The Urban Brookings Tax Policy Center has graded the key tax provisions of the pending House stimulus bill (the "American Recovery and Reinvestment Tax Act of 2009", as amended). Our grades reflect how well these measures would boost the economy in the short run per dollar of budget cost (sometimes called “bang for the buck”). For grading purposes, we assume that each provision will expire as scheduled and consider only the effects on aggregate demand (consumption or investment) or employment in the short-term. Each grade depends on both timeliness and targeting. To receive an A, a provision would have to begin quickly and go primarily to people who would most likely spend it or to businesses that would most likely use funds to retain workers or expand. We do not consider the long-term effects on the economy. An attached write-up describes current law, the proposed change, and the short- and long-term effects on the budget, the economy, fairness, and tax complexity. There, we also discuss the likelihood that each proposal would actually expire as scheduled and, for some provisions, explain what changes would raise the grade to an A.

Our report card is preliminary and does not include all of the provisions in the bill – most notably we omit provisions providing about $48 billion of fiscal relief for state and local governments. We may evaluate additional provisions and adjust our grades and analysis as we learn more about the proposals. In addition, TPC will update its Report Card as the stimulus bill moves through Congress.

<table>
<thead>
<tr>
<th>Tax provision</th>
<th>Stimulus effect</th>
<th>Ten-year revenue cost</th>
<th>Comments (see attached write-ups for details)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individual Income Tax Provisions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>“Making Work Pay” tax credit</td>
<td>B+</td>
<td>$144.9B</td>
<td>Could start quickly. Payment in small increments may increase stimulus effect but two-year limit and high-income eligibility reduces impact.</td>
</tr>
<tr>
<td>Increase in earned income tax credit</td>
<td>B</td>
<td>$4.7B</td>
<td>Highly targeted. Gives cash assistance to low-income families most likely to spend quickly but slow to start.</td>
</tr>
<tr>
<td>Increase eligibility for the refundable portion of child credit</td>
<td>B+</td>
<td>$18.3B</td>
<td>Highly targeted. Gives cash assistance to low-income families most likely to spend quickly but slow to start.</td>
</tr>
<tr>
<td>“American Opportunity” education tax credit</td>
<td>C</td>
<td>$13.7B</td>
<td>Slow to start. Refundable, so it goes to low-income students. Low-income households likely to spend quickly but only when funds become available.</td>
</tr>
<tr>
<td>Refundable first-time home buyer credit</td>
<td>C+</td>
<td>$2.6B</td>
<td>Small short-run stimulus to weak housing market. Large windfall gains to people who would buy anyway. Eliminating repayment simplifies administration.</td>
</tr>
<tr>
<td><strong>Business Tax Provisions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extension of enhanced small businesses expensing</td>
<td>C</td>
<td>$0.4B</td>
<td>Simplifies tax filing for small businesses and may encourage some businesses to accelerate decisions to invest in capital equipment. Impact is expected to be small and much of tax benefit is likely to go to businesses that would have invested anyway.</td>
</tr>
<tr>
<td>Extension of bonus depreciation</td>
<td>C</td>
<td>$5.1B</td>
<td>Previous experience suggests that investment effects would be modest at best. Severity of downturn decreases the stimulus potential.</td>
</tr>
<tr>
<td>Five-year carryback of net operating losses</td>
<td>B</td>
<td>$15.0B</td>
<td>Increases effectiveness of temporary investment incentives such as bonus depreciation and expensing. By increasing cash flow to businesses, it could also stimulate new investment but the effect is likely to be modest.</td>
</tr>
<tr>
<td>Incentives to hire unemployed veterans and disconnected youth</td>
<td>D</td>
<td>$0.2B</td>
<td>Based on past experience with this wage subsidy, it is unlikely to generate jobs for the target groups.</td>
</tr>
<tr>
<td><strong>Renewable Energy Provisions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reinvestment in renewable energy</td>
<td>C</td>
<td>$20.0B</td>
<td>Some new investment would be added, but some projects may take time to gear up.</td>
</tr>
</tbody>
</table>

1Revenue estimates from Joint Committee on Taxation, "Estimated Budget Effects of the Revenue Provisions Contained in Division B, Titles I and III of H.R. 1, as passed by the House of Representatives on January 28, 2009", JCX-14-09, January 30, 2009.
Introduction
The Tax Policy Center has graded the key tax provisions of the pending House stimulus bill (the “American Recovery and Reinvestment Tax Plan of 2009”). Our grades, which rely on the bill’s legislative language, focus on how well these measures would boost the economy in the short run.

In the long run, economies grow by expanding their capacity to produce goods and services. This involves increasing the supply of capital and labor, developing new technologies and moving resources to industries and regions where they can be employed best. This is a problem of raising aggregate supply of labor and capital.

The current economic problem, however, is not a lack of capacity or supply but rather a lack of aggregate demand that is reflected in the underuse of existing capacity: unemployment rates are high, capacity utilization rates in manufacturing are low, and consumer confidence is dismal. In the current environment, the most promising way of turning the economy around is to raise aggregate demand by stimulating consumer spending, business hiring and investment, and purchases by federal, state and local governments. This will raise demand for goods and increase use of existing capacity.

Therefore, a good provision boosts aggregate demand, has a high “bang for the buck”—that is, stimulates a substantial amount of spending per dollar of tax cut—and expires after the recession is over. Individual tax cuts with high bang for the buck target those most likely to spend the money and do so in a timely way. Business tax cuts with high bang for the buck encourage new investment and hiring rather than subsidize spending that would have occurred anyway.

These grades are preliminary and we may adjust them as we learn more about the proposals and their economic effects. In addition, TPC will update its Report Card as the stimulus bill moves through Congress.
“MAKING WORK PAY” TAX CREDIT

Key Points

- Each worker not claimed as a dependent on someone else’s tax return could receive an income tax credit equal to 6.2 percent of earned income up to a maximum credit of $500.
- The credit could start quickly if implemented through reduced withholding. Otherwise, taxpayers would likely not benefit until they file their tax returns the following year, in which case the stimulus effect would be significantly delayed.
- Delivery in small increments through reduced withholding—rather than in a lump sum as a tax refund—might encourage recipients to spend the credit rather than save more or pay down debt.
- A temporary credit induces less additional spending than a permanent credit.
- The credit could induce some low-income people to work and partially offsets the regressivity of the payroll tax.
- JCT estimates that the proposal would cost $145 billion over 10 years, more than one-half of the $275 billion cost of all the tax provisions combined. (If made permanent, the long-term costs would be very large.)

