

An Easy Checkoff for Global Competitiveness: The Case for a U.S. Innovation Box

BY ROBERT D. ATKINSON | NOVEMBER 2015

It is important that lawmakers add an innovation box to U.S. corporate tax law. Otherwise, the United States will continue to lose global economic competitiveness, especially in innovation-based industries. Within the last decade a growing number of countries have adopted some form of "patent box" or "innovation box" into their tax codes. So named because they can take the form of a check box on a corporate tax form, these policy innovations generally give companies a significantly lower tax rate on profits generated through patents, research, innovation, or other creative activity.¹ Because the United States competes with these countries in a global market where capital and labor are increasingly mobile, it is important that lawmakers add an innovation box to U.S. corporate tax law. Otherwise, the United States will continue to lose global economic competitiveness, especially in innovation-based industries, and the jobs and economic activities that go with that. Unlike other versions, however, a U.S. innovation box should be linked to some kind of economic activity, such as research and development, being conducted in the United States.

THE BASICS OF AN INNOVATION BOX

The drafters of an innovation box have to address a number of design issues:

- The type of revenues or profits that qualify for the lower rate.
- The precise level of the lower income tax rate. This can be set either by creating a new statutory rate for these profits or by allowing companies to deduct a portion of their innovation box profits from their taxable income, thereby exposing a portion of total profits to the normal statutory rate.

• The events that trigger the lower rate. This can range from obtaining a patent to conducting research and development.

As the Information Technology and Innovation Foundation (ITIF) has pointed out, countries have answered these questions in different ways.² For example, at the beginning of 2015, 11 member states of the European Union (EU), as well as Liechtenstein and the Swiss Canton of Nidwalden, used an innovation box system. Tax rates for eligible income in these countries vary between 0 percent (Malta) and 15 percent (France).³ Table 1 describes some of the main provisions of patent or innovation boxes in some major OECD (Organisation for Economic Co-operation and Development) countries.

Country	Year Enacted	Normal Rate	Box Rate	Coverage
Belgium	2007	33.99	6.8	Qualifying patents (excludes trademarks, designs, models, and secret recipes or processes)
France	2000	38.0	15.0	Patents granted in France, the United Kingdom, or European Patent Office
Ireland	Proposed	12.5	5.0 - 6.25	Patents and property functionally equivalent to patents
Italy	2015	27.5	13.75	Patents and property functionally equivalent to patents
Netherlands	2007	25.0	5.0	Worldwide patents and intellectual property (IP) arising from R&D activities for which the taxpayer has obtained declaration from the Dutch government (trademarks, nontechnical design rights, and literary copyrights are not included)
United Kingdom	2013	20.0	10.0	Patents granted by the United Kingdom or European Patent Office (excludes trademarks and registered designs) and certain associated IP

 Table 1: Patent or innovation box provisions in select OECD countries

 (Source: Joint Committee on Taxation; Senate Finance Committee)

THE BOUSTANY BILL

On July 29, 2015, Representatives Charles Boustany (R-LA) and Richard Neal (D-MA) publicly released a draft of their Innovation Promotion Act of 2015.⁴ The bill amends the Internal Revenue Code by adding an innovation box. The draft was praised by the then-Chairman of the House Ways & Means Committee, Paul Ryan (R-WI). It is expected that Mr. Boustany will release a revised bill sometime in early 2016.

Briefly, the current draft allows C corporations to deduct 71 percent of their innovationbox profits from their taxable income. Since the statutory rate is 35 percent, this would result in an effective tax rate of 10.15 percent for any income that qualified for the box. Of course, if eventual corporate tax reform results in a lower statutory rate, the effective tax rate would drop even further, unless the box deduction was reduced in response. The taxpayer could still claim any domestic production deductions (Section 199 of the Internal Revenue Code), research and development deductions (Section 174), or the research and development tax credit (Section 41).

The bill's definition of profits that qualify for the lower rate is fairly broad. Any profits derived from the sale, license, or other disposition of patents, inventions, formula, processes, know-how, film or video tape, computer software, and other similar intellectual property, as well as any property produced using such IP in the ordinary course of a U.S. firm's trade or business would qualify. This seems to include profits from virtually any product derived from innovative activity. However, the bill does not cover services.

