.2	-1,087	-1.1	19.8
90-95	59.1	0.0	0.4	3.7	-496	-0.3	22.4
95-99	6.7	0.0	0.0	0.4	-59	0.0	24.7
Top 1 Percent	4.8	0.0	0.0	0.1	-48	0.0	30.2
Top 0.1 Percent	1.2	0.0	0.0	0.0	-12	0.0	32.8

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 1006-2).

Number of AMT Taxpayers (millions). Baseline: 3.7 Proposal: 3.7

(1) Calendar year. Baseline is 2008 current law assuming extension and indexation for inflation of the 2007 AMT patch. Proposal provides a tax rebate of up to \$550 (\$1,100 for married couples filing a joint return) plus \$275 per dependent. The rebate would be limited by the sum of individual income tax liability (if positive) and 15 percent of earnings (defined as wages plus self-employment income, if positive). The rebate would be phased out at a rate of 5 percent of AGI in excess of the thresholds for the child tax credit phaseout (\$75,000 for singles, \$110,000 for couples).

(2) Tax units with negative cash income are excluded from the lowest income class but are included in the totals. For a description of cash income, see <http://www.taxpolicycenter.org/TaxModel/income.cfm>

(3) The cash income percentile breaks used in this table are (in 2006 dollars): 20% \$13,944, 40% \$26,887, 60% \$47,151, 80% \$83,902, 90% \$123,792, 95% \$174,283, 99% \$425,614, 99.5% \$663,650, and 99.9% 1,925,007.

(4) Includes both filing and non-filing units but excludes those that are dependents of other tax units.

(5) After-tax income is cash income less: individual income tax net of refundable credits; corporate income tax; payroll taxes (Social Security and Medicare); and estate tax.

(6) Average federal tax (includes individual and corporate income tax, payroll taxes for Social Security and Medicare, and the estate tax) as a percentage of average cash income.