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# Congress Needs to Pass Tax Extenders That Encourage Investment and Jobs

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*The research and development tax credit and bonus depreciation encourage the kind of investment and innovation that leads to high-paying jobs.*

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Before it adjourns this year, Congress must take up a number of major fiscal issues. These include finalizing an agreement on the appropriations bills funding most federal agencies; raising the debt limit; and last, but hopefully not least, dealing with the so-called tax extenders. Two of these, the research and experimentation tax credit, and bonus depreciation, are especially important to the economy. Both encourage the kind of investment and innovation that leads to high-paying jobs. Ideally, a permanent extension of both would be part of broader tax reform. Until then, Congress should renew them retroactively to the beginning of 2015 and extend them through at least 2016.

## INTRODUCTION

The extenders comprise a set of 52 separate tax provisions that expire periodically and hence must be renewed by Congress if they are to remain in force. Agreeing on them and finding the means to pay for the lost revenue has become an annual hurdle in Washington. Because Congress was unable to agree on their treatment last year, these provisions actually expired at the end of 2014. In addition to extending these provisions through 2016 and beyond, Congress must therefore decide whether the extension should be retroactive to the beginning of 2015.

Collectively, the extenders deal with a broad array of policy issues, differing both in their policy goals and their effectiveness. However, two of them—the research and development tax credit, and bonus depreciation—are especially important to U.S. economic growth.

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This paper will describe both provisions and summarize some of the evidence in their favor. As just noted, because both lapsed at the end of 2014, Congress must not only extend them for an additional time, it must also make this extension retroactive. In the absence of permanent enactment, retroactivity is necessary to assure companies that they will eventually get the full benefit of the tax provisions even if their renewal is delayed for political reasons.

## THE RESEARCH & DEVELOPMENT TAX CREDIT

The research and development (R&D) tax credit, also known as the research and experimentation tax credit, was first enacted as a temporary provision as part of the Economic Recovery Tax Act of 1981.<sup>1</sup> In passing it Congress hoped to reverse a decline in private spending on research and development as a share of GDP that began in the 1960s. This slowdown was matched by a decline in both productivity growth and U.S. competitiveness in a number of key industries.<sup>2</sup>

The credit was first scheduled to expire at the end of 1985. Since then, Congress has extended it 16 times.<sup>3</sup> Six of those extensions were retroactive because Congress did not pass the extension until after the credit had expired. In one instance, Congress failed to make the retroactive extension for a long enough time. As a result, the credit lapsed for one year. The Tax Relief Extension Act of 2015 (S. 1946) would retroactively extend the credit through the end of 2016 at a cost of \$22.6 billion.<sup>4</sup> Both the current and the last House of Representatives passed legislation making the R&D tax credit permanent at a static cost of \$181.6 billion over the next ten years.<sup>5</sup> On a dynamic basis, the cost would be much less.

As currently written, the provision gives a taxpayer a tax credit of 20 percent of its current-year “qualified research expenditures” (QRE) in excess of a base amount.<sup>6</sup> The base amount is calculated using an average of the firm’s qualified research expenditures over a past period. The result is to reward companies only for increased spending on research and development. The effective benefit of the credit is reduced by the fact that any expenditure included in calculating the credit cannot be deducted as a normal business expense. Since 2006, taxpayers can instead opt for the alternative simplified credit, which equals 14 percent of its qualified research expenditures above 50 percent of its average QREs during the previous three years. The credit also contains provisions for collaborative research with universities and for energy research conducted through non-profit organizations.<sup>7</sup>

Although the United States was one of the first countries to enact an R&D tax incentive, many other nations have followed suit. In fact, the relative generosity of the US credit has gradually slipped. As ITIF has documented, by 2012, the U.S. had fallen to 27<sup>th</sup> out of 42 countries in tax incentives for R&D.<sup>8</sup>

President Obama’s budget request for fiscal year 2016 includes a proposal to extend the tax credit permanently. Under the proposal, the credit would be extended retroactively to the beginning of 2015. Starting in 2016, the regular credit would be repealed and the alternative simplified credit would be increased to 18 percent of a company’s QREs above 50 percent of its average QREs for the previous three years.

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The policy rationale for the tax credit is fairly simple. Normally, a private company will invest in research as long as the private marginal benefit exceeds the private marginal cost. As soon as the private cost exceeds the private benefits, spending will stop. But R&D also brings large social benefits, which the company does not capture. Ideally, society should invest until the total *social* benefits equal the *social* costs. Further R&D benefits society even if it does not benefit the company. The R&D credit attempts to capture this imbalance between private and social benefits by lowering the after-tax cost of research. Economists Nicholas Bloom, Mark Schankerman, and John Van Reenen estimate that the gross social returns from R&D are at least twice as high as the private returns, indicating that the normal level of underinvestment is quite high.<sup>9</sup> Economists Charles Jones and John Williams calculated the social rate of return from R&D and found that the optimal level was at least two to four times the current rate of investment.<sup>10</sup>