The size of eligible profits is directly linked to the amount of research and development (R&D) conducted in the United States. The proportion of eligible profits that qualify for the lower rate would be equal to the ratio of the amount of domestic R&D to total costs (minus cost of goods sold, interest, and taxes), measured over the previous five years. As a result, companies that conduct more R&D in the United States will be rewarded more. Companies for which domestic R&D constitutes a large part of total costs would receive a larger benefit because a larger portion of their normal profits would be included in the box. For example, if, over the previous five years, R&D conducted in the United States constituted 25 percent of a company's total costs as defined above, the company would be eligible to deduct 17.75 percent of its innovation-box profits (one-quarter of 71 percent) from its taxable income. The advantage of tying the incentive to domestic R&D, compared to many foreign innovation boxes, which at the present time have no connection to domestic innovation activity, is that it provides an incentive for firms to conduct more of their global R&D in the United States, which would not only increase U.S. R&D activity, but also likely lead to increased production activity, as some production is closely linked spatially to R&D.

An innovation box bill could also help companies distribute intangible property held by controlled foreign companies (CFCs) to U.S. shareholders by making such distributions a nontaxable event. In recent years, companies have legally transferred large amounts of intellectual property (IP) to low-tax countries such as Ireland and the United Kingdom. Foreign profits are not subject to U.S. tax unless they are repatriated back to the United States. This is one reason over \$2 trillion in profits is currently being held overseas. One purpose of the legislation is to provide an incentive to U.S. companies to relocate much of their IP back to the United States. By lowering the effective corporate rate for IP-derived profits, an innovation box makes it more attractive to keep IP in the United States. To encourage this, any qualifying IP distributed to a U.S. parent would be treated as having a fair market value equal to the CFC's basis in the property. As a result, the U.S. company and shareholders would not realize any taxable gain from the transfer.

By dramatically lowering the effective corporate rate for IPderived profits, an innovation box makes it more attractive to keep IP in the United States. However, compared to most other nation's innovation boxes, the current version of the bill provides a lower incentive because only a fraction of a company's innovation profits will qualify for the deduction. This compares with 100 percent of profits in some other countries. The Joint Committee on Taxation's (JCT) technical explanation of the bill uses an example of a company for which domestic R&D equals approximately 25 percent of total costs minus cost of goods sold, interest, and taxes and the R&D-to-sales ratio is 15 percent. The effective rate on all innovation box profits only drops to 28.6 percent. Given that the average R&D-to-sales ratio for U.S. manufacturing is only 3.7 percent and for pharmaceuticals and semiconductors (the two most R&D-intensive industries), 13 percent and 20 percent, the JCT example is likely to be toward the lower end of the spectrum in terms of the effective rate. That is not likely to be low enough in comparison to the tax rate in other countries to cause companies to change where they base their IP. On the other hand, the nexus changes required by the base erosion and profit-shifting efforts discussed below are likely to reduce the attractiveness of foreign innovation boxes.

Representatives Boustany and Neal are seeking responses to several questions about the technical provisions of the bill and are likely to amend it before formally introducing the bill as legislation.⁵ Some of the improvements that have been suggested include making profits from services eligible for the lower rate; changing the denominator in the fraction of profits that qualify for the lower rate to total R&D performed (U.S. and global), rather than total costs excluding cost of goods, interest, and taxes; and excluding all normal, marketing, and financial profits from the box.

SUPPORT FROM THE SENATE

The concept of an innovation box has also received bipartisan support in the Senate. The Senate Finance Committee has been actively studying a large number of tax issues and alternatives. In July, the bipartisan working group focused on international tax reform issued a report that spoke favorably about the concept of an innovation box. The group, co-chaired by Senators Rob Portman (R-OH) and Charles Schumer (D-NY), noted tax changes that other countries have enacted to encourage companies to move more innovative activity to their jurisdictions.⁶ These include the United Kingdom's plan to enact a new nexus requirement for participating in its patent box.⁷

These changes are in line with the Organisation for Economic Co-operation and Development's (OECD) tentative proposals on base erosion and profit shifting (BEPS), which recommends that businesses be required to show that the business activities giving rise to profits were substantially performed in a country in order to take advantage of its innovation box rules. If widely adopted, these proposals would mean companies could no longer qualify for the lower rates merely by shifting IP around subsidiaries. They would have to move actual activity such as R&D or production into the country. This would pose a greater threat to the tax base of countries that do not offer similar boxes, as it would lead to greater offshoring of R&D or production in order to take advantage of the lower rates. In addition, to the extent U.S. companies cannot or choose not to do this, they would be subject to higher corporate taxes globally, making them less competitive with foreign companies. The Senate report found that "the anticipated impact of the new nexus requirements on innovation box regimes will have a significant detrimental impact on the creation and maintenance of intellectual property in the United States, as well as on the associated domestic manufacturing sector, jobs, and revenue base."⁸

The discussion of the topic ended with the statement that:

The co-chairs agree that we must take legislative action soon to combat the efforts of other countries to attract highly mobile U.S. corporate income through the implementation of our own innovation box regime that encourages the development and ownership of IP in the United States, along with associated domestic manufacturing. They continue to work to determine appropriate eligibility criteria for covered IP, a nexus standard that incentivizes U.S. research, manufacturing, and production, as well as a mechanism for the domestication of currently offshore IP.⁹

This sentiment was echoed by the Task Force on Corporate Reform, co-chaired by Senators Ben Cardin (D-MD) and John Thune (R-SD), which discussed an innovation box, as well as making permanent a strengthened R&D tax credit, as policies to promote domestic innovation.¹⁰ That report noted the advantage that the United States has in implementing an innovation box. Because of their mutual obligations, members of the European Union (EU) cannot condition the benefits of an innovation box on economic activity located within their territory as opposed to that of any other EU member. The United States does not face this restriction and therefore can capture more of the economic activity qualifying for the box.¹¹

WHY AN INNOVATION BOX WOULD BENEFIT THE UNITED STATES

Despite the fact that there is considerable support in both the House and Senate for some kind of innovation box, the concept of an innovation box has been attacked by some conservatives and liberals. These disputes hinge in part on ideology and values, but also in part on differences about what will happen without one.

For some conservatives, innovation boxes are simply another way for government to distort the workings of the market. For instance, a report by the Heritage Foundation correctly emphasizes the importance of a lower statutory rate and moving to a territorial rather than a worldwide system. Its main objection to the innovation box is that it skews the tax code by taxing some industries at a lower rate than others. In their view, all economic outcomes should be determined by the market alone, not by government policy.¹² But there is no reason why this should be true. For instance, the dead-weight loss from the corporate tax is much smaller for industries where the response of economic activity to tax rates is relatively inelastic. These industries should face a relatively higher tax rate relative to other industries. Similarly, some companies and economic activities have a much easier time relocating to another country, and taxing them at the same rate as other activities will mean at the margin that the United States will lose more of them to other nations. Finally, some economic activity, such as research, delivers large social benefits—what economists call externalities—while others do not. This is why both political parties have long supported taxing research and experimentation at lower rates than other activities through the R&D tax credit. Moreover, if Heritage were intellectually consistent, then it would not favor allowing firms to expense capital costs, as this would rewarding certain kinds of activities (i.e., investing in long-life capital assets) more than others and hence "distorting" the market.

Heritage's argument also ignores a fundamental reality of the global marketplace. Other nations already influence economic outcomes in globally traded sectors. In these sectors, such as advanced manufacturing, information industries, life sciences, and others, U.S. companies face heavy competition from overseas. That competition is intensified by tax policies, such as innovation boxes. Refusing to engage in tax competition for firms in traded sector industries will mean that U.S. firms lose global market share, the trade deficit will increase, and U.S. workers will lose good jobs.

Moreover, one reason other nations adopt policies like innovation boxes, which seek to lower taxes on traded sector firms, is because they are relatively sensitive to tax rates. Still others are critical to delivering the innovation and productivity improvements that drive higher living standards.

Tax law should actively reward and encourage those industries that depend heavily on research and investment as well as those that face significant competition from foreign companies. Otherwise we will see less investment in the United States and a gradual movement of market share and companies overseas. The primary benefit of a well-drafted innovation box is that it encourages the kind of economic activity that strengthens the country. The argument against an innovation box might be stronger if many of our international competitors were not actively trying to lure U.S. companies abroad by enacting boxes of their own. The OECD's recent agreement to require that companies also move tangible economic activity in order to benefit from the low rate will only increase this pressure.

Another argument Heritage makes against the innovation box is that it adds to the complexity of the tax code. This is no doubt true, but simplicity is only one goal of tax reform and should not come at the expense of effectiveness. In some cases, such as the innovation box, the cost of complexity can be more than offset by the social benefits of encouraging more innovation and keeping companies in the United States. A recent study by Ike Brannon and Michelle Hanlon surveyed the chief tax officers of large biotech and pharmaceutical companies and asked them how an innovation box would affect their business strategy.¹³ The responses suggested that an innovation box would increase the probability that companies would keep their intellectual property and related production in the United States. Companies in these industries are currently moving abroad, either though inversions or outright takeovers. According to the survey, roughly half of the companies that were profitable (and therefore subject to corporate income taxes) had already relocated patents overseas to take advantage of patent-box systems. One-third of the companies had also moved some of their manufacturing abroad. In response to a hypothetical U.S. innovation box, 40 percent indicated that they would relocate foreign research to the United States. Identical percentages said they would relocate manufacturing

Tax law should actively reward and encourage those industries that depend heavily on research and investment as well as those that face significant competition from foreign companies. processes and operations back to the United States. Likewise, a recent study by the European Commission looked at the evidence on patent boxes.¹⁴ It found that patent boxes were generally effective in attracting patent income to a country, especially if the definition of qualifying income was broad.