Current Law

The “Making Work Pay” tax credit is a new credit.

Stimulus Proposal

The “Making Work Pay” (MWP) tax credit would make good on President Obama’s promise to offset part of the Social Security taxes paid by low- and middle-income workers.

MWP would provide a refundable tax credit in 2009 and 2010 equal to 6.2 percent of earnings (the employee share of the Social Security payroll tax), up to a maximum credit of $500 per worker. Those claimed as dependents by other taxpayers are not eligible for the credit.

The credit would phase out at a rate of 2 percent of income over $150,000 for married couples filing joint tax returns and $75,000 for others. Therefore, couples with income above $200,000 and others with income above $100,000 would not get the credit.

The legislative language does not specify how workers would receive the credit, but the Ways and Means summary says that withholding would be adjusted to advance the credit to many workers soon after the bill is enacted. If the Internal Revenue Service (IRS) adjusts withholding tables, recipients would quickly benefit from the credit through larger paychecks.
Discussion

Assuming that taxpayers receive the credit over time through reduced withholding, the new credit could quickly boost take-home pay. The IRS could adjust withholding tables to reduce the amount withheld from workers’ checks by about $10 a week and thus deliver the $500 over the course of a year. Because each payment would be small, recipients might be more likely to spend the added income rather than saving it or paying down credit card or other debts. Evidence from behavioral economics suggests that taxpayers view small increments to after-tax pay as income, to be spent, whereas they tend to view lump-sum payments as wealth, to be saved. (James Surowiecki summarizes this point in “A Smarter Stimulus.”) Thus, the reduction in withholding would likely be an especially effective way to deliver stimulus.

If, alternatively, the IRS left withholding tables unchanged, most workers would get the credit only when they file their income tax returns the next year. In that case, the 2009 credit would not arrive until 2010, delaying any stimulative effect. Furthermore, because they would typically get the credit as a single large payment, recipients would be more likely to save it or use it to pay down their debts, which would not stimulate the economy. In addition, the fact that the credit disappears after two years makes it less likely that recipients will increase their spending. Permanent tax cuts can affect behavior more than temporary ones do.

The credit could begin quickly because employers could readily reduce withholding. Workers who hold multiple jobs and high-income workers for whom the credit would phase out would require special treatment to avoid under-withholding.

The credit would have some beneficial effects beyond the stimulus because it would partially offset the regressivity of payroll taxes and encourage low-income people to work. However, because it would not be limited to low-income workers, the credit would substantially reduce federal tax revenues. If it were made permanent—as President Obama proposed during the campaign—the credit would continue to reduce revenues even after the economy has turned around and when the country will need to restore fiscal balance.

Grade: B+

This proposal gets high marks for timeliness, assuming it is implemented as an adjustment to tax withholding, and that mechanism would also maximize the chances that the credit would be spent rather than saved. As a refundable tax credit, the proposal would aid many low-income workers who are most likely to spend the money. However, the credit would also be available to many higher-income workers who are less likely to spend the additional income. Were the credit better targeted, it would have been graded an A.
**INCREASE IN EARNED INCOME TAX CREDIT**

**Key Points**

- This proposal would increase the earned income tax credit (EITC) for families with three or more children from 40 to 45 percent of qualifying earnings. It would also increase the income range over which the EITC phases out for married couples to $5,000 more than that for single people, up from the 2009 level of $3,120.

- Increases to the EITC focus resources on relatively low-income families, who are most likely to spend the money.

- Marriage-penalty relief furthers efforts started with EGTRRA to keep low-income families from losing their EITC because of marriage.

- JCT estimates that the proposal would cost $4.7 billion over 10 years.

**Current Law**

The earned income tax credit (EITC) subsidizes earnings for low-income working families. The credit equals a fixed percentage of earnings until the credit reaches a maximum; both the percentage and the maximum credit depend on the number of children in the family. Maximum credits in 2009 are $457 for workers with no children, $3,043 for families with one child, and $5,028 for those with two or more children. Larger families get no additional credit. The credit stays at that maximum as income rises up to the phase-out threshold, above which the credit falls with each additional dollar of income until it disappears entirely. The phaseout begins at a higher income for married couples than for single parents. The credit is fully refundable: any excess beyond a family’s income tax liability is paid as a tax refund.

The table below summarizes the EITC parameters in 2009.

<table>
<thead>
<tr>
<th>Number of children</th>
<th>Credit rate (percent)</th>
<th>Income level for maximum credit</th>
<th>Maximum credit</th>
<th>Phase-out rate (percent)</th>
<th>Phase-out range*</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>7.65</td>
<td>5,970</td>
<td>457</td>
<td>7.65</td>
<td>7,470 to 13,440</td>
</tr>
<tr>
<td>One</td>
<td>34</td>
<td>8,950</td>
<td>3,043</td>
<td>15.98</td>
<td>16,420 to 35,643</td>
</tr>
<tr>
<td>Two or more</td>
<td>40</td>
<td>12,570</td>
<td>5,028</td>
<td>21.06</td>
<td>16,420 to 40,295</td>
</tr>
</tbody>
</table>

*The phase-out range for married couples begins and ends $3,120 higher than the values listed in this table. All dollar levels are adjusted annually for inflation.

**Stimulus Proposal**

The proposal would increase the earned income tax credit rate for working families with three or more children to 45 percent in 2009 and 2010. The maximum credit for families with three or more children would increase from $5,028 to $5,657. It would also increase the phase-out income levels for all married couples filing a joint tax return (regardless of the number of children) to $5,000 above the thresholds for single filers in 2009 and 2010.
Discussion

The EITC helps low-income families, but its structure ignores the greater needs of larger families. The credit goes to families with relatively low income—no more than $43,415—for whom having an additional child could impose significant demands on scarce resources.

Under the proposal, all families with three or more children who currently qualify for the EITC would receive a larger credit, and more families would become eligible for the credit because the phase-out range would extend over about $2,000 more income than the current credit for affected families.

The EITC may impose substantial marriage penalties on low-income families. When two low-income individuals marry, they may get a smaller or no EITC because of their higher combined earnings. The 2001 tax act increased the income level at which the credit begins to phase out for married couples to $3,120 above that for single people in 2009. The stimulus bill would further mitigate the marriage penalty by raising that higher phase-out start for couples to $5,000 above that for single people and thus make the credit available to more married tax filers.