In its original proposal for corporate tax reform, the administration argued that the R&D tax credit resulted in \$2 of additional research by the private sector for every \$1 in lost tax revenue.<sup>11</sup> It estimates that the social benefit of this additional spending ranges between \$2 and \$2.96.<sup>12</sup> This assertion is backed by a large amount of academic research on the effect of R&D tax credits both here and abroad. Economists Bronwyn Hall and John Van Reenen found the same relationship between tax relief and social benefits when they examined OECD countries.<sup>13</sup> Martin Falk found that tax incentives from R&D have a significant effect on business spending, with a 1 percent decline in the price of R&D producing a 0.9 percent rise in corporate R&D.<sup>14</sup> Other studies have found even larger impacts per dollar of tax revenue lost. For example, economists Dominique Guellec and Bruno Van Pottelsbergh reported that tax incentives have a positive effect on businesses' R&D, especially when rates are stable over time.<sup>15</sup>

Finally, a 2011 study estimated that making the alternative simplified credit (ASC) permanent at 20 percent instead of the current 14 percent would increase private research spending by \$15 billion annually in the short run, and by \$33 billion over the long term. This would create 300,000 research-related jobs over the long term.<sup>16</sup> An earlier ITIF report estimated that raising the ASC rate to 20 percent would increase productivity by 0.64 percent and GDP by \$66 billion per year. Moreover, increased federal tax revenues from the greater economic activity would exceed revenue losses within 15 years.<sup>17</sup>

## **BONUS DEPRECIATION**

Businesses are allowed to deduct the normal cost of their operations from revenues when calculating their taxable income. In the case of capital assets (those having a useful life of more than one year), however, taxpayers must write off (depreciate) the cost over the useful life of the asset. In practice, this is done by assigning each asset to one of a relatively small number of asset types, each with its own depreciation period. Because money received today (including in the form of a deduction) is more valuable than money received tomorrow, depreciation raises the after-tax cost of investment.

Bonus depreciation allows a company to write off a large portion of eligible capital equipment in the first year.<sup>18</sup> Although it does not increase the nominal value of deductions that can be claimed for an asset, it raises their effective value by moving them up in time.

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Congress first passed a version of bonus depreciation in 2002. Since then, the provision has been extended a number of times, often lapsing between extensions. The current provision allows for a bonus depreciation of 50 percent for eligible property acquired and placed in service before the end of 2014 (or 2015 for property with long production times). It also gives companies the option to claim an accelerated refundable credit from their alternative minimum tax credits carried forward from tax years before 2006.<sup>19</sup>

Extending bonus depreciation retroactively through 2016 would cost \$3.6 billion over 10 years. Extending it through 2025 would cost \$223.6 billion.<sup>20</sup> The dramatically higher cost occurs because, for a short-term extension, most of the revenue that is lost in the first years is offset in the later stages of the 10-year budget window by higher revenues when companies have fewer deductions to take. This is not true of the later years in a permanent extension. A permanent extension was passed by the House of Representatives in the last Congress, but it died in the Senate. S. 1946, as reported out by the Senate Finance Committee earlier this year would extend the 50 percent bonus provision through 2016. The President's budget did not request an extension of bonus depreciation.<sup>21</sup>

By lowering the after-tax cost of capital, bonus depreciation should cause companies to invest more. A report by the Congressional Research Service found that economists generally think that the price elasticity of demand for capital is close to -0.05, meaning that a 10 percent decline in the cost of capital should cause investment to rise by 5 percent.<sup>22</sup> There is evidence that bonus depreciation is important to at least some companies. Economist Matthew Knittel found that take-up rates for bonus depreciation between 2002 and 2004 ranged from 54 percent to 61 percent for C corporations, and from 65 percent to 70 percent for S corporations.<sup>23</sup> A second study estimated that the provision increased GDP between 0.07 percent and 0.14 percent and created between 100,000 and 200,000 jobs in 2002 and 2003, respectively.<sup>24</sup> And a wide range of economic studies have shown a link between expanded machinery and equipment stock and productivity growth.<sup>25</sup> The Tax Foundation estimates that permanent extension would boost GDP by more than 1 percent, the capital stock by more than 3 percent, and wages by about 1 percent.<sup>26</sup> It would also create 212,000 jobs. The Foundation finds that most of the benefits would go to workers in the form of more jobs and higher wages. Higher incomes would cause tax payments to rise by \$23 billion per year.

## THE IMPORTANCE OF RETROACTIVITY

Until it passes a corporate tax reform that makes these provisions permanent, Congress will have to continue to renew them on a short-term basis. Given large current deficits, some might question the wisdom of making any extension retroactive, thereby increasing its budget cost. After all, retroactivity rewards companies for something they have already done; it does not influence their future activity. Still, retroactivity is important for two reasons.

First, the gross amount of the deficit and federal debt should not be the only criteria for measuring the merit of programs. The correct measure of the burden of fiscal policy is the debt-to-GDP ratio, and this is heavily influenced by rate of economic growth and productivity. It makes little sense to reduce the deficit by cutting incentives for investment.

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Second and more importantly, given the short-term nature of past extensions, retroactivity is critically important to maintaining the incentive effect of these provisions. Future lapses are likely and, unless companies feel reasonably certain that Congress will make an extension retroactive, they will be reluctant to count on it. As a result, they will reduce their investments in research and capital equipment.

Anyone who has watched the annual end-of-year struggle to resolve outstanding budget issues knows that it is not easy. Still, the sooner Congress deals with these issues and extends the R&D credit and bonus depreciation in particular, the better.

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## ENDNOTES

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