

From Relic to Relevance, The Resurgence of Tariffs

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Abstract

Modern legal scholarship has largely relegated tariffs to economic analysis, overlooking their legal and policy significance. This Article challenges that view by examining tariffs as a potential pillar of fiscal policy, exploring their viability as a revenue source alongside or in place of traditional income and corporate taxation. While historically central to U.S. government funding, tariffs diminished in importance with the rise of income taxation and trade liberalization. However, their recent resurgence as a tool for trade protection raises broader questions about their role in national economic strategy.

This Article critically assesses the feasibility of a tariff-based tax system, drawing on historical lessons and economic modeling to evaluate its revenue potential, equity implications, and administrative challenges. It examines the legal constraints of such a system, including global trade compliance and the risks of economic retaliation. While tariffs alone cannot sustain a modern tax system, their strategic use, alongside excise and consumption-based taxes, offers a provocative alternative to existing revenue structures. By reframing tariffs as more than economic instruments, this Article situates them within broader debates on tax policy, sovereignty, and economic resilience in an era of shifting global trade dynamics.

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Table of Contents

I. Introduction	3
II. Historical Analysis	7
III. Understanding Tariff Foundations	22
IV. Designing a Tariff-Based Framework	27
A. Economic and Fiscal Implications	29
i. Revenue Generation and Fiscal Sustainability	29
ii. Economic Growth and Market Dynamics	32
iii. Optimal Tariff Rates and Economic Efficiency	39
iv. Destination Based Cash Flow Tax	44
v. Interim Summary	47
B. Administrative and Structural Requirements	48
C. Global and Geopolitical Dynamics	51
D. From Theory to Treasury and to real numbers	53
V. Conclusion	76

“Destroy the tariff and you will leave no means of carrying on internal improvements; destroy internal improvements and you leave no motive for the tariff.”

(Senator William Smith, D-S.C., 1830)¹

I. Introduction

While discussions on wealth taxation and capital gains reform are critical components of the broader tax policy debate, this Article focuses specifically on consumption and trade-based taxes, particularly excise taxes and tariffs. Likewise, alternative tax mechanisms, such as Financial Transaction Taxes, Carbon Taxes, and Digital Services Taxes, offer valuable revenue opportunities but fall outside the scope of this Article. Rather than evaluating every possible tax reform, this Article focuses on a central issue: Can a tariff-based tax system serve as a viable and sustainable revenue source for the federal government? If so, could it fully replace the existing system, which relies heavily on income taxation? If so, what would such a system look like, and how could it be structured to maximize revenue while minimizing economic and cross-border economic disruption? By focusing on this critical issue, we aim to provide a deeper and more targeted exploration of the feasibility and implications of a tariff-reliant tax framework.

W. M. Curtiss published an article in *The Analysts Journal*, which opened with the following statement: “*Who would have guessed that tariffs would once again become a political football in the United States? True, a half-century and more ago the question of tariffs was considered a major point of difference between the two great political parties. But in recent years it seemed that the subject, as a partisan issue, had about disappeared.*”² Surprisingly, this reflection on the resurgence of tariffs as a contentious political issue was not written in 2025 or even 2024, but

¹ Douglas A. Irwin, *Antebellum Tariff Politics: Regional Coalitions and Shifting Economic Interests*, 51 J.L. & ECON. 715, 715–41 (2008), <https://doi.org/10.1086/590131>.

² W.M. Curtiss, *Tariffs*, 10 ANALYSTS J. 35, 35–38 (1954), <http://www.jstor.org/stable/40797194>.

rather in 1954. At the time, Curtiss was commenting on what many assumed to be a relic of 19th-century political battles, a debate over tariffs that had long ceased to dominate the national discourse. His words, however, resonate strikingly in the modern context, highlighting the cyclical nature of economic and political debates. Despite nearly seven decades separating Curtiss's observations and the present day, the re-emergence of tariffs as a "political football" demonstrates how seemingly dormant issues can resurface in response to shifting political, economic, and social dynamics.

The resurgence of tariffs in recent years marks a notable departure from decades of trade liberalization, reestablishing their relevance in U.S. economic policy.³ The 21st century has seen tariffs re-emerge not merely as a fiscal tool but as a means of addressing perceived economic imbalances and protecting strategic industries.⁴ What is particularly striking about this resurgence is its bipartisan support. From the protectionist measures of the Trump administration to the Biden administration's continuation of tariffs on goods such as steel, aluminum, and solar panels, tariffs have transcended partisan divides, at a time when it seems the two major parties can hardly agree on anything.⁵

More than a century since the United States shifted away from tariffs as its main source of federal revenue,⁶ tariffs have once again become a shared mechanism for addressing global trade

³ Doron Narotzki, *Tariffs: Back to the Future* (Oct. 28, 2024), reprinted from TAX NOTES INT'L, at 565, <https://ssrn.com/abstract=5007289>; Reuven S. Avi-Yonah & Doron Narotzki, *The Tariffs Are Coming! The Tariffs Are Coming!*, U. MICH. PUB. L. RES. PAPER (forthcoming Jan. 3, 2025), <https://ssrn.com/abstract=5080792>.

⁴ Doron Narotzki, *Tariffs: Back to the Future* (Oct. 28, 2024), reprinted from TAX NOTES INT'L, at 565, <https://ssrn.com/abstract=5007289>; Reuven S. Avi-Yonah & Doron Narotzki, *The Tariffs Are Coming! The Tariffs Are Coming!*, U. MICH. PUB. L. RES. PAPER (forthcoming Jan. 3, 2025), <https://ssrn.com/abstract=5080792>.

⁵ Doron Narotzki, *Tariffs: Back to the Future* (Oct. 28, 2024), reprinted from TAX NOTES INT'L, at 565, <https://ssrn.com/abstract=5007289>; Reuven S. Avi-Yonah & Doron Narotzki, *The Tariffs Are Coming! The Tariffs Are Coming!*, U. MICH. PUB. L. RES. PAPER (forthcoming Jan. 3, 2025), <https://ssrn.com/abstract=5080792>.

⁶ Doron Narotzki, *Tariffs: Back to the Future* (Oct. 28, 2024), reprinted from TAX NOTES INT'L, at 565, <https://ssrn.com/abstract=5007289>; Reuven S. Avi-Yonah & Doron Narotzki, *The Tariffs Are Coming! The Tariffs Are Coming!*, U. MICH. PUB. L. RES. PAPER (forthcoming Jan. 3, 2025), <https://ssrn.com/abstract=5080792>.

challenges, including competition with China and the safeguarding of domestic supply chains.⁷ Yet, it should be emphasized that this bipartisan embrace is not without nuance, and its origins often stem from differing motives. For conservatives, tariffs have been framed as a means of reclaiming economic sovereignty and protecting traditional manufacturing sectors, while for progressives, they serve as tools to advance labor rights, environmental standards, and fair-trade practices.⁸ Whether the tariffs introduced by their respective administration achieved these goals is a separate issue.⁹

This bipartisan embrace signals a profound shift in the political and economic calculus surrounding tariffs, warranting a deeper examination of their historical significance and modern applications. And though Curtiss's article serves as a reminder that while the specific context of the tariff debate may have evolved, the underlying tensions and concerns, rooted in protectionism, economic nationalism, and partisan rivalry, remain remarkably persistent. The very fact that tariffs continue to provoke vigorous discussion stresses their enduring relevance as both a policy tool and a symbol of broader ideological divides.¹⁰

⁷ Nurullah Gur & Serif Dilek, *US-China Economic Rivalry and the Reshoring of Global Supply Chains*, 16 CHINESE J. INT'L POL. 61, 61-83 (2023).

⁸ Reuven S. Avi-Yonah & Doron Narotzki, *The Tariffs Are Coming! The Tariffs Are Coming!*, U. MICH. PUB. L. RES. PAPER (forthcoming Jan. 3, 2025), <https://ssrn.com/abstract=5080792>.

⁹ The answer to this issue is somewhat more complex and depends on various factors, however, see for example Yeo Joon Yoon & Wongi Kim, *Trump Tariff and Firm Relief: Winners and Losers from Steel Tariff Exclusion Request* (KIEP Working Paper No. 20-01, 2020), <https://ssrn.com/abstract=3700752>; Daniel C. K. Chow & Ian Sheldon, *Understanding the Economic and Political Effects of Trump's China Tariffs* (Aug. 25, 2020) 12 WM. & MARY BUS. L. REV. 273 (2020-2021), Ohio State Legal Studies Research Paper No. 563, <https://ssrn.com/abstract=3680630>; Jaerim Choi & Sungun Lim, *Tariffs, Agricultural Subsidies, and the 2020 US Presidential Election* (Sept. 1, 2022), <https://ssrn.com/abstract=3773952>; Edward Mansfield & Omer Solodoch, *Political Costs of Trade War Tariffs* (July 20, 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4516694; Mary Amity, Stephen J. Redding & David E. Weinstein, *The Impact of the 2018 Tariffs on Prices and Welfare*, 33 J. ECON. PERSPECT. 187 (2019); Thiemo Fetzer & Carlo Schwarz, *Tariffs and Politics: Evidence from Trump's Trade Wars* (Oct. 18, 2019), <https://ssrn.com/abstract=3349000>; Stuart Malawer, *Biden's Trade Policies - Recalibrated, More Focused, and a Bit Concerning* (June 23, 2021), <https://ssrn.com/abstract=3872708>; Stuart Malawer, *Biden's and Trump's Trade Policies. - Same as Trump's? More Aggressive?* (Jan. 29, 2022), <https://ssrn.com/abstract=3991157>; Simon Schropp, *International Trade Policy under Biden: The "New" Washington Consensus and Its Discontents* (June 1, 2024) MERCATUS POLICY BRIEF SERIES, <https://ssrn.com/abstract=4898046>.

