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New Research Provides More Reasons to Repeal the Medical Device Tax

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Key Findings

- The medical device tax is a 2.3 percent excise tax on the value of medical devices sold domestically. The tax was packaged in the Affordable Care Act to help cover its cost.
- The medical device tax fails most tests for good policy and is fundamentally flawed in its structure.
- New research shows that many of the predicted negative effects from the medical device tax occurred, both to the companies and to consumers.
- In 2013, the medical device tax lowered industry research and development spending by \$34 million.
- The tax is responsible for the loss of approximately 21,800 jobs from 2013 to 2015.
- The tax has been delayed by Congress twice, but the tax still exists. While full repeal is difficult due to federal revenue constraints, ideally, suspensions would exist for longer than two-year intervals.

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Introduction

The medical device tax is a small but consequential provision in the Affordable Care Act (ACA) that created economic distortions for America's medical device manufacturers, sellers, importers, and consumers from 2013 until 2016.

Some of the provisions in the ACA were specifically designed to cover some of its cost to taxpayers, and one such provision was the medical device tax. The medical device tax is a 2.3 percent excise tax on the price a medical device is sold for, which is charged to the manufacturer, producer, or importer of the device. This tax distorts the medical device industry, leading to higher prices, less pharmaceutical research, and fewer job opportunities.

The provision has always been controversial, evidenced by two back-to-back delays, yet somehow it has managed to avoid full repeal. Ideally, Congress would repeal the provision, but if it is unable to do so, providing more certainty than two-year suspensions would be beneficial.

What is the Medical Device Tax?

The medical device tax is a 2.3 percent excise tax on the price at which a qualified medical device is sold.¹ The tax is based on the price of the good, not on quantity, as most excise taxes are.

The tax applies to a broad category of medical products. The definition "includes an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar or related article."² Some examples include X-ray machines, hospital beds, and Magnetic Resonance Imaging (MRI) machines.

The tax, however, does include several exemptions. First, the statute specifically exempts "eyeglasses, contact lenses, [and] hearing aids," along with other medical devices that are "generally purchased by the general public at retail for individual use."³ Additionally, the tax only applies to medical devices for human consumption, meaning that veterinary devices are also excluded.⁴

History of the Tax

The medical device tax was included to finance the health insurance market changes within the ACA in 2010, and initially went into effect in 2013. The main argument supporting the medical device tax is that it only affected device companies that would be benefiting from increased demand for their products, due to health insurance expansion through the ACA.⁵ Individuals would be more likely to

1 26 U.S. §4191.

2 Center for Devices and Radiological Health, "Classify Your Medical Device - Is The Product A Medical Device?" U.S. Food and Drug Administration, www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/Overview/ClassifyYourDevice/ucm051512.htm.

3 26 U.S. §4191(b)(2).

4 26 U.S. §4191(b).

5 Jane G. Gravelle and Sean Lowry, "The Medical Device Excise Tax: Economic Analysis," Congressional Research Service, , 2015, <http://fas.org/sgp/crs/misc/R43342.pdf>.

purchase medical devices now that the purchases would be subsidized by health insurance.

The tax, however, was only in effect for two years. It was first suspended in 2016 for the 2016 and 2017 calendar years, and then again in 2018 for the 2018 and 2019 calendar years.⁶ The Joint Committee on Taxation (JCT) originally estimated that the tax would raise approximately \$3.2 billion in revenue in 2018.⁷

The Medical Device Tax Violates Principles of Good Policy

The medical device tax violates several principles of sound tax policy.⁸ The medical device tax is not neutral, consistent, simple, or transparent.⁹

Neutrality

The medical device tax is nonneutral as it impacts firms differently. Because the tax is assessed on sales, and not profit, firms with smaller profit margins are disproportionately impacted by the tax. Table 1 below illustrates the impacts of the tax on both a high-margin and low-margin hypothetical medical device company.

TABLE 1.

Profit Calculations for a High- and Low-Margin Firm under the Medical Device Tax

| | Firm A-High Margin | Firm B-Low Margin |
|--------------------------|--------------------|-------------------|
| Total Revenue | \$1 million | \$1 million |
| Costs of Production | \$900,000 | \$980,000 |
| Profit | \$100,000 | \$20,000 |
| Medical Device Tax | \$23,000 | \$23,000 |
| After-tax Profits | \$77,000 | -\$3,000 |

Source: Authors' Calculations

Both firms have \$1 million in sales. Firm A, however, has lower costs of \$900,000, while firm B has costs totaling \$980,000. Firm A's profit margin is 10 percent before the tax is assessed, compared to 2 percent for firm B.

⁶ Pub. L. 114-113 and Pub.L.115-120.

⁷ The Joint Committee on Taxation, "Estimated Revenue Effects Of The Amendments In The Nature Of A Substitute To H.R. 4872, The 'Reconciliation Act Of 2010,' As Amended, In Combination With The Revenue Effects Of H.R. 3590, The 'Patient Protection And Affordable Care Act ('PPACA'),' As Passed By The Senate, And Scheduled For Consideration By The House Committee On Rules On March 20, 2010," JCX-17-10, March 20, 2010, <https://www.jct.gov/publications.html?func=startdown&id=3672>.

⁸ Andrew Chamberlain, "Ten Principles of Sound Tax Policy," Tax Foundation, Oct. 07, 2005, <https://taxfoundation.org/ten-principles-sound-tax-policy/>.

⁹ United States Congress Joint Economic Committee, "An Economic Analysis of the Medical Device Tax," July 08, 2015, <https://www.jec.senate.gov/public/index.cfm/republicans/republican-reports?ID=069C3BCE-158A-48AE-8300-8502B06826FB>.