The proposal is highly targeted, providing benefits to poor families, who are most likely to spend the additional income. Research based on credit card data showed that low-income households spent about 75 percent of their rebates from the 2001 tax stimulus (Johnson, Parker, and Souleles 2006). Shapiro and Slemrod (2003), however, found that low-income families spent much less than three-fourths of their 2001 rebates and not much more than higher-income families.

The larger EITC would increase the benefits of working and could thus induce some very low income people to look for jobs. In an ordinary time, that would help boost the economy. Given the currently high unemployment rate, however, new job seekers are unlikely to find work so the economy would get little stimulus through this mechanism.

There is likely to be substantial pressure to extend the credit beyond two years. That would increase long-term revenue losses, but it would also improve fairness for large families by recognizing their relatively greater needs and would mitigate some marriage penalties.

Grade: B

This provision is targeted on low-income households that are likely to spend additional income. The proposal would receive a higher grade if money could be distributed to affected families quickly—for example, through rebates based on 2008 income levels. More than 98 percent of recipients get the EITC as a refund at filing time, so the higher credit would not affect most recipients until they file their tax returns in 2010.
INCREASE ELIGIBILITY FOR THE REFUNDABLE PORTION
OF THE CHILD TAX CREDIT

Key Points

• This proposal would reduce the income threshold at which the Child Tax Credit (CTC) begins to phase in from $12,550 in 2009 and an estimated $12,600 in 2010 to $0 and, therefore, would extend the credit to the poorest working families.

• This is the most highly targeted of the tax provisions, helping low-income working families with children, who would tend to spend most or all of the additional funds.

• The stimulus would be delayed because the credit would generally only come after recipients file their tax returns the following year.

• JCT estimates that the proposal will cost $18.3 billion over 10 years.

Current Law
Families with children under age 17 can claim a Child Tax Credit (CTC) of up to $1,000 per child. The credit is reduced by 5 percent of adjusted gross income over $110,000 for married couples ($75,000 for single parents). If the credit exceeds taxes owed, families can receive some or all of the balance as a refund, known as the Additional Child Tax Credit (ACTC). The ACTC is limited to 15 percent of earnings above a threshold—$12,550 in 2009—that is indexed to inflation. The point at which the ACTC begins to phase-in coincides with the end of the phase-in range of the earned income tax credit (EITC) for families with two or more children, providing a smooth transition between the two credits for these families. For families with one child, however, there is a $3,600 gap between the $8,950 end of the EITC phase-in and the $12,550 start of the ACTC phase-in.

Stimulus Proposal
The proposal would reduce the start of the phase-in for the ACTC to $0 through 2010 so that families would start getting at least a partial credit as soon as they enter the labor force.

Discussion
The CTC is the largest tax code provision benefiting families with children, distributing about $45 billion to 31 million families in 2007. As currently structured, higher-income families are much more likely to benefit than lower-income families. In 2007, when the ACTC threshold was $11,750, only 8.2 percent of families with eligible children in the lowest quintile—or fifth—of the income distribution received any benefit from the credit, compared to nearly all families in the middle income quintile (see TPC table T07-0296). On top of that, many low-income families who receive the credit get less than its full $1,000 value because their income falls in the phase-in range.

The Tax Policy Center estimates that if the earnings threshold were reduced to $0, the families of 10.4 million children would see higher benefits from the child credit; of those, families of 6.3 million children would become newly eligible for the credit (see TPC table T08-0278).

This proposal is the most targeted part of the stimulus package, providing assistance to the poorest families, who are most likely to spend additional income. Research based on credit...
card data showed that low-income households spent about 75 percent of their rebates from the 2001 tax stimulus (Johnson, Parker, and Souleles 2006). Beneficiaries of this proposal have even lower incomes than the low-income recipients of the earlier tax rebate and would likely spend an even larger share of any additional credit this proposal would provide. On the other hand, survey data contradict that research, suggesting instead that low-income families spent much less than three-fourths of their 2001 rebates and not much more than higher-income families (Shapiro and Slemrod 2003). However, low-income survey respondents were also generally better off than most of the people who will benefit from this proposal so how they reacted to the 2001 rebates may not be relevant; the very low income households newly eligible for the CTC could well spend most of their additional credits and thus help to stimulate the economy.

The lower phase-in threshold would increase the benefits of working and could thus induce some very low income people to look for jobs. In an ordinary time, that would help boost the economy. In today’s weak economy with its high unemployment rate, however, new job seekers are unlikely to find work so the economy would get little stimulus through this mechanism.

The proposal gets marked down because most families would receive no benefit until they file their tax returns in 2010. The stimulus could be made timelier (and thus more effective) if the first installment were paid out as rebate checks based on 2008 incomes.

The proposal represents a modest simplification in the sense that a threshold of $0 is easy to comprehend and the refundable portion of the credit would be easy to calculate. The threshold would also not change from year to year as the current threshold does. The main benefit, though, is that it would make the refundability provision more transparent.

There would be strong pressure to extend the credit beyond two years. That would significantly increase the long-term revenue cost, but it would make the tax system fairer and slightly simpler. If the $0 threshold were made permanent, it would have mixed effects on economic efficiency. Most lower-income households in the phase-in range would have a greater incentive to work, but many households in the phase-out range for the EITC could face strong disincentives to work more.

**Grade: B+**

This provision is the most highly targeted in the stimulus package, going to the poorest households who are most likely to spend additional income. The proposal would receive an A grade if the first installment were distributed based on 2008 tax returns.
“AMERICAN OPPORTUNITY” TAX CREDIT

Key Points
• Raises maximum education credit from $1,800 to $2,500 and extends to four years.
• Makes credit partially refundable so lowest-income students could benefit.
• Greatest impact if available at beginning of school term; timing might delay effects.
• Expiration could leave students without adequate funding to complete studies.
• JCT estimates that the proposal would cost $13.7 billion over 10 years.

