A Start-up Research Tax Credit

By Jessica Perez and Tess Stovall

America’s competitors are quickly outpacing the United States when it comes to support for scientific research and development. But our primary innovation tax incentive—the Research and Experimentation Credit—can’t truly be used by many job-creating start-up businesses. The credit is only useful when companies are profitable, and most start-ups hungry for cash don’t make money in their early stages. Making the credit tradable would allow start-ups to access up-front cash from the private market to fund research, stay afloat, and create jobs.

THE PROBLEM
Start-ups need capital for growth-driving research, but our tax code favors established firms.

Research is integral to America’s growth and prosperity.

In the 20th century, research conducted by Bell Laboratories led to inventions and breakthroughs in everything from the laser, digitized music, and the solar battery cell to the cellular telephone. These technologies created industries unto themselves, and their commercialization and adoption led to widely-shared economic benefits. The six Nobel Prizes awarded to the lab’s scientists symbolized the United States’ position as the world’s innovator. Today, our technological and economic leadership hinges in large part on a continued commitment to research and innovation.

Research conducted by American businesses is a significant driver of economic growth. Not only does research itself create jobs—70% of research spending that companies use to claim the research and development tax credit goes directly to salaries—but new technologies drive economic growth and cause ripples of job creation throughout the economy. In fact, 75% of U.S. economic growth since World War II has been derived from technological innovation.
employed millions of Americans, from scientists to manufacturers to salespeople and mechanics. Likewise, by 2014, cloud computing technology will have created 276,000 new American jobs in the smart phone services and aerospace industries alone.\(^5\)

However, America’s research dominance is under threat from competitors looking to gain their own innovation edge. China, which has grown in large part by building what America invents, seeks to move up the value chain and is now set to match U.S. R&D by 2023.\(^6\) Next year, the U.S. is set to increase R&D spending by 2.1%, while Asian economies will increase spending by 9%, Europe’s will grow by 3.5%.\(^7\)

At the same time, our innovation investments have slowed significantly. Between 2000 and 2008, business investment in university research fell by 7% as a share of GDP.\(^8\) Total government investment in R&D stood at 2.2% of GDP in 1964. It has since fallen to a meager one percent. These numbers place the United States 23rd out of the 30 OECD nations in terms of these investments.\(^9\)

**Investment in research is a necessary, but costly, business expense.**

From an accounting perspective, long-term business research seems like a risky proposition. Research is costly and often fails to produce marketable results. Investors generally seek short-term returns, meaning that the stock market fails to reward long-term R&D. While research is integral to a company’s success, the lifecycles of new products are much shorter today than they were in years past. The VCR was widely used for home recording of television programs for three decades.\(^10\) The TiVo, introduced in 1999 has already given way to Netflix and Hulu. For these reasons and others, several leading American innovation companies like Xerox, AT&T, and IBM have trimmed research budgets in recent years.\(^11\)

Despite the short-term drawbacks of research, it is often a critical component of long-term success. For example, Unilever’s research led to the discovery of a new protein that can make ice cream that is lower in fat, calories and sugar.\(^12\) Research at P&G led to the development of Crest Whitestrips, a first in its product category.\(^13\) If American companies are going to perform the ongoing R&D that is vital to America’s economic leadership, the United States must offer robust incentives.

**America’s main research incentive isn’t available to many high-tech firms.**

The Research and Experimentation Tax Credit, also known as the R&D Credit, was created in 1981 as a way to incentivize private companies to perform research and development.\(^14\) Because the benefits of research are greater for society as a whole than for any individual company, the tax credit has helped to close the incentive gap for research.
Even though the U.S. spends approximately $9.5 billion dollars annually to encourage innovation through the R&D Credit, this incentive excludes many job-creating start-ups from taking advantage of it. Since the credit must be claimed against a tax liability, start-ups with no profits early on must wait until subsequent years when they owe taxes to claim the credit.

Although the law allows companies to take up to 15 years to claim earned credits against a tax liability, this structure fails to address start-ups’ most pressing need—an immediate cash infusion. Many start-ups do not become profitable for several years, and others go under before they ever do. A recent survey of business started in 2004 found that 55% experienced losses in their first year. By 2008, 27% had permanently closed. Without the ability to realize a quicker return on their research, not only are the companies put at increased risk for failure, but the incentive power of the credit is diluted. Thus, opportunities for scientific advancement are missed, and smaller, newer companies lose the opportunity to create jobs.

