



## Research

# Revenue Implications of a Potential U.S. Patent Boxes

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A robust workforce and ample investment are the main ingredients of a growing economy. But the alchemy that produces truly booming economies often lies in technological breakthroughs. To foster these leaps in innovation, nations (the United States included) provide funding for basic research patent protections and tax incentives. Innovation or patent “boxes” are a growing feature of many nations’ research support policies that attract research-intensive investment. Patent boxes offer preferential tax treatment of income derived from intellectual property, often patent-related income.

Many of the United States’ major trading partners have enacted patent box tax regimes, spurring consideration of a similar policy here. In the current tax environment, a patent box could also retain the outflow of research intensive investment that might otherwise flee U.S. shores. Designing a patent box policy in the United States would require the determination of several key features of an innovation box design, all of which would affect the implications the patent box would have on innovation and related-investment.<sup>[1]</sup> Beyond these key design issues, and perhaps most consequentially, is the issue of cost. This analysis provides revenue estimates of variations of a patent box policy under current law, or as part of a comprehensive tax reform. Depending on the generosity of the policy and the context of its enactment, a patent box policy could cost as much as \$236 billion, or as little as \$5 billion.<sup>[2]</sup>

## Design Assumptions

This analysis provides revenue estimates of options for a potential patent box regime. The analysis provides revenue estimates for a preferential tax rate for patent-derived income of 15 or 10 percent. For each rate, alternative assumptions are made for patent eligibility and the tax environment in which the patent box regime is adopted. With respect to patent eligibility, this analysis examines two options: first applies the new tax regime to all income earned on all currently held patents and the second applies the taxes only to patents granted on or after January 1st 2016. This analysis also presents each of the patent box options under two tax environment scenarios: one whereby the patent box is adopted as a standalone measure (thus, relative to current law) or as part of a comprehensive tax reform.<sup>[3]</sup> The hypothetical U.S. patent box policy examined here is broadly modeled on the system adopted in the United Kingdom and includes the following primary features:

- A reduced tax rate on qualified income from patents (either 15 or 10 percent);
- only C-corporations are eligible for the reduced tax rate;
- the patent box regime is limited to commercial activities conducted in the US;
- the patented products result from domestic R&D.<sup>[4]</sup>

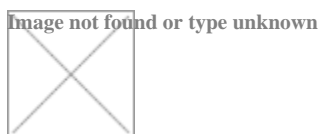
All revenue projections are effective for income earned on or after January 1<sup>st</sup> 2016.

## Table 1: Revenue Effects of a 15 Percent Patent Box



If the 15 percent tax regime is adopted as a standalone tax provision, the policy would cost \$158.3 billion over ten years compared to current law. However, if the preferential rate is only applied to new patents, the revenue cost drops to \$16.1 billion. As part of a larger corporate reform, a 15 percent tax regime across all patents would decrease revenue by \$63.1 billion or \$5.2 billion if only applicable to new patents.

## Table 2: Revenue Effects of a 10 Percent Patent Box



Alternatively, if a 10 percent tax regime is adopted as a standalone tax provision, the policy would cost \$236.1 billion over ten years compared to current law. However, if the preferential rate is only applied to new patents, the revenue cost declines to \$22.9 billion. As part of a larger corporate reform, a 10 percent tax regime across all patents would decrease revenue by \$111 billion or \$8.1 billion if only applicable to new patents.

## Conclusion

Myriad public policies have been put in place to spur the innovation essential to improving living standards. Patent boxes are gaining favor overseas as an additional policy support for innovation, and are gaining attention from policymakers here. Depending on key assumptions, costs could vary dramatically, with a revenue loss for a standalone 10 percent incentive of \$236 billion on income for all patents, or cost as little as \$5 billion for a 15 percent rate on income from new patents and within the context of an overall tax reform.