Current Law
The Hope credit provides a tax credit of up to $1,800 for each of the first two years of postsecondary education. The credit equals 100 percent of the first $1,200 of tuition and fees plus 50 percent of the next $1,200. Students must attend school at least half time. The credit does not apply to expenses covered by other tax-preferred vehicles such as 529 plans and Coverdell Savings Accounts. Taxpayers may only claim one of the Hope credit, lifetime learning credit, or a deduction for tuition expenses for each qualifying student on their tax returns in one year. They may, however, use different options for different students or in different years. Because the credit is not refundable, it provides little or no assistance to low-income households.

Stimulus Proposal
The “American Opportunity” tax credit (AOTC) would provide a partially refundable tax credit in 2009 and 2010 equal to 100 percent of the first $2,000 plus 25 percent of the next $2,000 spent on tuition, fees, and course materials during each of the first four years of postsecondary education. The maximum credit would thus be $2,500 a year. As is currently the case for the Hope credit, taxpayers could not claim the credit for any expenses paid using funds from other tax-preferred vehicles such as 529 plans and Coverdell Savings Accounts, nor could they use more than one of the AOTC, the lifetime learning credit, and the deduction for tuition expenses for a student in a given year.

Forty percent of the AOTC would be refundable and thus available to households with little or no tax liability. The maximum amount of refundable credit would be $1,000.

The credit would phase out evenly for married couples filing joint tax returns with income between $160,000 and $180,000 and for others with income between $80,000 and $90,000. Couples with income above $180,000 and others with income above $90,000 would not get the credit.

The AOTC has a similar structure to President Obama’s campaign proposal for an American Dream tax credit. However, the AOTC would be smaller (a maximum of $2,500 versus $4,000) and would not go directly to educational institutions but rather would be paid as a credit claimed on the household’s tax return.

Discussion
The AOTC would provide additional financial assistance for students pursuing postsecondary education, raising the maximum tax credit from $1,800 to $2,500 per year and extending the credit to cover four years of postsecondary schooling. Because the credit would be 40 percent refundable, low-income students could benefit up to $1,000 each year; the AOTC would thus
reach all the way down the income distribution, unlike the current non-refundable Hope credit. Extending the credit to cover four years of schooling for the next two years might enable some students currently enrolled to complete their postsecondary education. Research suggests that aid could increase student persistence but that the effect is not large (Hossler et al. 2008).

Because it would provide funds through the income tax, the credit might take time to become effective as a stimulus. Taxpayers generally do not adjust their tax withholding immediately when their tax liability goes down and thus would benefit from the credit only when they file their tax returns the following year. To the extent that low-income students need funds at the time they enroll, the delayed receipt of the credit could limit its value in enabling people to attend school. Paying the credit directly to the school once the student enrolls—as President Obama proposed during the election campaign—would give low-income students financial aid when they need it and could help more people to afford college, although it would create new administrative challenges to the IRS.

For students already in school or planning to attend, the credit would represent a windfall, a portion of which might be spent, albeit with a significant lag. However, because most students take out student loans to attend college, the credit might simply replace those loans and thus have no stimulative effect. If, however, students are having trouble getting loans because of the problems in financial markets, the expanded credit could increase enrollments.

With high unemployment, this might be a particularly good time to encourage people to attend college. With labor temporarily in surplus, there is little cost to the economy from encouraging more people to temporarily exit the work force. And students who attend college develop skills and credentials that add to their labor productivity and incomes over the long term.

Research suggests that the Hope credit caused colleges to raise tuition more than they otherwise would have (Long 2004). In the current economic environment with reduced state funding for colleges and shrunken endowments, the higher tuition could translate directly into increased spending by schools. That effect could enhance the AOTC’s impact as a stimulus but could also reduce enrollment of low-income students.

The long-run impact of the proposal would be mixed. On the one hand, it could induce people to begin their postsecondary education, although evidence from the use of Hope credits suggests that the credit would have little effect on enrollment (Long 2004; Baum and McPherson 2008). Once enrolled, however, students would be more likely to complete their schooling, even if the credit expired. Some students would complete their degrees using the credit and would thus be likely to get better jobs than otherwise. And even students who did not complete their schooling would have improved their skills and their job opportunities. On the other hand, expiration of the credit could leave needy students without funds to continue their studies. There would likely be strong pressure to extend the credit beyond its proposed two-year life.

**Grade: C**

The credit is a windfall to students who had planned to attend college anyway (or to their families) and some of that windfall would likely be spent, providing a modest stimulus. The credit could also lead colleges to raise tuition and spend the extra funds, which would also help the economy. However, much of the credit is likely to go to reduce student loan burdens. Moreover, the credits would come with a significant lag since they would generally become available only at tax filing time. Although not considered in the grade, the proposal deserves
extra credit for making it easier for unemployed or underemployed workers to enhance their skills and might offset some of the student loan market’s problems caused by the financial market meltdown.
REFUNDABLE FIRST-TIME HOME BUYER CREDIT

Key Points

- The proposal converts the first-time home buyer credit from an interest-free loan to a cash grant in the form of a refundable tax credit of 10 percent of home purchase price, up to a maximum $7,500 credit, for qualifying first-time home buyers who purchase a home between January 1 and June 30, 2009.

- The provision is likely to speed up some home purchases, providing a very modest temporary boost to the housing market.

- There is likely to be enormous pressure to extend this provision beyond its scheduled effective date.

- JCT estimate that the proposal would cost $2.7 billion over 10 years.

Current Law

First-time home buyers are allowed a refundable tax credit equal to the lesser of $7,500 ($3,750 for married-filing-separate returns) or 10 percent of the purchase price of a principal residence. The credit phases out for individual taxpayers with modified adjusted gross income between $75,000 and $95,000 ($150,000 and $170,000 for joint filers). To qualify, the taxpayer must not have owned a home during the three years prior to purchase. In addition, taxpayers are ineligible if they claim the D.C. home buyer credit (a $5,000 nonrefundable tax credit for qualifying purchases in Washington, D.C.) or if their home is financed with tax-exempt mortgage revenue bonds (low-interest rate mortgages).

The credit is recaptured ratably over 15 years starting in the second year after purchase. That is, the credit is basically an interest-free loan, paid back in installments over 15 years. If the taxpayer sells the home or stops using it as a principal residence, any remaining credit must be repaid. However, the amount repaid is limited to the gain (if any) on sale. (To calculate gain, the taxpayer’s cost basis is reduced by the amount of the credit.) There is no recapture if a taxpayer dies.

The provision applies to purchase between April 9, 2008, and June 30, 2009. Taxpayers who buy a home in 2009 may elect to claim the credit on their 2008 tax returns (with recapture starting in 2010).