In fact, 80% of the dollar benefit of the research credit goes to companies with $250 million or more in gross receipts. Almost 65% goes to companies with receipts of $1 billion or more. While large companies are vital to producing cutting-edge research, start-ups are engines of new ideas and job creation. Although start-ups account for only 3% of total employment, they drive 20% of gross job creation. Without them, there would have been zero net job growth for all years but seven from 1977 to 2010. A 2010 Kauffman Foundation report put it simply: “…start-ups aren’t everything when it comes to job growth. They’re the only thing.”

THE SOLUTION
Make the R&D Tax Credit tradable.

In order to expand access to the R&D tax credit, Third Way recommends that lawmakers make the research credit tradable. With a tradable credit, qualified companies and institutions would claim the credit on their annual tax returns, as they do now. If low or zero tax liability prevented a business from claiming the full value, the business would then have the option of selling the credit to an investor in exchange for cash. Similar to the Low Income Housing Tax Credit model, investors could purchase the credit at a discounted rate to reduce their future tax liability.

Modeled after what works.

Several states have been on the cutting edge of providing tradable tax credits, for both R&D and other activities like filmmaking. Pennsylvania, for
example, allows companies to sell excess R&D credits after holding them for a year. Massachusetts film producers can apply for permission to sell their credits or exchange them for cash from the government, equal to 90% of face value.

With a tradable R&D credit, qualifying businesses would be able to sell any credits in excess of their tax liability. If warranted, legislation could set a floor sale price to ensure that the government-provided incentive for research isn’t diluted. For instance, New Jersey’s tax credit transfer programs require that buyers of credits pay the original recipient of 80% of the credit’s value.23

**Allow start-ups to access much needed capital.**

By allowing private market transfers of the credit, start-ups can access capital to fund ongoing research expenses and stay afloat. They can operate under the previously-established system, without adding complexity to the code or advantaging one business over another. More research jobs will be funded, and we can incentivize the development of new technologies that will employ the next generation of Americans.

---

**CRITIQUES AND RESPONSES**

**It’s too expensive.**

The only increased costs would result from additional businesses taking advantage of the credit or claiming the credit earlier than they would have otherwise. Trading would take place in the private market, and the government would not need to take on new functions to administer the program.

Because credits sell for less than their redeemable value (and cost to taxpayers), this is a less efficient method of incentivizing R&D.

It’s true that credits must sell for less than face value for investors to have a reason to buy them. However, up-front cash is often a more effective incentive than promise of a tax credit in the future—especially for start-ups that may not turn a profit for several years. Additionally, legislation could set a floor price to ensure that a minimum percentage of the credit’s value goes directly to research.

This creates yet another tax preference at a time we are trying to broaden the tax base.

This proposal doesn’t create a new credit; it simply provides a tool for expanding access to the existing credit by giving companies a chance to redeem it in the private market. This is an efficient way of expanding R&D incentives to a class of businesses whose incentives are diminished under the current system.
**Businesses will just cheat the system resulting in more government waste.**

IRS procedures for honoring R&D credits will not change under this proposal. Making the R&D credit tradable would not expand eligibility, but rather would simply allow awardees to sell their earned credits in the private market.

* * *

**THE AUTHORS**

Jessica Perez is a Policy Advisor for the Third Way Economic Program and can be reached at iperez@thirdway.org. Tess Stovall is the Deputy Director of the Third Way Economic Program and can be reached at tstovall@thirdway.org.

**ABOUT THIRD WAY**

Third Way is a think tank that answers America’s challenges with modern ideas aimed at the center. We advocate for private-sector economic growth, a tough and smart centrist security strategy, a clean energy revolution, and progress on divisive social issues, all through a moderate-led U.S. politics.

For more information about Third Way please visit [www.thirdway.org](http://www.thirdway.org).
ENDNOTES

1   “Historical Timeline,” Alcatel-Lucent. Accessed March 2, 2012. Available at: http://www.alcatel-lucent.com/wps/portal/tut/p/kxml/04_Sj9SPykssy0xPLMnMz0vMOY_QiqZKL4z3DADJm-MU7xhu5mupHliq5zXoCvBqXw98nNT9YOAEpHmQlLWm7t76f9RPvre-qEgk2BidUPwpeSmpRfo-FuaE5Sx5pHrmOiooAMmlAQOII/delta/base64xml/L0lNN3VhQ1NXWUEHiS9JTmhBQ0l8Sw9BaU13cUFBd0FxZQFNQXEtNExFNVJPZ3JnSUEhLzdFQV81R0s!?decade=1960s&innovation=History%2FTimeline%2FTimeline_Innovation_000049.jsp#7_A_5GK.


7   Ibid, p. 3.


22 Kane, p. 2.