Finally, Heritage argues that comprehensive corporate tax reform can deliver even greater benefits. For instance, the Heritage report states: "Congress should focus first on lowering the tax rate, moving to a territorial system, and making 50 percent expensing permanent (as a first step toward full expensing)."¹⁵ But the real question is what would have a larger economic benefit: a dollar of tax expenditure going to lower the statutory rate or a dollar going to an innovation box. We believe that, given the importance of innovation and global competiveness to the U.S. economy, this more targeted reform would provide greater overall economic benefits. Moreover, in the new BEPS era defined by the OECD, there is a real risk that foreign governments will use the BEPS requirements to either tax these foreign held profits or force U.S. companies to move operations there. Waiting for the possibility of comprehensive corporate tax reform passing in order to address BEPS is a risky strategy that may come too late.

If the right criticizes the innovation box for "picking winners" and making the code more complex, the left complains simply that it cuts taxes on corporations and as such is unfair. For example, the Center for American Progress (CAP) also published a report critical of innovation boxes.¹⁶ While Heritage wants to tax all companies in all industries the same, CAP and others on the left want to increase taxes for all companies in all industries, and rightly sees an innovation box as going in the opposite direction. The CAP report can support higher taxes for U.S. business because it refuses to accept that the United States faces a serious problem in the form of international tax competition. At the same time, it criticizes companies for taking advantage of lower tax rates abroad, implicitly ascribing this to lax morals rather than rational profit maximizing. In this view, placing intellectual property abroad, inversions, and foreign takeovers occur because executives are greedy, not because the United States has the highest combined corporate tax rate among OECD countries and a very high effective tax rate as well.¹⁷

The CAP report also engages in a little sleight of hand that is common to defenders of the status quo. On the one hand, it argues that the current tax code does not hurt U.S. multinationals because the high U.S. tax rate does not apply until foreign profits are repatriated. Indeed, multinationals have an advantage over domestic companies that have to immediately pay the high rate on all of their earnings. On the other hand, it assumes that all of these foreign profits will eventually come back to the United States, reducing the economic burden of deferral and resulting in large expected tax revenues that will be lost if we move to a territorial system. The truth is somewhere in the middle. Many U.S. companies have managed to lower their effective tax rates. But they have done this only by moving a large amount of activity overseas and then keeping the resulting profits there for an indefinite time. If one assumes that these and future profits will never be repatriated, then the cost of tax reform is much lower.

A related argument from some on the left is that an innovation box is corporate welfare. But corporate welfare is giving corporations something in return for nothing. If properly designed, an innovation box is an incentive linked to a company innovating in the United States, which produces jobs, most of them paying well above the median wage level. Moreover, as long as the United States is in the race for global innovation advantage, policymakers have no choice but to provide a competitive environment in which firms will choose the United States as a home for their innovative activity, including production.

American companies are relocating their IP and even their headquarters abroad, and our competitors are considering making their lower rates contingent on placing more productive activity in country. Finally, some critics argue that if the goal is to spur more innovation then it would be simpler and better to just increase the R&D tax credit. This is a false choice. R&D tax incentives are an important component of an effective national innovation strategy. Innovation boxes differ from R&D incentives, though, because they provide firms with an incentive for commercialization of innovation, rather than just for the conduct of research. Commercialization is a key driver of economic growth and jobs. Therefore, creating tax incentives linked to success at commercializing innovation is an important strategy for growth, competitiveness and job creation. Moreover, an expanded R&D credit—something we should do as a nation—would not address the challenge presented by the new OECD rules that now will encourage countries to pressure U.S. companies to move R&D and related economic activities to other nations to quality for lower IP taxes. A well designed innovation box would address this.

CONCLUSION

Congress and the administration have been debating tax reform for the past seven years. Meanwhile, American companies are relocating their IP and even their headquarters abroad, and our competitors are considering making their lower rates contingent on placing more productive activity in country. If we want to preserve the tax base, while at the same time increasing U.S. economic competitiveness, we need to enact some kind of innovation box now.