Proposal

The proposal would waive the repayment requirement for qualifying homes purchased between January 1 and June 30, 2009, and held for at least three years. Effectively, the home buyer credit would be converted from an interest-free loan into a cash grant.

Discussion

The proposal would temporarily increase the demand for owner-occupied housing by reducing the after-tax cost for qualifying home purchasers. The higher demand is likely to increase the sale price and shorten the average time on the market of more affordable owner-occupied housing units. That is, part of the benefit of the tax subsidy will accrue to home sellers, especially those with “starter homes.” However, since first-time home buyers are a small part of the housing market, the effect on prices is likely to be very modest. To the extent that the credit encourages people to move from renting to owning, it is likely to also increase rental vacancy
rates, depressing slightly the value of rental real estate. Thus, the overall effect of housing prices is likely to be very small. In addition, taxpayers eligible for the credit are likely to buy somewhat better (more expensive) homes than they would without the credit.

The proposal would provide a windfall to qualifying taxpayers who already planned to buy a home and it would encourage some taxpayers who were thinking about buying to speed up their purchases so the sale could be completed by June 30. If taxpayers expect that the credit will expire as scheduled, it would build in an automatic after-tax price increase—offsetting the deflationary expectations in the housing market. Currently, with house prices falling, buyers may perceive that they are better off waiting, which further weakens demand for housing and can lead to further price declines. If the credit expires as scheduled on July 1, home buyers could save $7,500 if they buy before June 30.

While the temporary proposal would have little effect on the housing market, the windfalls to first-time home buyers would provide a modest stimulus. It is not particularly well targeted, but it would be timely. Although the tax credit would be fully refundable, potentially helping households with modest incomes, most low-income people cannot afford to purchase a home (and many would have difficulty finding a mortgage even if they wanted to buy), so the credit would primarily go to middle-income families. The credit could, however, be claimed on 2008 tax returns, meaning that it could raise after-tax incomes fairly quickly if taxpayers either completed their sale before they file or if they chose to file an amended tax return after qualifying for the credit.

There will thus be enormous pressure on policymakers to extend the scheduled expiration date beyond June 30. Some purchases in the works by June 30 will not be completed in time to qualify and those buyers will lobby for extension. Home sellers, builders, and realtors will also want to extend the expiration date because the real estate market is likely to remain soft for more than six months, and the drop off in demand on July 1 would tend to depress the market again.

As a long-term measure, however, the proposal would increase the tilt in the tax code in favor of owner-occupied housing. Owner-occupied housing is very heavily subsidized, resulting in too much investment in homes and not enough in other productive assets. This is both inefficient and inequitable. (If the cost of a permanent home buyer credit were financed by reductions in other housing tax expenditures, such as the mortgage interest deduction, the proposal could improve equity by retargeting housing subsidies at those with lower incomes and expand homeownership (see Gale et al. 2007).)

However, the credit as modified is much simpler than the original provision. Recapture over 15 years requires fairly extensive record keeping and annual reporting, which, under this proposal, would not be necessary for taxpayers who remain in their homes for at least three years.

**Grade: C+**

The proposal would raise incomes of some middle-income families, boosting consumption slightly, and it would be very timely. However, it is likely to do little to solve the housing market’s problems. There is a substantial risk that the credit would be extended, which would be undesirable unless other housing tax subsidies were scaled back.
EXTENSION OF ENHANCED EXPENSING FOR SMALL BUSINESS

Key Points

- The proposal would extend the 2008 limits on the amount of investment that small businesses can expense, rather than depreciate through the end of 2009.
- Both the stimulus effect and revenue cost would be very modest.
- Although it would be easy to let the higher limits expire, past history suggests Congress often extends expiring tax benefits.
- JCT estimates that the proposal would cost $41 million through 2019.

Current Law

Under Section 179 of the Internal Revenue Code, businesses may expense, or immediately deduct, the first $25,000 of investments in machinery and equipment. The amount of qualifying investment eligible for the deduction decreases dollar for dollar for amounts in excess of $200,000, so that businesses investing more than $225,000 receive no immediate deduction.

In 2003, Congress increased the amount of Section 179 expensing to $100,000 and raised the start of the phase-out range to $400,000, through the end of tax year 2009. The economic stimulus package that Congress enacted in January 2008 raised these limits for tax year 2008 to $250,000 and $800,000.

The table below summarizes Section 179 limits under current law:

<table>
<thead>
<tr>
<th>Year(s)</th>
<th>Expensing limit</th>
<th>Start of phase-out</th>
<th>End of phaseout</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–07</td>
<td>$100,000</td>
<td>$400,000</td>
<td>$500,000</td>
</tr>
<tr>
<td>2008</td>
<td>$250,000</td>
<td>$800,000</td>
<td>$1,050,000</td>
</tr>
<tr>
<td>2009</td>
<td>$100,000</td>
<td>$400,000</td>
<td>$500,000</td>
</tr>
<tr>
<td>2010 and later</td>
<td>$25,000</td>
<td>$200,000</td>
<td>$225,000</td>
</tr>
</tbody>
</table>

Stimulus Proposal

The proposal would extend the 2008 limits through the end of tax year 2009. The proposal is estimated to cost $41 million through 2019. The revenue loss would be $1.1 billion in fiscal years 2009 and 2010, but revenue would be recovered in later years when businesses would otherwise be claiming depreciation deductions.

Discussion

Section 179 expensing reduces the cost of capital for businesses that use qualifying machinery and equipment and reduces compliance costs by eliminating the need to apply tax depreciation rules and keep track of the adjusted basis of assets. It produces little benefit for those whose capital consists mainly of structures or inventory and no benefit for businesses whose investment exceeds the end of the phase-out limit. The benefit of expensing is larger for longer-lived equipment than for shorter-lived equipment, such as computers, that could otherwise be amortized over three years.
At a 10 year cost of $41 million, the proposal would have a very minor effect on the long-term budget picture and provide little net subsidy to businesses. Some businesses, however, could experience a large one-year drop in the cost of capital for some investments.

It is hard to know how much this proposal would boost the economy. There have been no studies on the effect of Section 179 expensing on the long-term level or timing of investment. Lower capital costs should encourage some additional investment, but much of the tax benefit would go to investments that would have been undertaken even if taxpayers had to depreciate them. A temporary tax incentive could accelerate some investment. However, since generous expensing rules have been in place for several years, some capital purchases that may otherwise have been accelerated already have occurred.