¹⁰ *Trump Plans to Impose 25% Tariffs on Mexico, Canada by Feb.1*, BLOOMBERG, <https://www.bloomberg.com/news/articles/2025-01-21/trump-plans-to-enact-25-tariffs-on-mexico-canada-by-feb->

Historically, tariffs played a central role in funding governmental activities.¹¹ In the pre-income tax era, many nations relied heavily on customs duties for revenue. For example, in the United States, at times tariffs accounted for more than 90% of federal revenue before the implementation of income taxes in 1913, providing the government with a predictable and robust stream of governmental revenue.¹² Similarly, throughout the final two decades of the nineteenth century, tariffs served as a critical revenue source for the Swedish national government, generating more

[1?embedded-checkout=true](#) (last accessed Feb. 4, 2025); João da Silva, *US Markets Rise as Trump Holds Off on Tariffs*, BBC (Jan. 18, 2025), <https://www.bbc.com/news/articles/c1ezgdj7wvpo>; *Trump's Proposed Tariff Agency Raises Questions, and Confusion, for Experts*, NEW YORK TIMES, <https://www.nytimes.com/2025/01/21/us/politics/trump-tariffs-external-revenue-service.html> (last accessed Feb. 4, 2025); Andrea Bitely, *Trump's 25% Tariffs on Canada will Wreck Michigan Economy*, DETROIT FREE PRESS (Jan. 21, 2025), <https://www.freep.com/story/opinion/contributors/2025/01/21/trump-tariff-michigan-economy-canada-oil-eggs/77745555007/>; Brian Sozzi, *Trump Tariffs Have Already Triggered Williams-Sonoma CEO to Slash China Exposure*, YAHOO FINANCE (Jan. 21, 2025), [https://finance.yahoo.com/news/trump-tariffs-have-already-triggered-williams-sonoma-ceo-to-slash-china-exposure-163105149.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAJQTasv2vCi-WNJet9PZF4AOrQOb7qC0gvaTZuyI7r3wn5MhGmkV3CHuXBkHILSIONu949QnNmeRYHbgUrMQYeMsS_OYwqbVBD9Ik13rOAOgGyJbIa2KkXYAPtvUz0iCgggCRE2dJD78JR7IMadWnzDgdn7Wcq4I7j0XWXFTBynb](https://finance.yahoo.com/news/trump-tariffs-have-already-triggered-williams-sonoma-ceo-to-slash-china-exposure-163105149.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAJQTasv2vCi-WNJet9PZF4AOrQOb7qC0gvaTZuyI7r3wn5MhGmkV3CHuXBkHILSIONu949QnNmeRYHbgUrMQYeMsS_OYwqbVBD9Ik13rOAOgGyJbIa2KkXYAPtvUz0iCgggCRE2dJD78JR7IMadWnzDgdn7Wcq4I7j0XWXFTBynb;); Ryan Mulholland & Mike Williams, *Trump's Tariffs Would Raise Prices, Harm U.S. Workers, and Make it Harder to Solve Global Problems*, CENTER FOR AMERICAN PROGRESS (Dec. 18, 2024), <https://www.americanprogress.org/article/trumps-tariffs-would-raise-prices-harm-u-s-workers-and-make-it-harder-to-solve-global-problems/>; Erica York, *Trump Tariffs: Tracking the Economic Impact of the Trump Trade War*, TAX FOUNDATION (Jan. 23, 2025), <https://taxfoundation.org/research/all/federal/tariffs/>; Elijah Asdourian & David Wessel, *What are Tariffs, and Why are They Rising?*, BROOKINGS (July 1, 2024), <https://www.brookings.edu/articles/what-are-tariffs-and-why-are-they-rising/>; Robert Goulder, *It's 2024 and Trump's Tariffs are (Still) a Bad Idea*, TAX NOTES (Feb. 12, 2024), <https://www.taxnotes.com/featured-analysis/its-2024-and-trumps-tariffs-are-still-bad-idea/2024/02/09/7j55n>; Reuven S. Avi-Yonah & Doron Narotzki, *The Tariffs Are Coming! The Tariffs Are Coming!*, U. MICH. PUB. L. RES. PAPER (forthcoming Jan. 3, 2025), <https://ssrn.com/abstract=5080792>; Doron Narotzki, *Scrapping Tariffs, Spurring Growth* (Sept. 16, 2024) reprinted from TAX NOTES FEDERAL at 2289, <https://ssrn.com/abstract=5007283>; Doron Narotzki, *Tariffs: Back to the Future* (Oct. 28, 2024), reprinted from TAX NOTES INT'L, at 565, <https://ssrn.com/abstract=5007289>.

¹¹ *Protectionism in the Interwar Period*, OFFICE OF THE HISTORIAN, <https://history.state.gov/milestones/1921-1936/protectionism> (last accessed Feb. 4, 2025); Phillip Magness, *The Problem of the Tariff in American Economic History, 1787-1934*, CATO INSTITUTE (Sept. 26, 2023), <https://www.cato.org/publications/problem-tariff-american-economic-history-1787-1934>; Congressional Research Service, *Tariffs and Federal Finances: A Thumbnail History*, CRS Rep. No. IN12482 (Jan. 10, 2025), available at <https://crsreports.congress.gov>; Douglas A. Irwin, *Historical Perspectives on US Trade Policy*, NATIONAL BUREAU OF ECONOMIC RESEARCH (Jan. 1, 1998), <https://www.nber.org/reporter/winter-1998/9/historical-perspectives-us-trade-policy>.

¹² Sheldon D. Pollack, *Origins of the Modern Income Tax, 1894-1913*, 66 TAX LAW. 295, 295-330 (2013), <http://www.jstor.org/stable/24247768>; U.S. Tariff Policy: Overview, Cong. Rsch. Serv. IF11030, at 1 (2024), <https://crsreports.congress.gov>; Chad Bown & Douglas Irwin, *Even Now, Tariffs are a Tiny Portion of US Government Revenue*, PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS (July 16, 2019), <https://www.piie.com/research/piie-charts/even-now-tariffs-are-tiny-portion-us-government-revenue>.

than half of its total income and sustaining the fiscal stability of the state.¹³ Meanwhile, European powers like the United Kingdom and France also depended on tariffs to finance their imperial and domestic activities.¹⁴ However, the 20th century saw an intentional decline in tariff reliance as countries pushed forward for globalization and shifted toward income and consumption taxes, facilitated by the rise of global trade and economic interdependence.¹⁵

The question this Article focuses on is whether a tariff-based tax system could be revived and serve as a substantial source of governmental funding, compatible with the demands of a modern, interconnected cross-border economy. This Article evaluates the feasibility of such a system in the United States, analyzing historical examples, theoretical foundations, and potential challenges.

II. Historical Analysis

As the title of this Article suggests, in many countries, tariffs are a relic from the past and are no longer viewed or used as a primary source of government revenue.¹⁶ Hence, to fully understand tariffs, we must look to the past and examine their historical role as a cornerstone of fiscal policy. From the protectionist measures of 19th-century industrializing nations¹⁷ to the tariff wars of the early 20th century,¹⁸ the evolution of tariff policies offers critical insights into their economic, political, and social impacts. By tracing these historical developments, we can better contextualize the role tariffs have played in shaping global trade systems and assess their relevance in the modern economic landscape.

¹³ Daniel Tarschys, *Tributes, Tariffs, Taxes and Trade: The Changing Sources of Government Revenue*, 18 BRIT. J. POL. SCI. 1, 1–20 (1988), <http://www.jstor.org/stable/193686>.

¹⁴ Percy Wells Bidwell, *Trade, Tariffs, the Depression*, 10 FOREIGN AFF. 391, 391–401 (1932), <https://doi.org/10.2307/20030444>.

¹⁵ Doron Narotzki, *Tariffs: Back to the Future* (Oct. 28, 2024), reprinted from TAX NOTES INT’L, at 565, <https://ssrn.com/abstract=5007289>.

¹⁶ Andrew Chatzky, Anshu Siripurapu & Noah Berman, *What are Tariffs?*, COUNCIL ON FOREIGN RELATIONS (Jan. 28, 2025), <https://www.cfr.org/background/what-are-tariffs>.

¹⁷ Kevin O’Rourke, *Tariffs and Growth in the Late 19th Century*, 110 ECON. J. 456, 457–58 (2001).

¹⁸ Judith A. McDonald, Anthony Patrick O’Brien & Colleen M. Callahan, *Trade Wars: Canada’s Reaction to the Smoot-Hawley Tariff*, 57 J. ECON. HIST. 802, 803–06 (1997), <http://www.jstor.org/stable/2951161>.