Since the medical device tax is based on sales, both firms have the same liability of \$23,000. While this significantly reduces firm A's after-tax profits, firm B's profits are completely eliminated by the tax, highlighting the inherent nonneutrality to the tax.

Consistency

While the medical device tax is a flawed tax, the short-term suspensions create difficulties for firms to plan and manage the tax. For instance, in early 2018, the moratorium was signed after the tax year had begun, creating issues for firms.¹⁰

Investment and hiring decisions can take months to plan, and the lack of certainty impacts the industry. If the companies knew that the tax was gone permanently, they could begin hiring more, investing in more research, and generally spend more comfortably knowing the tax was gone. This inconsistency could be eliminated along with the tax, or at least alleviated with a much longer moratorium.

Complexity

The medical device tax has a high compliance cost, which disproportionately affects smaller firms. Complying with the tax is difficult because medical device companies are often vertically integrated, which means that they both produce and distribute goods. The vertically integrated firm must create an artificial wholesale price before selling in order to collect the tax.¹¹ The complex distribution channels within the health care industry make this even more difficult to comply and administer than other excise taxes.¹²

The tax's retail exemption also creates confusion for medical device firms. The statute gives the U.S. Treasury Secretary broad authority to exempt items from the tax, which creates compliance issues for firms. For instance, the Internal Revenue Service has issued guidance on the sales of medical device kits, which contain both taxable and nontaxable items.¹³

10 Erica York, "Agreement to Fund Government Delays Three Health Care-Related Taxes," Tax Foundation, Jan. 24, 2018, <https://taxfoundation.org/affordable-care-act-taxes-delayed/>.

11 Kyle Pomerleau, "The ACA Medical Device Tax: Bad Policy in Need of Repeal," Tax Foundation, April 9, 2013, <https://taxfoundation.org/aca-medical-device-tax-bad-policy-need-repeal/>.

12 Kyle Pomerleau, "Obamacare Medical Device Tax Still Baffling Business," Tax Foundation, March 20, 2013, <https://taxfoundation.org/obamacare-medical-device-tax-still-baffling-business>.

13 PwC, "IRS Issues Private Letter Ruling on Medical Device Excise Tax Convenience Kit Rules," January 2014, <https://www.pwc.com/us/en/tax-services/publications/insights/irs-plr-medical-device-excise-tax-convenience-kit-rules.html>.

Transparency

The medical device tax is hidden from the consumer. Unlike retail sales taxes, the tax is not visible to the consumer at purchase.

And even if consumers are aware of the tax's existence, it isn't always clear where the price of a medical device is impacted by the tax. For instance, items made in a dental laboratory would be generally exempt from the tax, but inputs used in the labor could be subject to the tax, raising the final costs.¹⁴

Consequences: Less Research and Higher Costs

In theory, the medical device tax would increase costs for consumers as the costs of producing the goods would increase by the amount of the tax. Firms would seek to pass forward the tax through higher prices, but that could be difficult due to the competitive nature of the health-care industry.¹⁵ Increasing prices could result in consumers purchasing fewer products. Additionally, firms are limited by negotiated rates with hospitals and insurance companies, meaning they would be unable to pass those increased costs along to their institutional customers.¹⁶ Because bidding up the price of the medical device would be difficult, therefore, firms would look to absorb the tax in other ways, such as reducing their costs.

One way to reduce costs would be to lower investments into research and development. As discussed previously, the tax was in effect from 2013 to 2015, allowing researchers to estimate the impact of the tax on medical device firms. A new study by Daeyong Lee at Iowa State University showed that in the years that the medical device tax was active, it negatively affected medical device companies. Research and development (R&D) was reduced by \$34 million in 2013.¹⁷

Lee states in his report that, "Highly advanced equipment in hospitals is a critical aspect of medical care....Some devices such as coronary stents require high-research investment. If medical device firms stop or reduce that investment, we won't have better equipment and devices for complicated surgeries or procedures."¹⁸

The study also estimated that sales of medical devices decreased by \$188 million, which, in turn, lowered gross margins and earnings.¹⁹

14 *Journal of Dental Technology*, "The Medical Device Excise Tax and Dental Laboratory-Made Devices," November/December 2012, http://idla.com/Medical_Device_Tax.pdf.

15 Pomerleau, "The ACA Medical Device Tax: Bad Policy in Need of Repeal."

16 Ibid.

17 Daeyong Lee, "Impact of the Excise Tax on Firm R&D and Performance in the Medical Device Industry: Evidence from the Affordable Care Act," *Research Policy* 47(5), June 2018, 854-871, <https://www.sciencedirect.com/science/article/pii/S0048733318300416?via%3Dihub>.

18 Ibid.

19 Ibid.

Similarly, firms could reduce their expenses by cutting jobs. A study from 2017 estimated that the medical device industry lost 21,900 jobs from 2013 to 2015, due to the tax.²⁰ This number is similar to the actual decrease in employment in the medical device industry of 28,800 jobs during the 2013 to 2015 time period.²¹ Relatedly, repealing the tax permanently would likely result in the lost jobs returning within “three to five years.”²²

Conclusion

The medical device tax is an economically flawed tax, which raises prices for consumers, lowers job opportunities, and results in less investment in the industry. Research on the period when the tax was in effect shows that R&D spending decreased, which could lead to less innovation on needed medical devices. The tax has also led to approximately 22,000 fewer jobs from 2013 to 2015.

Ideally, Congress would repeal the tax in its entirety, but short of that, Congress should work to make the tax suspensions longer than two years to allow firms adequate time to plan.

20 Robert Book, “Employment Effects Of The Medical Device Tax,” American Action Forum, March 2, 2017, <https://www.americanactionforum.org/research/employment-effects-medical-device-tax/>.

21 Ibid.

22 Ibid.