Some believe that expensing should be the rule for all investments, not just those made by small businesses. Expensing is equivalent to exempting the normal return on investment and would be the norm if the tax base were consumption rather than income. However, enacting expensing alone, without making other conforming changes, such as eliminating deductions for interest expense, can create inefficient arbitrage opportunities. Under such a system, investments could be profitable even if they earned sub-par returns because of the tax deductions that they generated. This is a primary concern about expanding the scope of small business expensing provisions. The gains from simplicity have to be weighed against the costs of expanding tax-shelter opportunities.

While the proposal is designed to be temporary, the higher limits originally enacted in 2003 were extended in 2005 and then raised in 2008. If taxpayers believe these higher limits will be permanent, their short-term stimulus effect would be smaller because taxpayers would have no incentive to accelerate the timing of investments.

**Grade: C**

The proposal would simplify tax filing for small businesses and may encourage some businesses to accelerate decisions to invest in capital equipment. It will probably have little stimulatory effect and much of the tax benefit is likely to go to businesses that would have invested anyway.
EXTENSION OF BONUS DEPRECIATION

Key Points

- Businesses would be allowed to deduct their cost of capital equipment more quickly. They could write off half the cost of new investment in the year it is purchased.

- Temporarily reducing taxes on new investment encourages taxable businesses to make capital purchases now rather than delaying them. Increased investment now stimulates the economy.

- The provision only benefits businesses with positive taxable income. Businesses running large net operating losses relative to past income, which many now are, receive no immediate benefit from additional deductions.

- Previous experience suggests bonus depreciation has limited effectiveness, but pairing this proposal with an extension of the net operating loss carry-back period might change this.

- JCT estimates that the proposal would cost $5.1 billion over 10 years.

Current Law

To determine taxable income, businesses subtract expenses from their receipts. While some business expenses are for items that are entirely used up during the year (e.g., materials and labor), other business expenses are for durable goods that last for many years. The expense for investment in capital equipment (e.g., tractors, computers and wind turbines) occurs over many years as the value of the investment is used up or depreciated. Under current law, businesses calculate taxable income by deducting capital costs over time according to a fixed depreciation schedule.

Stimulus Proposal

The provision would speed up depreciation deductions by providing businesses with a “bonus” depreciation allowance equal to 50 percent of the cost of qualifying investments acquired in 2009. Businesses would deduct the remaining 50 percent of the investment’s cost according to regular depreciation schedules.

Discussion

Accelerating depreciation deductions does not increase the total amount a company can write off for a given investment. Instead, it allows businesses to deduct more of the cost now and less in the future. That reduces their current tax liabilities at the cost of higher taxes later. Since deductions today are worth more to taxable businesses than deductions in the future, the provision lowers the effective tax rate on new investment making investment more attractive. Lower taxes also increase cash flow.

Economic research suggests that bonus depreciation enacted in 2002 and 2003 had relatively modest effects (CBO 2008). There are at least three reasons why: Businesses may have expected that Congress would extend the provisions, thus blunting their incentive to speed up investment. It takes time for businesses to make major investments, making it hard to fit them into specified time periods. Finally, many businesses may have had too little income to offset with these additional tax benefits, a problem that is especially acute during economic downturns.

Bonus depreciation could increase investment this year if businesses have projects they are willing to bring forward into 2009 and if they have income against which to use the deduction. However, many businesses are currently losing money and have no taxable income. A separate provision in the economic recovery package—the net operating loss carryback—would allow such businesses to offset up to five years of previous taxable income with current losses. That carry-back provision would complement bonus depreciation by extending the latter benefit to businesses that were profitable in the past but are currently losing money. Thus, although prior experiments with bonus depreciation have not been encouraging, pairing the two provisions could yield a modest stimulus. Nonetheless, businesses with very large losses or start-ups that have yet to see a profit would receive no benefit.

As recent history has made clear, Congress can turn bonus depreciation on and off as economic circumstances dictate. Paradoxically, that flexibility could render the policy less effective. If businesses expect that Congress will extend the provision as it has in the past, they may not accelerate their investment. As a result, the benefits of the provision may accrue primarily to investment that would have been made anyway, thereby undercutting the cost effectiveness of the tax incentive.

The temporary nature of the provision increases its strength as a stimulus but necessarily reduces its long-run impact. Expiration of bonus depreciation raises a firm’s net cost of new investment back to its previous level and removes any further incentive to invest now rather than later. In fact, because the provision primarily leads businesses to move their investment up in time and not to increase overall investment, it may lead businesses to reduce investment when the provision expires. If the economy is still in recession at that point, this could be especially undesirable.

The revenue loss of the provision is front-loaded. Bonus depreciation decreases tax payments in the first years but increases payments in future years relative to current law.

**Grade: C**

Previous experience with bonus depreciation is not encouraging. However, pairing this proposal with an extension of the net operating loss carry-back period would increase its effectiveness.
5-YEAR CARRYBACK OF NET OPERATING LOSSES

Key Points

• Current law allows businesses to carry net operating losses back for two years to offset past taxable income. This proposal would allow businesses the option of carrying back losses an additional three years. However, if the business decides to use the additional carry-back period, losses are permanently reduced by 10 percent. The provision would allow businesses to redo prior-year tax returns and get immediate cash refunds for previously unusable losses.

• The proposal would make temporary investment incentives such as bonus depreciation and expensing more effective.

• The proposal would increase cash flow to businesses that are constrained in borrowing, enabling them to increase investment.

• The increase in the carry-back period would benefit previously profitable businesses that face large losses now. Given the state of the economy, this may be insufficient to induce those businesses to invest more now. Start-ups, as well as businesses that have large losses relative to past gains receive no benefit from the provision.

• JCT estimates that the proposal will cost $15 billion over 10 years.

Current Law

Businesses calculate taxable income by subtracting expenses from revenues. While net income is taxed immediately, net operating losses do not qualify for immediate refunds on current tax returns. However, businesses may effectively receive a refund to the extent that they can be “carried back” against income taxed in previous years. Under current law, businesses may use current losses to offset only the past two years of profits. Losses that exceed the sum of the previous two years of positive income may be “carried forward” and used to offset taxable income earned in future years. Losses can currently be carried forward for twenty years (without interest, so their present value is lower than if they could be claimed immediately).