The early 19th century marked a critical juncture in U.S. economic policy, characterized by the rise of the protective movement.¹⁹ This movement gained momentum in response to the economic crises of 1818–1819, which devastated agricultural prices and disrupted foreign markets for U.S. goods.²⁰ Advocates for protectionism, including farmers and manufacturers, sought legislative measures in order to shield domestic industries from foreign competition and stimulate the domestic market.²¹ The protective movement’s momentum was further bolstered by external and internal economic disruptions that highlighted the vulnerabilities of domestic industries.²²

The Embargo Act of 1807²³ and the War of 1812 between the United States and Great Britain²⁴ created an environment of enforced protectionism, where limited access to foreign goods encouraged the growth and establishment of emerging domestic industries.²⁵ Although the

¹⁹ F. W. Taussig, *The Early Protective Movement and the Tariff of 1828*, 3 POL. SCI. Q. 17, 17–45 (1888), <https://doi.org/10.2307/2138984>; Broadus Mitchell, *The Abominable Tariff-Making 1789–1828*, 42 CURRENT HIST. 327, 327–63 (1962), <http://www.jstor.org/stable/45310745>; Robert V. Remini, *Martin Van Buren and the Tariff of Abominations*, 63 AM. HIST. REV. 903, 903–17 (1958), <https://doi.org/10.2307/1848947>; Douglas A. Irwin, *Antebellum Tariff Politics: Regional Coalitions and Shifting Economic Interests*, 51 J.L. & ECON. 715, 715–41 (2008); Rosenbloom, Joshua L., Path Dependence and the Origins of Cotton Textile Manufacturing in New England (September 2002). NBER Working Paper No. w9182, Available at SSRN: <https://ssrn.com/abstract=330321>; D. Andrew Austin, *Tariffs and Federal Finances: A Thumbnail History*, Cong. Rsch. Serv. Insight No. IN12482 (Jan. 10, 2025), <https://crsreports.congress.gov/product/pdf/IN/IN12482>.

²⁰ F. W. Taussig, *The Early Protective Movement and the Tariff of 1828*, 3 POL. SCI. Q. 17, 17–45 (1888), <https://doi.org/10.2307/2138984>; Jessica M. Lepler, *Introduction: The Panic of 1819 by Any Other Name*, 40 J. EARLY REPUBLIC 665, 665–70 (2020), <https://www.jstor.org/stable/27105311>; James Narron, David Skeie & Donald Morgan, *Crisis Chronicles: The Panic of 1819 America’s First Great Economic Crisis*, LIBERTY STREET ECONOMICS (Dec. 5, 2014), <https://libertystreeteconomics.newyorkfed.org/2014/12/crisis-chronicles-the-panic-of-1819americas-first-great-economic-crisis/>.

²¹ F. W. Taussig, *The Early Protective Movement and the Tariff of 1828*, 3 POL. SCI. Q. 17, 17–45 (1888), <https://doi.org/10.2307/2138984>.

²² Joshua L. Rosenbloom, *Path Dependence and the Origins of Cotton Textile Manufacturing in New England*, Nat’l Bureau of Econ. Rsch., Working Paper No. 9182 (2002), <https://www.nber.org/papers/w9182>.

²³ Tenth Congress, Sess. I, C. 3, 4, 5, 2 Stat. 451 (1807), <https://www.govinfo.gov/content/pkg/STATUTE-2/pdf/STATUTE-2-Pg451-3.pdf>; *Embargo Act of 1807*, THOMAS JEFFERSON MONTICELLO, <https://www.monticello.org/research-education/thomas-jefferson-encyclopedia/embargo-1807/> (last accessed Feb. 4, 2025); Jeffrey A. Frankel, *The 1807–1809 Embargo Against Great Britain*, 42 J. ECON. HIST. 291, 291–308 (1982), <http://www.jstor.org/stable/2120129>.

²⁴ *War of 1812*, BRITANNICA, <https://www.britannica.com/event/War-of-1812> (last accessed Feb. 4, 2025).

²⁵ Joshua L. Rosenbloom, *Path Dependence and the Origins of Cotton Textile Manufacturing in New England*, Nat’l Bureau of Econ. Rsch., Working Paper No. 9182 (2002), <https://www.nber.org/papers/w9182>; F. W. Taussig, *The Early Protective Movement and the Tariff of 1828*, 3 POL. SCI. Q. 17, 17–45 (1888), <https://doi.org/10.2307/2138984>.

conclusion of the war in 1815 reopened the floodgates to British imports, the temporary boom had irrevocably changed the political climate. Manufacturers, emboldened by the benefits of protection during wartime, began lobbying Congress for legislative safeguards to preserve their investments.²⁶

Their influence shaped critical tariff legislation, such as the Tariff of 1816, which provided minimum valuation protections for key industries, including cotton textiles.²⁷ The cotton textile industry, particularly in New England, benefited immensely from these protective measures.²⁸ As noted by Rosenbloom, the early success of the Boston Manufacturing Company, which introduced vertically integrated textile production, relied heavily on the protection provided by the 1816 tariff.²⁹

The minimum valuation clause, which effectively taxed low-cost imported textiles at a disproportionately high rate, shielded American manufacturers from competition and allowed time

²⁶ Joshua L. Rosenbloom, *Path Dependence and the Origins of Cotton Textile Manufacturing in New England*, Nat'l Bureau of Econ. Rsch., Working Paper No. 9182 (2002), <https://www.nber.org/papers/w9182>; F. W. Taussig, *The Early Protective Movement and the Tariff of 1828*, 3 POL. SCI. Q. 17, 17–45 (1888), <https://doi.org/10.2307/2138984>.

²⁷ Mark Bills, *Tariff Protection and Production in the Early U.S. Cotton Textile Industry*, 44 J. ECON. HIST. 1033, 1033–45 (1984), <http://www.jstor.org/stable/2122117>.

²⁸ F. W. Taussig, *The Early Protective Movement and the Tariff of 1828*, 3 POL. SCI. Q. 17, 17–45 (1888), <https://doi.org/10.2307/2138984>; Douglas A. Irwin & Peter Temin, *The Antebellum Tariff on Cotton Textiles Revisited*, 61 J. ECON. HIST. 777, 777–98 (2001), <http://www.jstor.org/stable/2698135>; Joshua L. Rosenbloom, *Path Dependence and the Origins of Cotton Textile Manufacturing in New England*, Nat'l Bureau of Econ. Rsch., Working Paper No. 9182 (2002), <https://www.nber.org/papers/w9182>, citing Caroline F. Ware, *The Early New England Cotton Manufacture: A Study in Industrial Beginnings* (Boston and New York: Houghton Mifflin, 1931), Robert Brooke Zevin, *The Growth of Manufacturing in Early Nineteenth Century New England* (New York: Arno Press, 1975); Lance E. Davis and H. Louis Stettler III, *The New England Textile Industry, 1825-60: Trends and Fluctuations*, in *Output, Employment and Productivity in the United States After 1800*, Dorothy S. Brady, Ed. Conference on Studies in Income and Wealth, Volume 30 (New York: National Bureau of Economic Research, 1966), 213-33; Robert McGouldrick, *New England Textiles in the Nineteenth Century: Profits and Investment* (Cambridge: Harvard University Press, 1968); and Peter Temin, *Product Quality and Vertical Integration in the Early Textile Industry*, *Journal of Economic History* 48, no. 4 (December 1988), 891-907.

²⁹ Joshua L. Rosenbloom, *Path Dependence and the Origins of Cotton Textile Manufacturing in New England*, Nat'l Bureau of Econ. Rsch., Working Paper No. 9182 (2002), <https://www.nber.org/papers/w9182>; Douglas A. Irwin & Peter Temin, *The Antebellum Tariff on Cotton Textiles Revisited*, 61 J. Econ. Hist. 777, 777–98 (2001), <http://www.jstor.org/stable/2698135>.

for technological innovations and industrial scaling.³⁰ This protection was instrumental in paving the way for the broader acceptance of high tariffs, culminating in the controversial Tariff of 1828,³¹ often referred to as the "Tariff of Abominations."³²

This enactment of the Tariff of 1828 was driven by middle and western agricultural states, such as Pennsylvania and New York, which demanded high duties not only on manufactured goods but also on agricultural products like wool and hemp.³³ These states, suffering from economic dislocation caused by the post-war collapse of export markets, saw the tariff as a quick and efficient way to fix their economic problems and deficiencies.³⁴ However, the Tariff of 1828 worsened sectional tensions, as southern plantation economies, reliant on exporting cotton and importing manufactured goods, viewed the policy as disproportionately favoring northern interests.³⁵

As this Article will later discuss in the context of the resurgence of tariffs in modern times, this protective tariff of 1828 was not merely an economic measure but also a deeply political one. It highlighted the complex interplay between regional interests and national policy, laying the groundwork for the sectional divisions that would later erupt into the nullification crisis. By imposing heavy duties on imported goods, the Tariff of 1828 reflected both the ambitions and

³⁰ Joshua L. Rosenbloom, *Path Dependence and the Origins of Cotton Textile Manufacturing in New England*, Nat'l Bureau of Econ. Rsch., Working Paper No. 9182 (2002), <https://www.nber.org/papers/w9182>.

³¹ Joshua L. Rosenbloom, *Path Dependence and the Origins of Cotton Textile Manufacturing in New England*, Nat'l Bureau of Econ. Rsch., Working Paper No. 9182 (2002), <https://www.nber.org/papers/w9182>.

³² *Tariff of 1828*, ch. 16, 4 Stat. 208 (1828), <https://fraser.stlouisfed.org/title/tariff-1828-5888>; *Tariff of 1828*, ch. 16, 4 Stat. 208 (1828), <https://www.britannica.com/topic/Tariff-of-1828> (last accessed Feb. 4, 2025).