ENDNOTES

- Robert D. Atkinson and Scott Andes, "Patent Boxes: Innovation in Tax Policy and Tax Policy for Innovation" (Information Technology and Innovation Foundation, October 2011), http://www.itif.org/files/2011-patent-box-final.pdf.
- 2. Ibid.
- Lisa K. Evers, "Intellectual Property Box Regimes," European Parliament, Directorate-General for Internal Policies, October 2015,
 - http://www.europarl.europa.eu/RegData/etudes/IDAN/2015/563454/IPOL_IDA(2015)563454_EN.pdf.
- 4. Innovation Promotion Act, H.R. 2089, 114th Cong. (2015), http://waysandmeans.house.gov/wp-content/uploads/2015/07/Innovation-Box-2015-Bill-Text.pdf. The sponsors also released a section-by-section summary of the bill, available at http://waysandmeans.house.gov/wp-content/uploads/2015/09/FINAL-TE-Innovation-Promotion-Act.pdf. For a more detailed explanation of the bill and related issues, see "What is an "Innovation Box"? Why Should People Care?" (Washington, DC: U.S. KPMG, September 10, 2015), https://home.kpmg.com/content/dam/kpmg/pdf/2015/09/tnf-innovation-box-sep10-2015.pdf.
- 5. "Innovation Promotion Act of 2015 Requests for Feedback," http://waysandmeans.house.gov/wpcontent/uploads/2015/07/2015-07-29-Boustany-Neal-Innovation-Box-Questions.pdf.
- United States Senate Finance Committee, *The International Tax Bipartisan Tax Working Group Report*, (Washington, DC: July 2015), 75, http://www.finance.senate.gov/download/?id=E1FA3F08-B00C-4AA8-BFC9-7901BD68A30D.
- Organisation for Economic Co-operation and Development (OECD)/G20 Base Erosion and Profit Shifting Project, *Countering Harmful Tax Practices More Effectively, Taking into Account Transparency and Substance*, (Paris: OECD, 2015), http://www.keepeek.com/Digital-Asset-Management/oecd/taxation/countering-harmful-tax-practices-more-effectively-taking-into-accounttransparency-and-substance-action-5-2015-final-report_9789264241190-en#page1.
- 8. Ibid.
- 9. Ibid, 76.
- 10. United States Senate Committee on Finance, Bipartisan Tax Report, 43-49,
- 11. Ibid, 51.
- Curtis S. Dubay, "An Innovation Box for the U.S.? Congress Should Focus on Business Tax Reform Instead" (The Heritage Foundation, August 18, 2015), 5, http://www.heritage.org/research/reports/2015/08/an-innovation-box-for-the-us-congress-should-focuson-business-tax-reform-instead.
- Ike Brannon and Michelle Hanlon, "How a Patent Box Would Affect the U.S. Biopharmaceutical Sector," *Tax Notes*, 146, no. 5 (February 2, 2015); Ike Brannon, "The Case for an 'Innovation Box," *American Enterprise Institute blog*, April 28, 2015, https://www.aei.org/publication/the-case-for-aninnovation-box/.
- 14. Annette Alstadsæter, et al., "Patent Boxes Design, Patent Location and Local R&D," (IPTS working papers on corporate R&D and innovation, no. 6/2015, Spain, 2015),
- 15. Dubay, "An Innovation Box for the U.S.? Congress Should Focus on Business Tax Reform Instead."
- Alexandra Thornton, "Patent Tax Dodge: Why the Patent Box Does Not Answer America's Need for Tax Reform" (Center for American Progress, June 1, 2015), https://www.americanprogress.org/issues/economy/news/2015/06/01/114088/patent-tax-dodge-why-thepatent-box-does-not-answer-americas-need-for-tax-reform/.
- 17. Joe Kennedy, "U.S. Companies Continue to Suffer From the High Cost of Corporate Taxation," https://itif.org/publications/2015/08/28/us-companies-continue-suffer-high-cost-corporate-taxation.

ACKNOWLEDGMENTS

The author wishes to thank ITIF senior fellow Joe Kennedy for providing input for this report. Any errors or omissions are the author's alone.

ABOUT THE AUTHOR

Robert D. Atkinson is the founder and president of the Information Technology and Innovation Foundation. He is also the co-author of the book *Innovation Economics: The Race for Global Advantage* (Yale, 2012). Atkinson received his Ph.D. in City and Regional Planning from the University of North Carolina at Chapel Hill in 1989.

ABOUT ITIF

The Information Technology and Innovation Foundation (ITIF) is a nonprofit, nonpartisan research and educational institute focusing on the intersection of technological innovation and public policy. Recognized as one of the world's leading science and technology think tanks, ITIF's mission is to formulate and promote policy solutions that accelerate innovation and boost productivity to spur growth, opportunity, and progress.

FOR MORE INFORMATION, VISIT US AT WWW.ITIF.ORG.