Stimulus Proposal

The provision would increase the net operating loss carry-back period from two years to five years for tax years 2008 and 2009. Businesses have the option of using the additional three years. If they choose to use the additional period, net operating losses are permanently reduced by 10 percent. The benefit would not be available to Fannie Mae, Freddie Mac and businesses that received money from the Temporary Asset Relief Program.

Discussion

Businesses that are unable to absorb their current losses with past tax payments do not receive immediate benefits from investment tax incentives such as expensing or bonus depreciation. Unused deductions can’t be used until future years. Because this blunts any stimulus provided by investment tax incentives, extending the carry-back period enhances these incentives. The more generous carry-back period can allow a company to benefit immediately from temporary investment incentives.

The provision also gives an infusion of cash to businesses that are running losses, which may promote investment. This may be especially important if those businesses have trouble
borrowing because of financial market problems. The carry-back provision acts like an interest-free loan to these businesses. The Congressional Budget Office (2008) has concluded, however, that “effects of taxes on investment that stem from their impact on cash-flow are generally believed to be weaker, dollar for dollar, than those that stem from the direct effects of taxes on the cost of capital.” But this relationship may be reversed in a period when businesses are having difficulty obtaining external finance.

The provision would also help businesses that were relatively healthy in the past but now face large losses. The provision benefits old capital held by these businesses, but it is not clear whether it would induce them to undertake new investment. Start-ups and businesses that have large losses relative to past gains receive no benefit from the provision.

The provision would not be extended to Freddie Mac, Fannie Mae, and businesses already receiving TARP benefits. These businesses have already received cash benefits from the government.

The Job Creation and Worker Assistance Act of 2002 applied a five-year carry back to losses from 2001 and 2002. In 2003, the carry-back period reverted to two years. There is no research that we are aware of evaluating the effects of that tax law change on business investment.

Increasing the carry-back period is not necessarily bad tax policy. By not providing full refunds for losses, the government discriminates against risky investments relative to safe ones. Allowing full and immediate refunds of losses would level the playing field. But not all losses claimed by businesses are “real”. Some are generated by differences between income measured for tax and accounting purposes. Other losses may not be genuine and are taken to reduce taxable income in an attempt to evade taxation. Limiting the carry-back period can be viewed as a compromise between discouraging tax evasion and not discouraging risk-taking. Extending the carry-back period reduces the penalty on risk-taking and provides for more neutral treatment between risky and safe investments.

The proposal would cost an estimated $15 billion over 10 years. The loss of revenue occurs in fiscal years 2009 and 2010. In later years there will be revenue gains due to the reduction in the stock of losses that can be deducted from future profits. As a result, the short-term stimulus effect is likely greater than the 10-year costs suggest.

Grade: B

Increases effectiveness of temporary investment incentives such as bonus depreciation and expensing. By increasing cash flow to businesses that cannot borrow, it could also stimulate new investment but effect would be modest at best given current economic downturn.
INCENTIVES TO HIRE UNEMPLOYED VETERANS AND DISCONNECTED YOUTH

Key points

• The Work Opportunity Tax Credit offers subsidies to businesses that hire certain disadvantaged workers. The provision would expand the target groups of the credit to include a broader category of youth (“disconnected youth”) and unemployed veterans. The maximum credit available is $2,400.

• Research suggests that the credit has not been effective in improving employment outcomes. Few businesses have used the Work Opportunity Tax Credit. The credit only benefits businesses with positive tax liability and the maximum credit of $2,400 is not likely to be enough to encourage hiring from these target groups.

• To the extent that any new hiring is induced, the jobs will go to low-income individuals who are likely to spend their earnings, providing a modest stimulus.

• JCT estimates that the proposal would cost $208 million over 10 years.

Current law

The Work Opportunity Tax Credit (WOTC) is available for employers hiring individuals from one or more of nine targeted groups including welfare recipients, food stamp recipients (age 18-39), poor and disabled veterans, youth from disadvantaged geographic areas, Supplemental Security Income recipients, and qualified ex-felons. An individual is not treated as a member of the target group unless she or he received a certification from a designated local agency before starting work or the employer completed a request for certification within four weeks of hiring the employee.

The credit is determined by the amount of qualified wages paid by the employer. Certified employees must work a minimum of 120 hours. Generally, the subsidy level is 40 percent (25 percent for employment of 400 hours or less) of qualified first-year wages up to $6,000, resulting in a maximum subsidy of $2,400 per qualified worker. The credit applies only to qualified first-year wages except in the case of workers who have received Temporary Assistance for Needy Families (TANF) for an extended period of time. Employers who hire these individuals receive a larger credit that covers both first and second year wages.

Stimulus Proposal

The proposal would expand the target group to include disconnected youth and unemployed, recently discharged veterans hired in 2009 or 2010. Individuals would qualify as unemployed veterans if they were discharged or released from active duty during 2008, 2009 or 2010 and received unemployment compensation for not less than four weeks during year before being hired. Individuals would qualify as disconnected youths if they are at 16 and not yet 25 when hired, have not been regularly employed or attending school in the past 6 months, and lack basic skills.

Discussion

The small literature on the WOTC credit suggests that the credit has been vastly underutilized and has had no meaningful impact on employment rates among the disadvantaged (GAO 2002; Department of Labor 2001; Hamersma 2005). Few businesses participate in the program. GAO reported that in 1999, only about one out of 790 corporations and one out of 3,450 individuals...
with a business affiliation claimed the credit. Hamersma (2005) found that disadvantaged youth were especially unlikely to benefit from the credit. The relatively few workers whose employers have participated in the program did enjoy modestly higher earnings.

The proposal would substantially expand the population eligible for the credit. Veterans whose families were receiving (or recently received) Food Stamps and certain disabled veterans qualify under current law. Under the stimulus proposal, all recent veterans who are currently unemployed would qualify. Under current law, individuals between the ages of 18 and 39 who either (i) receive or recently received TANF payments or food stamps or (ii) live in disadvantaged communities qualify for the credit. Under the proposal, anyone between the ages of 16 and 24 who is not in school or working when hired qualifies if they lack basic skills. Both groups are likely to spend any additional income they earn as a result of the credit.