³³ Douglas A. Irwin, *Antebellum Tariff Politics: Regional Coalitions and Shifting Economic Interests*, 51 J.L. & ECON. 715, 715–41 (2008); Douglas A. Irwin & Peter Temin, *The Antebellum Tariff on Cotton Textiles Revisited*, 61 J. ECON. HIST. 777, 777–98 (2001), <http://www.jstor.org/stable/2698135>; F. W. Taussig, *The Early Protective Movement and the Tariff of 1828*, 3 POL. SCI. Q. 17, 17–45 (1888), <https://doi.org/10.2307/2138984>.

³⁴ F. W. Taussig, *The Early Protective Movement and the Tariff of 1828*, 3 POL. SCI. Q. 17, 17–45 (1888), <https://doi.org/10.2307/2138984>.

³⁵ F. W. Taussig, *The Early Protective Movement and the Tariff of 1828*, 3 POL. SCI. Q. 17, 17–45 (1888), <https://doi.org/10.2307/2138984>.

contradictions of early U.S. economic policy, as protectionist measures aimed to support domestic growth while simultaneously alienating key sectors of the population.³⁶

By 1860, tariffs served as the cornerstone of federal revenue in the United States,³⁷ reflecting their critical role in pre-industrial economies. As detailed in F.W. Taussig's seminal book *The Tariff History of the United States*,³⁸ import duties consistently provided the bulk of government income prior to the adoption of income taxes in 1913. This reliance on tariffs highlights the economic structure of the time, characterized by limited sources of federal taxation and the absence of direct taxes on personal income.³⁹ In an era when the economy was predominantly agrarian and international trade played a vital role, tariffs offered a straightforward and administratively feasible method to fund government operations.⁴⁰

Taussig highlights how protective tariffs were intertwined with revenue generation, ensuring that even goods produced domestically faced competitive pressures from foreign imports.⁴¹ However,

³⁶ The Tariff of 1828 was shaped not only by economic reasoning but also by political strategy. For example, Jacksonian Democrats, who at the time emerged as a dominant political force primarily in the South and West, championed the ideals of expanded suffrage at a time when only white males who owned property were allowed to vote, opposition to centralized power, and advocacy for the "common man." The Jacksonian Democrats sought to dismantle elitist policies, often opposing protective tariffs and federal infrastructure projects they believed favored northern interests. Their populist rhetoric frequently clashed with economic realities, as their policies, including the dismantling of the Second Bank of the United States, deepened sectional tensions. For more, see *American Experience, Jacksonian Democracy*, <https://americanexperience.si.edu/glossary/jacksonian-democracy/>. The Jacksonian Democrats also sought to undermine President John Quincy Adams, and crafted the tariff knowing it would alienate key constituencies while appealing to others. This political maneuvering revealed the divisive nature of economic policy in the early republic, see Robert V. Remini, *Martin Van Buren and the Tariff of Abominations*, 63 AM. HIST. REV. 903, 903–17 (1958), <https://doi.org/10.2307/1848947>, and F. W. Taussig, *The Early Protective Movement and the Tariff of 1828*, 3 POL. SCI. Q. 17, 17–45 (1888), <https://doi.org/10.2307/2138984>.

³⁷ John Wallis, *American Government and the Promotion of Economic Development in the National Era, 1790 to 1860*, U. CHI. PRESS., 21 (2007).

³⁸ F.W. Taussig, *The Tariff History of the United States* (1910).

³⁹ D. Andrew Austin, *Tariffs and Federal Finances: A Thumbnail History*, Cong. Rsch. Serv. Insight No. IN12482 (Jan. 10, 2025), <https://crsreports.congress.gov/product/pdf/IN/IN12482>; Taussig, F.W., *The Tariff History of the United States* (1910); Doron Narotzki, Tamir Shanan & Julianne Jules, *Taxation and the Founding Fathers Tax Notes* (2/18/2025).

⁴⁰ D. Andrew Austin, *Tariffs and Federal Finances: A Thumbnail History*, Cong. Rsch. Serv. Insight No. IN12482 (Jan. 10, 2025), <https://crsreports.congress.gov/product/pdf/IN/IN12482>; F.W. Taussig, *The Tariff History of the United States* (1910); Kevin H. O'Rourke, *Tariffs and Growth in the Late 19th Century*, 110 ECON. J. 456, 456–83 (2000), <http://www.jstor.org/stable/2566243>; Douglas A. Irwin, *Tariffs and Growth in Late Nineteenth Century America*, Nat'l Bureau Econ. Res., Working Paper No. 7639 (2000), <https://www.nber.org/papers/w7639>.

⁴¹ F.W. Taussig, *The Tariff History of the United States* (1910).

it should be noted that the United States was not the only nation at the time that relied heavily on tariffs in order to fund itself.⁴²

In Europe, for instance, the Swedish government relied on tariffs for more than half of its total income, while the United Kingdom and France used tariffs as key tools to finance both their imperial ambitions and domestic expenditures. Additionally, countries like Germany utilized high tariffs during the Zollverein period⁴³ to unify internal markets and protect nascent industries, demonstrating how tariffs served as both economic and political tools.⁴⁴

The shift away from reliance on tariffs in the United States did not happen until 1913,⁴⁵ when Congress introduced the modern federal income tax system following the ratification of the 16th Amendment,⁴⁶ which granted it the authority to levy income taxes. This transformation was

⁴² Kevin H. O'Rourke, *Tariffs and Growth in the Late 19th Century*, 110 *ECON. J.* 456, 456–83 (2000), <http://www.jstor.org/stable/2566243>.

⁴³ *Zollverein*, BRITANNICA, <https://www.britannica.com/topic/Zollverein> (last accessed Feb. 4, 2025).

⁴⁴ Daniel Tarschys, *Tributes, Tariffs, Taxes and Trade: The Changing Sources of Government Revenue*, 18 *BRIT. J. POL. SCI.* 1, 1–20 (1988), <http://www.jstor.org/stable/193686>; W. O. Henderson, *The Zollverein*, 19 *HIST.* 1, 1–19 (1934), <http://www.jstor.org/stable/24401133>; Rolf Horst Dumke, *Intra-German Trade in 1837 and Regional Economic Development*, 64 *VSWG: VIERTELJAHRSSCHRIFT FÜR SOZIAL- UND WIRTSCHAFTSGESCHICHTE* 468, 468–96 (1977), <http://www.jstor.org/stable/20733074>; Kevin H. O'Rourke, *Tariffs and Growth in the Late 19th Century*, 110 *ECON. J.* 456, 456–83 (2000), <http://www.jstor.org/stable/2566243>; Douglas A. Irwin, *Tariffs and Growth in Late Nineteenth Century America*, Nat'l Bureau Econ. Res., Working Paper No. 7639 (2000), <https://www.nber.org/papers/w7639>; Hans Rosenberg, *The Struggle for a German-Austrian Customs Union (1815–1931)*, 14 *SLAVONIC & E. EUR. REV.* 332, 332–42 (1936), <http://www.jstor.org/stable/4203123>; John Vincent Nye, *The Myth of Free-Trade Britain and Fortress France: Tariffs and Trade in the Nineteenth Century*, 51 *J. ECON. HIST.* 23, 23–46 (1991), <http://www.jstor.org/stable/2123049>; François Crouzet, *The Historiography of French Economic Growth in the Nineteenth Century*, 56 *ECON. HIST. REV.* 215, 215–42 (2003), <http://www.jstor.org/stable/3698835>. It should be noted though that Nye did find that Great Britain had on average a higher tariff's rate than France.

⁴⁵ Additionally, the first national income tax was introduced in 1861, shortly after the onset of the American Civil War, to fund the war. It was introduced by the Revenue Act of 1861 and repealed in 1872. See Sheldon D. Pollack, *The First National Income Tax, 1861–1872*, 67 *TAX LAW.* 311, 311–30 (2014), <http://www.jstor.org/stable/24247751>; Revenue Act of 1861, H.R. 54, 37th Cong., 1st Sess. (1861), https://www.senate.gov/artandhistory/history/common/civil_war/RevenueAct_FeaturedDoc.htm#:~:text=Fessenden's%20first%20attempt%20to%20fund,provide%20for%20an%20enforcement%20mechanism; NCC Staff, *Blame Abraham Lincoln for the Nation's First National Income Tax*, NATIONAL CONSTITUTION CENTER (Aug. 5, 2023), <https://constitutioncenter.org/blog/say-happy-birthday-to-the-first-income-tax>; *Revenue Act of 1861, ch. 45, 12 Stat.* 292 (Aug. 5, 1861), <https://fraser.stlouisfed.org/title/revenue-act-1861-1117>; Tax History Museum, *1861-1865 The Civil War*, TAX NOTES, <https://www.taxnotes.com/tax-history-project/tax-history-museum/1861-1865>.

⁴⁶ U.S. Const. amend. XVI., CONGRESS GOV, <https://constitution.congress.gov/browse/amendment-16/#:~:text=Sixteenth%20Amendment%20Income%20Tax,to%20any%20census%20or%20enumeration> (last accessed Feb. 4, 2025).

marked by the passage of the Underwood Tariff Act,⁴⁷ which not only reimposed a federal income tax system, but also drastically reduced tariff rates from roughly 40% to 25%.⁴⁸ This legislative shift signaled a fundamental reorganization of federal revenue sources, with income taxes replacing tariffs as the primary means of funding the government.⁴⁹

While the introduction of the federal income tax in 1913 shifted the primary source of the U.S. federal government revenue away from tariffs, it did not signal the complete abandonment of tariff policy. Instead, tariffs continued to play a role in U.S. economic strategy, albeit with changing purposes over time (mainly regulating cross-border trade and commerce). This persistence of tariff policy culminated in one of its most infamous applications: the Smoot-Hawley Tariff.⁵⁰

Economic conditions following World War I played a significant role in setting the stage for the Smoot-Hawley Tariff.⁵¹ During the war, American farmers experienced high demand and expanded production to fill the gap left by reduced European output. Many relied on loans to support this growth. However, as European agriculture recovered and global markets were flooded with crops, prices dropped sharply, leading to a severe recession in the early 1920s.

⁴⁷ *Underwood Tariff Act of 1913*, ch. 15, 16, 38 Stat. 114 (1913),

<https://fraser.stlouisfed.org/files/docs/historical/congressional/underwood-tariff-1913.pdf>.

⁴⁸ U.S. Tariff Policy: Overview, Cong. Rsch. Serv., IF11030, at 1 (2024), <https://crsreports.congress.gov>; *Protectionism in the Interwar Period*, OFFICE OF THE HISTORIAN <https://history.state.gov/milestones/1921-1936/protectionism> (last accessed Feb. 4, 2025).

⁴⁹ U.S. Tariff Policy: Overview, Cong. Rsch. Serv., IF11030, at 1 (2024), <https://crsreports.congress.gov>.

⁵⁰ *Protectionism in the Interwar Period*, OFFICE OF THE HISTORIAN, <https://history.state.gov/milestones/1921-1936/protectionism> (last accessed Feb. 4, 2025); *The Senate Passes the Smoot-Hawley Tariff*, UNITED STATES SENATE (June 13, 1930),

https://www.senate.gov/artandhistory/history/minute/Senate_Passes_Smoot_Hawley_Tariff.htm; Douglas A. Irwin,

The Smoot-Hawley Tariff: A Quantitative Assessment, 80 REV. ECON. & STAT. 326, 326–34 (1998),

<http://www.jstor.org/stable/2646642>; D. F. Fleming, *How the Smoot-Hawley Tariff Was Made*, 9 Proc. Ann. Sess. (S.

Pol. Sci. Ass'n) 14, 14–19 (1936), <http://www.jstor.org/stable/43945714>; David A. Lake, *Protection, Retaliation, and Response, 1930–1939*, in *Power, Protection, and Free Trade: International Sources of U.S. Commercial Strategy, 1887–1939* 184, 184–215 (Cornell Univ. Press 1988), <http://www.jstor.org/stable/10.7591/j.ctt207g6jz.10>; *President Hoover on the Hawley-Smoot Tariff Act of 1930*, 92 *Advocate of Peace Through Just.* 191, 191–93 (1930),

<http://www.jstor.org/stable/20681474>; Kris James Mitchener, Kirsten Wandschneider & Kevin Hjortshøj O'Rourke, *The Smoot-Hawley Trade War*, Nat'l Bureau of Econ. Rsch., Working Paper No. 28616 (2021),

<https://www.nber.org/papers/w28616>.

⁵¹ Douglas A. Irwin, *The Hawley-Smoot Tariff and the Great Depression, 1928–1932*, U. CHI. PRESS., 400-05, <https://www.nber.org/system/files/chapters/c13858/c13858.pdf>.

Throughout the decade, falling incomes and mounting debts left American farmers struggling to stay afloat, with many losing their livelihoods. These challenges spurred calls for government intervention, culminating in the Smoot-Hawley Tariff as an attempt to shield domestic agriculture from foreign competition.⁵² Enacted just before the economic collapse of the early 1930s, the Smoot-Hawley Tariff raised import duties by an average of approximately 20%, effectively causing a 5–6% increase in the relative cost of imported goods.⁵³ Smoot-Hawley is widely regarded as a symbol of global protectionism⁵⁴ and its catastrophic effects on international trade.⁵⁵ Passed amid intense congressional debate during 1929 and 1930, the tariff imposed steep duties on imported goods, aiming to protect American industries during an economic downturn.⁵⁶

⁵² Kris James Mitchener, Kirsten Wandschneider & Kevin Hjortshøj O'Rourke, *The Smoot-Hawley Trade War*, Nat'l Bureau of Econ. Rsch., Working Paper No. 28616 (2021), <https://www.nber.org/papers/w28616>; President Hoover on the Hawley-Smoot Tariff Act of 1930, 92 *Advocate of Peace Through Just.* 191, 191–93 (1930), <http://www.jstor.org/stable/20681474>; D. F. Fleming, *How the Smoot-Hawley Tariff Was Made*, 9 *Proc. Ann. Sess. (S. Pol. Sci. Ass'n)* 14, 14–19 (1936), <http://www.jstor.org/stable/43945714>.

⁵³ Douglas A. Irwin, *The Smoot-Hawley Tariff: A Quantitative Assessment*, 80 *REV. ECON. & STAT.* 326, 326–34 (1998), <http://www.jstor.org/stable/2646642>; Catherine L. Mann, *Protection and Retaliation: Changing the 'Rules of the Game'*, 1987 *BROOKINGS PAPERS ON ECON. ACTIVITY* 311, 311–35 (1987), <https://doi.org/10.2307/2534520>.

⁵⁴ David A. Lake, *Protection, Retaliation, and Response, 1930–1939*, in *Power, Protection, and Free Trade: International Sources of U.S. Commercial Strategy, 1887–1939* 184, 184–215 (Cornell Univ. Press 1988), <http://www.jstor.org/stable/10.7591/j.ctt207g6jz.10>; Also, see President Hoover statement on this Act: “The Republican Party believes that the home market, built up under the protective policy, belongs to the American farmer, and it pledges its support of legislation which will give this market to him to the full extent of his ability to supply it...” “There are certain industries which cannot now successfully compete with foreign producers because of lower foreign wages and a lower cost of living abroad, and we pledge the next Republican Congress to an examination and, where necessary, a revision of these schedules to the end that the American labor in these industries may again command the home market, may maintain its standard of living and may count upon steady employment in its accustomed field.” President Hoover on the Hawley-Smoot Tariff Act of 1930, 92 *Advocate of Peace Through Just.* 191, 191–93 (1930), <http://www.jstor.org/stable/20681474>.

⁵⁵ Judith A. McDonald, Anthony Patrick O'Brien & Colleen M. Callahan, *Trade Wars: Canada's Reaction to the Smoot-Hawley Tariff*, 57 *J. ECON. HIST.* 802, 802–26 (1997), <http://www.jstor.org/stable/2951161>; Percy Wells Bidwell, *Trade, Tariffs, the Depression*, 10 *FOREIGN AFF.* 391, 391–401 (1932), <https://www.jstor.org/stable/20030444>; Kris James Mitchener, Kirsten Wandschneider & Kevin Hjortshøj O'Rourke, *The Smoot-Hawley Trade War*, Nat'l Bureau of Econ. Rsch., Working Paper No. 28616 (2021), <https://www.nber.org/papers/w28616>; Barry Eichengreen, *Economic History and Economic Policy*, 72 *J. ECON. HIST.* 289, 289–307 (2012), <http://www.jstor.org/stable/23256939>; Percy W. Bidwell, *Tariff Reform: The Case for Bargaining*, 23 *AM. ECON. REV.* 137, 137–46 (1933) (supp.), <https://www.jstor.org/stable/55>.

⁵⁶ D. F. Fleming, *How the Smoot-Hawley Tariff Was Made*, 9 *Proc. Ann. Sess. (S. Pol. Sci. Ass'n)* 14, 14–19 (1936), <http://www.jstor.org/stable/43945714>; President Hoover on the Hawley-Smoot Tariff Act of 1930, 92 *Advocate of Peace Through Just.* 191, 191–93 (1930), <http://www.jstor.org/stable/20681474>; Kris James Mitchener, Kirsten Wandschneider & Kevin Hjortshøj O'Rourke, *The Smoot-Hawley Trade War*, Nat'l Bureau of Econ. Rsch., Working Paper No. 28616 (2021), <https://www.nber.org/papers/w28616>.

However, its consequences were far-reaching and deeply damaging as it also led to a trade war between the United States and its trade partners, as in response to its enactment, countries imposed tariffs specifically aimed at U.S. exports.⁵⁷ Within two years of its implementation, U.S. trade volume fell by nearly half, as exports to retaliating countries decreased by 28-33% and exports to non-retaliating but protesting nations declined by 15-22%.⁵⁸ These retaliatory tariffs and reduced trade flows further disrupted global commerce, deepening the economic challenges of the Great Depression.⁵⁹

Though some critics blame Smoot-Hawley for worsening international trade relations and turning a modest recession into the Great Depression, others argue it may have softened the economic blow rather than exacerbating it.⁶⁰ Either way, it highlights the risk of excessive reliance on protectionist policies during times of economic fragility and emphasizes the challenges of reversing such measures.⁶¹

High tariffs, like those implemented under the Smoot-Hawley Tariff, were not only criticized for exacerbating the Great Depression but also for fostering international retaliation and trade barriers.⁶² Public sentiment and economic analysis increasingly linked protectionism to stagnation,

⁵⁷ Kris James Mitchener, Kirsten Wandschneider & Kevin Hjortshøj O'Rourke, *The Smoot-Hawley Trade War*, Nat'l Bureau of Econ. Rsch., Working Paper No. 28616 (2021), <https://www.nber.org/papers/w28616>.