Although the expansion makes more potential workers eligible, the maximum credit of $2,400 is not likely to encourage many businesses to hire these workers in today’s deep recession. Many businesses will not have sufficient tax liability to claim the credit (although under current law they can carry the credit back one year and forward 20 years). On the other hand, businesses that are profitable and do owe tax will receive a benefit for hiring workers they would have employed anyway.

**Grade: D**

Based on past experience, this wage subsidy is not likely to be effective in generating jobs for the newly expanded target group. Further, the credit may subsidize hiring that would have occurred anyway.
REINVESTMENT IN RENEWABLE ENERGY

Key Points

- The proposals would extend and modify existing tax incentives for energy conservation and renewable energy and add some new ones.

- Any investment subsidy provides some short-term stimulus, but “green” jobs do no more to promote economic recovery than other jobs and investments in new and alternative technologies may be slower in coming.

- Tax incentives for renewable energy and conservation reduce fossil fuel use, potentially slow global warming, reduce dependence on oil imports, and could spur the development of new technologies that can sustain themselves in the future without credits. However, the proposed credits are not large enough to have much impact on global warming or oil imports and are less cost-effective than policies that directly raise prices of fossil fuels, such as a carbon tax or tradable permits that limit total carbon emissions.

- JCT estimates that the tax incentives for conservation and renewable energy would cost about $20 billion over 10 years. The extension of the production credit for electricity produced from renewable resources accounts for almost two-thirds of the total cost.

Current Law

There are many tax incentives that promote energy conservation and renewable energy. Among these are business credits for electricity produced from renewable energy (wind power, geothermal etc.), investments in renewable energy property, and tax-exemption of bonds to finance certain renewable energy property. Individuals can receive credits for purchases of alternative fuel vehicles (electric cars, hybrid vehicles, plug-in hybrid electric vehicles, and fuel cell vehicles), and for a wide variety of energy-saving residential investments (such as solar and photovoltaic energy systems; high-efficiency water heaters, heating, and air conditioning systems; storm windows, storm doors, insulation, and other energy-saving property). The Energy Policy Act of 2005 added new and expanded tax subsidies for alternative energy production and conservation investments by businesses and households and for some traditional energy sources (“clean coal” and natural gas refining), at a revenue cost then estimated at $8 billion over 5 years and $14 billion over 10 years.

Many of these incentives are scheduled to expire after short periods. These sunset provisions limit revenue loss, but may also limit the credits’ effectiveness.

Stimulus Proposal

The proposal would extend and modify a number of existing tax incentives for renewable energy production and conservation and add some new ones. These include:

- Extending a credit for electricity produced from renewable resources through 2012 for wind energy and through 2013 for other renewable energy sources (The credit is now due to expire at the end of 2010).

- Allowing businesses to claim an investment credit for property used to produce electricity from renewable sources in the year the property is installed in 2009 and 2010. Taxpayers could use this one-time credit if they find it more advantageous than the production credit (above) that is claimed over time as electricity is generated from the property.
• Removing dollar caps on the renewable credit and certain restrictions for property that receives other subsidies.

• Enacting a new tax credit for gas stations that install alternative fuels pumps that dispense E85 fuel, hydrogen, and natural gas.

• Increasing annual limits on the issuance of tax-exempt bonds to fund qualified energy conservation and renewable energy projects.

• Extending through 2010 residential tax credits for energy efficiency improvements.

• Modifying the research and experimentation credit to add an additional 20 percent credit for increases in spending on qualified research on fuel cells and battery technology, renewable energy, conservation, efficient transmission and distribution of electricity, and carbon capture and sequestration.

**Discussion**

While any investment or production tax credit can boost the economy by lowering costs of capital or production, credits limited to new energy technologies may generate less short-run stimulus than other incentives. It may take more time for these projects to gear up and for new investors to perceive that the credit would make an otherwise unprofitable technology profitable. Because some proposals prevent existing subsidies from expiring, they could maintain some credit-dependent activities that would otherwise cease. However, they would also support investments that would be profitable without the credits.

The incentives may promote more energy conservation and renewable energy and thereby help retard global warming and reduce U.S. dependence on oil imported from insecure foreign sources. Prices of carbon-based fuels do not reflect either the long-term economic costs of global warming or the adverse effect on national security of increased dependence on imported oil. However, these selective tax incentives may encourage the use of less efficient production technologies that do not reduce fossil fuel much.

The most direct way to reduce over-consumption of carbon-based fuels (such as coal, oil, and gasoline) is to increase their price. This can be done either by new excise taxes or by “cap-and-trade” systems that, for example, allocate permits that limit total allowable carbon emissions, but allow them to be traded, thereby creating a cost for carbon emissions and raising the price of carbon-based fuels. Higher fossil fuel prices reduce consumption in the short run by encouraging people to drive less or turn down their thermostats. They encourage investments in energy-efficient capital and alternative energy sources in the medium run and, most importantly, spur development of new technologies to replace fossil fuels in the long-run.

Instead of using taxes or emissions caps with tradable permits to raise energy prices, Congress has sought to reduce fossil fuel use by subsidizing alternative technologies and conservation. In general, these subsidies are less cost-effective than price increases. They can encourage businesses and households to invest in specified energy-saving technologies, but they do not reduce overall consumption of energy-intensive goods and services or encourage energy savings, except through those technologies Congress has specifically chosen to subsidize. Moreover, some tax incentives have been found to have adverse effects. For example, heavily subsidized alcohol fuels such as ethanol have driven up food prices, contributing to global
hunger. Such subsidies are very hard to remove once they have outlived their usefulness, since they develop powerful constituencies.

Some of the House proposals create fewer distortions than others. In general, it is preferable to provide incentives for production rather than investment because production subsidies influence what is produced (for example, renewable energy), but not how it is produced (with capital or labor). Investment credits are more cost-effective than tax-exempt financing, because the benefits of tax-exempt financing are shared between high-income savers who receive higher after-tax returns and businesses who see a lower cost of capital. In that regard, the production credit for renewable energy may be relatively more cost-effective than others because it subsidizes output of a broad range of technologies that displace fossil fuels in electricity generation, without biasing choice towards one energy solution or altering relative prices of capital and labor in production.

**Grade: C**

Would spur some new investment that would help economic recovery, but some projects may take time to gear up. Although not included in the grade, the proposal gets extra credit to the extent that it would encourage investments that would reduce carbon emissions over the long term. However, there are far more effective means to achieve that end.
References