⁵⁸ Kris Mitchener, Kevin O'Rourke & Kirsten Wandschneider, *The Smoot-Hawley Trade War*, 132 ECON. J. 2500, 2500-01 (Feb. 1, 2022), <https://doi.org/10.1093/ej/ueac006>.

⁵⁹ Kris James Mitchener, Kirsten Wandschneider & Kevin Hjortshøj O'Rourke, *The Smoot-Hawley Trade War*, Nat'l Bureau of Econ. Rsch., Working Paper No. 28616 (2021), <https://www.nber.org/papers/w28616>.

⁶⁰ Kris James Mitchener, Kirsten Wandschneider & Kevin Hjortshøj O'Rourke, *The Smoot-Hawley Trade War*, Nat'l Bureau of Econ. Rsch., Working Paper No. 28616 (2021), <https://www.nber.org/papers/w28616>; Douglas A. Irwin, *The Smoot-Hawley Tariff: A Quantitative Assessment*, 80 REV. ECON. & STAT. 326, 326-34 (1998), <http://www.jstor.org/stable/2646642>; Eichengreen, Barry, *The Political Economy of the Smoot-Hawley Tariff* (August 1986). NBER Working Paper No. w2001, Available at SSRN: <https://ssrn.com/abstract=269524>; Barry Eichengreen & Douglas A. Irwin, *The Slide to Protectionism in the Great Depression: Who Succumbed and Why?*, 70 J. ECON. HIST. 871, 871-97 (2010), <https://doi.org/10.1017/S0022050710000756>.

⁶¹ Percy W. Bidwell, *Tariff Reform: The Case for Bargaining*, 23 AM. ECON. REV. 137, 137-46 (1933) (supp.), <https://www.jstor.org/stable/55>.

⁶² Percy W. Bidwell, *Tariff Reform: The Case for Bargaining*, 23 AM. ECON. REV. 137, 137-46 (1933) (supp.), <https://www.jstor.org/stable/55>.

yet attempts to reduce tariffs often faced fierce opposition from industries benefiting from these policies.⁶³ Historically, economic downturns tended to amplify demands for higher tariffs rather than reductions, illustrating the deeply ingrained obstacles to reforming protectionist trade policies.⁶⁴

In response to the failures of Smoot-Hawley and the global trade breakdown it may have triggered,⁶⁵ the Reciprocal Trade Agreements Act (RTAA) of 1934 marked a pivotal shift in U.S. trade policy and transitioned tariff-setting authority from Congress to the executive branch, allowing for more flexible and responsive negotiation of reciprocal trade agreements.⁶⁶ The RTAA granted the president the authority to negotiate reciprocal tariff reductions with other nations, fostering a more cooperative and dynamic approach to international trade.⁶⁷

⁶³ Percy W. Bidwell, *Tariff Reform: The Case for Bargaining*, 23 AM. ECON. REV. 137, 137–46 (1933) (supp.), <https://www.jstor.org/stable/55>.

⁶⁴ Percy W. Bidwell, *Tariff Reform: The Case for Bargaining*, 23 AM. ECON. REV. 137, 137–46 (1933) (supp.), <https://www.jstor.org/stable/55>.

⁶⁵ Percy W. Bidwell, *Tariff Reform: The Case for Bargaining*, 23 AM. ECON. REV. 137, 137–46 (1933) (supp.), <https://www.jstor.org/stable/55>.

⁶⁶ Abraham Berglund, *The Reciprocal Trade Agreements Act of 1934*, 25 AM. ECON. REV. 411, 411–25 (1935), <http://www.jstor.org/stable/1802526>; Douglas A. Irwin & Randall S. Kroszner, *From Smoot-Hawley to Reciprocal Trade Agreements: Changing the Course of U.S. Trade Policy in the 1930s*, Nat'l Bureau of Econ. Rsch., Working Paper No. 5895 (1997), <https://www.nber.org/papers/w5895>; U.S. Tariff Policy: Overview, Cong. Rsch. Serv., IF11030, at 1 (2024), <https://crsreports.congress.gov>; David A. Lake, *Protection, Retaliation, and Response, 1930–1939*, in *Power, Protection, and Free Trade: International Sources of U.S. Commercial Strategy, 1887–1939* 184, 184–215 (Cornell Univ. Press 1988), <http://www.jstor.org/stable/10.7591/j.ctt207g6jz.10>; Henry F. Grady, *Reciprocal Agreements for Trade Expansion*, 211 ANNALS AM. ACAD. POL. & SOC. SCI. 58, 58–64 (1940), <https://www.jstor.org/stable/1022511>; *New Deal Trade Policy: The Export-import Bank & the Reciprocal Trade Agreements Act, 1934*, OFFICE OF THE HISTORIAN, <https://history.state.gov/milestones/1921-1936/export-import-bank> (last accessed Feb. 4, 2025); *Eighty Years After the Reciprocal Trade Agreements Act*, OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE, <https://ustr.gov/about-us/policy-offices/press-office/blog/2014/June/Eighty-years-of-the-Reciprocal-Trade-Agreements-Act> (last accessed Feb. 4, 2025).

⁶⁷ Abraham Berglund, *The Reciprocal Trade Agreements Act of 1934*, 25 AM. ECON. REV. 411, 411–25 (1935), <http://www.jstor.org/stable/1802526>; Douglas A. Irwin & Randall S. Kroszner, *From Smoot-Hawley to Reciprocal Trade Agreements: Changing the Course of U.S. Trade Policy in the 1930s*, Nat'l Bureau of Econ. Rsch., Working Paper No. 5895 (1997), <https://www.nber.org/papers/w5895>; David A. Lake, *Protection, Retaliation, and Response, 1930–1939*, in *Power, Protection, and Free Trade: International Sources of U.S. Commercial Strategy, 1887–1939* 184, 184–215 (Cornell Univ. Press 1988), <http://www.jstor.org/stable/10.7591/j.ctt207g6jz.10>; Henry F. Grady, *Reciprocal Agreements for Trade Expansion*, 211 ANNALS AM. ACAD. POL. & SOC. SCI. 58, 58–64 (1940), <https://www.jstor.org/stable/1022511>; *Teddy Bears, Tungsten — and the Tariff*, 1 CHALLENGE 47, 47–49 (1953), <https://www.jstor.org/stable/40716634>.

This legislative innovation not only marked a departure from severe protectionism but also signaled the United States' recognition of the importance of trade liberalization in rebuilding a fractured global economy.⁶⁸ By delegating trade negotiation powers to the executive branch, the RTAA became a cornerstone for modern trade agreements and helped reshape the global economic order and the development of future trade agreements and institutions such as the General Agreement on Tariffs and Trade (GATT).⁶⁹

The GATT, established in 1947, served as a foundational framework for promoting international trade by reducing tariffs and trade barriers among member nations.⁷⁰ Although it was designed as a provisional agreement, it laid the groundwork for modern trade rules,⁷¹ and along with 23 other nations, the United States joined the GATT to reduce tariffs and dismantle other barriers to international trade.⁷² In 1995, the World Trade Organization (WTO) was created to succeed and expand upon GATT's principles, incorporating broader trade areas such as services, intellectual

⁶⁸ Henry F. Grady, *Reciprocal Agreements for Trade Expansion*, 211 ANNALS AM. ACAD. POL. & SOC. SCI. 58, 58–64 (1940), <https://www.jstor.org/stable/1022511>; Douglas A. Irwin & Randall S. Kroszner, *Interests, Institutions, and Ideology in Securing Policy Change: The Republican Conversion to Trade Liberalization After Smoot-Hawley*, 42 J.L. & ECON. 643, 643–74 (1999), <https://www.jstor.org/stable/10.1086/467437>.

⁶⁹ Abraham Berglund, *The Reciprocal Trade Agreements Act of 1934*, 25 AM. ECON. REV. 411, 411–25 (1935), <http://www.jstor.org/stable/1802526>; Douglas A. Irwin & Randall S. Kroszner, *Interests, Institutions, and Ideology in Securing Policy Change: The Republican Conversion to Trade Liberalization After Smoot-Hawley*, 42 J.L. & ECON. 643, 643–74 (1999), <https://www.jstor.org/stable/10.1086/467437>; *General Agreement on Tariffs and Trade (GATT 1947)*, WORLD TRADE ORGANIZATION, https://www.wto.org/english/docs_e/legal_e/gatt47_e.htm (last accessed Feb. 4, 2025); Donald McRae, *General Agreement on Tariffs and Trade-Introductory Note* (June 2021), <https://legal.un.org/avl/ha/gatt/gatt.html>; Judith Goldstein & Robert Gulotty, *Trading Away Tariffs: The Operations of the GATT System*, 21 WORLD TRADE REV. 135 (May 2022).

⁷⁰ John H. Jackson, *The General Agreement on Tariffs and Trade in United States Domestic Law*, 66 MICH. L. REV. 249, 249–332 (1967), <https://www.jstor.org/stable/1287033>; John W. Evans, *The General Agreement on Tariffs and Trade*, 22 INT'L ORG. 72, 72–98 (1968), <https://www.jstor.org/stable/2705825>; Robert E. Hudec, *GATT or GABB? The Future Design of the General Agreement on Tariffs and Trade*, 80 YALE L.J. 1299, 1299–1386 (1971), <https://www.jstor.org/stable/795173>; Judith Goldstein & Robert Gulotty, *Trading Away Tariffs: The Operations of the GATT System*, 21 WORLD TRADE REV. 135 (May 2022).

⁷¹ Judith L. Goldstein, Douglas Rivers & Michael Tomz, *Institutions in International Relations: Understanding the Effects of the GATT and the WTO on World Trade*, 61 INT'L ORG. 37, 37–67 (2007), <http://www.jstor.org/stable/4498137>; Patrick M. Moore, *The Decisions Bridging the GATT 1947 and the WTO Agreement*, 90 AM. J. INT'L L. 317, 317–28 (1996), <https://doi.org/10.2307/2203695>.

⁷² U.S. Tariff Policy: Overview, Cong. Rsch. Serv. IF11030, at 1 (2024), <https://crsreports.congress.gov>.

property, and a more robust dispute resolution system.⁷³ The WTO represents the institutional evolution of the GATT, providing a comprehensive platform for global trade governance.⁷⁴

In 1976, the United States implemented its Generalized System of Preferences (GSP), a trade program first authorized under the Trade Act of 1974.⁷⁵ Designed to promote economic growth in developing nations,⁷⁶ the GSP provides unilateral duty-free treatment for eligible products from designated countries.⁷⁷ At its peak, the program covered over 3,500 duty-free items from developing nations, with an additional 1,500 products available to the least-developed beneficiaries.⁷⁸ While the GSP has faced periodic lapses in reauthorization, it remains an integral part of U.S. trade policy, aiming to help developing nations diversify exports, reduce dependence on raw materials, and encourage sustainable growth.⁷⁹

⁷³ Patrick M. Moore, *The Decisions Bridging the GATT 1947 and the WTO Agreement*, 90 AM. J. INT'L L. 317, 317–28 (1996), <https://doi.org/10.2307/2203695>.

⁷⁴ Judith L. Goldstein, Douglas Rivers & Michael Tomz, *Institutions in International Relations: Understanding the Effects of the GATT and the WTO on World Trade*, 61 INT'L ORG. 37, 37–67 (2007), <http://www.jstor.org/stable/4498137>; Patrick M. Moore, *The Decisions Bridging the GATT 1947 and the WTO Agreement*, 90 AM. J. INT'L L. 317, 317–28 (1996), <https://doi.org/10.2307/2203695>.

⁷⁵ *Trade Act of 1974*, Pub. L. No. 93-618 (as amended through Pub. L. No. 118-31, Dec. 22, 2023), <https://www.govinfo.gov/content/pkg/COMPS-10384/pdf/COMPS-10384.pdf>.

⁷⁶ U.S. Tariff Policy: Overview, Cong. Rsch. Serv. IF11030, at 1 (2024), <https://crsreports.congress.gov>; Congressional Research Service, *Generalized System of Preferences (GSP): FAQ*, CRS REPORT IF11232, Version 8 (Jan. 16, 2025), <https://crsreports.congress.gov>; Congressional Research Service, *Generalized System of Preferences (GSP): Overview and Issues for Congress* (Nov. 22, 2023), <https://crsreports.congress.gov/RL33663>; Congressional Research Service, *Generalized System of Preferences (GSP): 2019 Overview*, IG10018, Version 3 (Apr. 3, 2020), <https://crsreports.congress.gov>; Congressional Research Service, *Trade Preferences: Economic Issues and Policy Options* (Jan. 10, 2013), <https://crsreports.congress.gov/R41429>.

⁷⁷ Congressional Research Service, *Generalized System of Preferences (GSP): FAQ*, CRS Report IF11232, Version 8 (Jan. 16, 2025), <https://crsreports.congress.gov>; Congressional Research Service, *Generalized System of Preferences (GSP): Overview and Issues for Congress* (Nov. 22, 2023), <https://crsreports.congress.gov/RL33663>; Congressional Research Service, *Generalized System of Preferences (GSP): 2019 Overview*, IG10018, Version 3 (Apr. 3, 2020), <https://crsreports.congress.gov>; Congressional Research Service, *Trade Preferences: Economic Issues and Policy Options* (Jan. 10, 2013), <https://crsreports.congress.gov/R41429>.

⁷⁸ Congressional Research Service, *Generalized System of Preferences (GSP): FAQ*, CRS REPORT IF11232, Version 8 (Jan. 16, 2025), <https://crsreports.congress.gov>; Congressional Research Service, *Generalized System of Preferences (GSP): Overview and Issues for Congress* (Nov. 22, 2023), <https://crsreports.congress.gov/RL33663>.

⁷⁹ Congressional Research Service, *Generalized System of Preferences (GSP): FAQ*, CRS REPORT IF11232, Version 8 (Jan. 16, 2025), <https://crsreports.congress.gov>; Congressional Research Service, *Generalized System of Preferences (GSP): Overview and Issues for Congress* (Nov. 22, 2023), <https://crsreports.congress.gov/RL33663>.

In addition to its economic objectives, the GSP reflects broader U.S. foreign policy and security goals, using low tariff rates as a tool to foster global economic development and strengthen international partnerships. The GSP is a part of a wider strategy that includes free trade agreements (FTAs) to achieve both economic and geopolitical aims,⁸⁰ as tariff preferences are essential for developing countries to enhance exports, enabling them to acquire necessary equipment and machinery from industrialized nations. This support also aims to help narrow the growing economic gap between developed and developing countries, as the former continues to amass wealth at a significantly faster pace.⁸¹

Nearly 20 years after the United States established the GSP, it became a member of the WTO in 1995, which also marked the most recent occasion when GATT/WTO members collectively agreed to significant reductions in tariff rates.⁸²

Overall, and to better illustrate the long trend of decline in tariffs' rates, consider the following: when the GATT was founded in 1947, tariffs rates were high. However, during the eight successful GATT-negotiations, tariff rates were reduced significantly. The average reductions in tariff rates for each round were as follows: Geneva (1947) saw a 19% decline, Annecy (1949) a 2% decline, Torquay (1950–51) a 3% decline, Geneva (1955–56) a 2% decline, Geneva (1961–62, "Dillon Round") a 7% decline, Geneva (1964–67, "Kennedy Round") a 35% decline, Geneva (1973–79, "Tokyo Round") a 33% decline, and Uruguay (1986–94) a 40% decline.⁸³ Furthermore, the shift

⁸⁰ U.S. Tariff Policy: Overview, Cong. Rsch. Serv. IF11030, at 1 (2024), <https://crsreports.congress.gov>.

⁸¹ K. S. Sundara Rajan, *Tariff Preferences and Developing Countries*, 60 PROC. AM. SOC'Y INT'L L. 86, 86–93 (1966), <https://www.jstor.org/stable/25657686>.

⁸² U.S. Tariff Policy: Overview, Cong. Rsch. Serv. IF11030, at 1 (2024), <https://crsreports.congress.gov>.

⁸³ Weerth, Carsten, *Tariff Rates of the World: Are Customs Duties Really Growing Unimportant?* (February 15, 2009). *Global Trade and Customs Journal*, Vol. 4, No. 2, p. 53-60, 2009.

in tariff policy was not only a U.S. phenomenon, as in Europe alone, the overall average reductions in tariff rates for industrial goods dropped from 10.4% in 1968, to only 3.7% in 2004.⁸⁴

In stark contrast to the trend observed in the United States and European countries, many developing nations continued to rely heavily on tariffs as a significant source of revenue. Between 2000 and 2004, countries such as Kuwait (77.7%), Maldives (64.9%), and Comoros (59.8%) exemplified this dependence.⁸⁵ This reliance on tariffs highlights the central role customs duties play in supporting the fiscal frameworks of these economies, particularly in contrast to developed nations, where tariffs account for a negligible portion of national revenue.⁸⁶

This divergence stresses a critical difference in fiscal approach between developed and developing economies. While developed nations embraced trade openness and liberalization and reduced tariff rates to foster global integration, the transition away from tariffs often revealed gaps in adapting

⁸⁴ Weerth, Carsten, *Tariff Rates of the World: Are Customs Duties Really Growing Unimportant?* (February 15, 2009). *Global Trade and Customs Journal*, Vol. 4, No. 2, p. 53-60, 2009. On average the tariffs rates in Europe were on decline during these years, with a few exceptions, for example France who had a higher tariff rate in 1958.

⁸⁵ Furthermore, between 2000 and 2004, numerous countries demonstrated a significant reliance on tariffs as a source of government revenue, with several falling within the range of 20% to 50%. For example, nations such as Bangladesh (40.6%), Belize (42.4%), and Sudan (40.8%) relied heavily on customs duties to finance public expenditures. Similarly, countries like Namibia (35.1%) and Oman (31.9%) exemplify the continuing importance of tariffs in the fiscal frameworks of developing economies, see Weerth, Carsten, *Tariff Rates of the World: Are Customs Duties Really Growing Unimportant?* (February 15, 2009). *Global Trade and Customs Journal*, Vol. 4, No. 2, p. 53-60, 2009; *Taxes on International Trade (% of Revenue)*, WORLD BANK GROUP, <https://data.worldbank.org/indicator/GC.TAX.INTT.RV.ZS> (last accessed Feb. 4, 2025); *Customs and Other Import Duties by Country 1988-2022*, WORLD INTEGRATED TRADE SOLUTION, <https://wits.worldbank.org/CountryProfile/en/country/by-country/startyear/LTST/endyear/LTST/indicator/GC-TAX-IMPT-ZS> (last accessed Feb. 4, 2025).

⁸⁶ Michael Keen & Jenny E. Ligthart, *Coordinating Tariff Reduction and Domestic Tax Reform*, 56 J. INT'L ECON. 489, 489–507 (2002), [https://doi.org/10.1016/S0022-1996\(01\)00123-4](https://doi.org/10.1016/S0022-1996(01)00123-4); *United States- Customs and Other Import Duties (% of Tax Revenue)*, TRADE ECONOMICS, <https://tradingeconomics.com/united-states/customs-and-other-import-duties-percent-of-tax-revenue-wb-data.html> (last accessed Feb. 4, 2025); *How Much Revenue has the U.S. Government Collected this Year?*, FISCAL DATA, <https://fiscaldata.treasury.gov/americas-finance-guide/government-revenue/> (last accessed Feb. 4, 2025); *U.S. Bureau of Economic Analysis, Federal Government Current Tax Receipts: Taxes on Production and Imports: Customs Duties*, FEDERAL RESERVE BANK OF ST. LOUIS, <https://fred.stlouisfed.org/series/B235RC1Q027SBEA> (last accessed Feb. 4, 2025). It should also be noted that studies have found that stronger developing countries that reformed their tax systems tended to implement policies promoting greater trade openness and liberalization, whereas less developed countries relied more heavily on tariffs as a primary revenue source, see Sena Kimm Gnanon, *Tax Reform and Trade Openness in Developing Countries*, 34 J. ECON. INTEGRATION 498, 498–519 (2019), <https://www.jstor.org/stable/26756454>; Lant Pritchett & Geeta Sethi, *Tariff Rates, Tariff Revenue, and Tariff Reform: Some New Facts*, 8 WORLD BANK ECON. REV. 1, 1–16 (1994), <http://www.jstor.org/stable/3989884>.

their fiscal systems. Reliance on more complex and economically sensitive revenue sources, such as income and corporate taxes, exposed developed economies to vulnerabilities that might have been mitigated with a more intentional and phased transition strategy.⁸⁷ Such a strategy could have included measures like gradually increasing reliance on broad-based consumption taxes (e.g., VAT),⁸⁸ modernizing tax administration to ensure better compliance,⁸⁹ and implementing targeted policies to address the short-term fiscal gaps created by tariff reductions. The failure to adequately anticipate the revenue shortfalls and economic dislocations associated with trade liberalization left many developed nations struggling to sustain their fiscal stability in the face of economic cycles and globalization-induced shifts.⁹⁰

In contrast, many developing nations, faced with fewer viable revenue alternatives, leaned much more heavily on tariffs as a practical and straightforward means to fund government operations.⁹¹ The continuous reliance on tariffs in these economies reflects a combination of structural challenges, including limited diversification of revenue streams, weaker domestic tax bases, and the difficulty of implementing robust tax collection systems. For these countries, the administrative simplicity and reliability of tariff revenue outweighed the potential long-term benefits of

⁸⁷ Gary Hufbauer & Barbara Kotschwar, *The Future Course of Trade Liberalization*, PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS (Oct. 1, 2008), <https://www.piie.com/commentary/speeches-papers/future-course-trade-liberalization>.

⁸⁸ *Value-Added Tax (VAT)*, TAX FOUNDATION, [https://taxfoundation.org/taxedu/glossary/value-added-tax-vat/#:~:text=A%20Value%2DAdded%20Tax%20\(VAT,a%20tax%20on%20final%20consumption](https://taxfoundation.org/taxedu/glossary/value-added-tax-vat/#:~:text=A%20Value%2DAdded%20Tax%20(VAT,a%20tax%20on%20final%20consumption) (last accessed Jan. 29, 2025).

⁸⁹ Milka Casanegra de Jantscher, Carlos Silvani & Charles Vehorn, “Chapter 6 Modernizing Tax Administration.” In *Fiscal Policies in Economies in Transition*, INTERNATIONAL MONETARY FUND (June 1, 1992), <https://www.elibrary.imf.org/display/book/9781557751911/ch006.xml>.

⁹⁰ Mario I. Blejer & Adrienne Cheasty, Fiscal Implications of Trade Liberalization, *IMF Occasional Paper No. 180* (Int’l Monetary Fund 1999), available at <https://www.elibrary.imf.org/display/book/9781557751713/ch006.xml?>.

⁹¹ Michael Keen & Jenny E. Ligthart, *Coordinating Tariff Reduction and Domestic Tax Reform*, 56 J. INT’L ECON. 489, 489–507 (2002), [https://doi.org/10.1016/S0022-1996\(01\)00123-4](https://doi.org/10.1016/S0022-1996(01)00123-4); Richard M. Bird, Jorge Martinez-Vazquez & Benno Torgler, *Tax Effort in Developing Countries and High-Income Countries: The Impact of Corruption, Voice and Accountability*, 38 ECON. ANALYSIS & POL’Y 55 (2008), [https://doi.org/10.1016/S0313-5926\(08\)50006-3](https://doi.org/10.1016/S0313-5926(08)50006-3).

transitioning to more complex taxation systems, such as income or value-added taxes.⁹² This reliance draws attention to the need for tailored fiscal and tax policy that account for these countries' specific economic contexts, trade dependencies, and fiscal needs, rather than applying a one-size-fits-all model of liberalization and the continuous failures of the post-1994 WTO/GATT negotiations, may be one of the results of this.⁹³

This duality raises important questions about the sustainability and adaptability of fiscal policies in a globalized world. For developed economies, the experience highlights the importance of proactive tax reforms that anticipate and address revenue losses from liberalization. For developing nations, it emphasizes the ongoing tension between the need for tariff revenues and the pressure to liberalize trade in alignment with global norms.⁹⁴ Together, these lessons suggest the necessity of a more nuanced approach to balancing revenue stability with economic openness, particularly as the global trade landscape continues to evolve.

III. Understanding Tariff Foundations

In theory, a tariff-based tax system would presumably shift the tax burden away from domestic earnings and consumption (particularly in cases where a consumption tax is in place) and place it primarily on cross-border transactions.⁹⁵ Such an approach has significant theoretical appeal due to its simplicity in administration and enforcement, particularly when compared with the complexities of income tax systems.

⁹² Michael Keen & Jenny E. Ligthart, *Coordinating Tariff Reduction and Domestic Tax Reform*, 56 J. INT'L ECON. 489, 489–507 (2002), [https://doi.org/10.1016/S0022-1996\(01\)00123-4](https://doi.org/10.1016/S0022-1996(01)00123-4); Richard M. Bird, Jorge Martinez-Vazquez & Benno Torgler, *Tax Effort in Developing Countries and High-Income Countries: The Impact of Corruption, Voice and Accountability*, 38 ECON. ANALYSIS & POL'Y 55 (2008), [https://doi.org/10.1016/S0313-5926\(08\)50006-3](https://doi.org/10.1016/S0313-5926(08)50006-3).

⁹³ Weerth, Carsten, *Tariff Rates of the World: Are Customs Duties Really Growing Unimportant?* (February 15, 2009). *Global Trade and Customs Journal*, Vol. 4, No. 2, p. 53-60, 2009.

⁹⁴ IMF Staff, *Global Trade Liberalization and the Developing Countries*, INTERNATIONAL MONETARY FUND (Nov 2001), <https://www.imf.org/external/np/exr/ib/2001/110801.htm>.

⁹⁵ Erica York, *Separating Tariff Facts from Tariff Fictions*, CATO INSTITUTE (Apr. 16, 2024), <https://www.cato.org/publications/separating-tariff-facts-tariff-fictions>.

Tariffs are inherently easier to monitor and collect because they rely on a self-enforcing mechanism: tangible goods cannot easily cross-national borders without passing through regulated customs points, minimizing opportunities for evasion. Additionally, tariffs carry considerable political appeal.⁹⁶ They allow governments to raise revenue indirectly, avoiding the immediate visibility of taxing domestic earnings or consumption. This aligns with the ancient adage, "Don't tax you. Don't tax me. Tax the guy behind the tree."⁹⁷

By targeting external trade rather than voters' direct incomes, tariffs often face less political resistance from the popular vote and can be framed as measures to protect domestic industries or level the playing field against foreign competitors. However, while the tax is formally borne on the importer, the actual burden depends on the relative elasticities of supply and demand. This combination of administrative efficiency and political palatability has historically made tariffs an attractive revenue tool for governments.⁹⁸

However, while tariffs offer these advantages, setting them too high can lead to significant negative consequences.⁹⁹ Excessive tariffs can distort market dynamics by inflating the prices of imported goods, burdening consumers with higher costs and reducing their purchasing power.¹⁰⁰ Such

⁹⁶ Reuven S. Avi-Yonah & Doron Narotzki, *The Tariffs Are Coming! The Tariffs Are Coming!*, U. MICH. PUB. L. RES. PAPER (forthcoming Jan. 3, 2025), <https://ssrn.com/abstract=5080792>.

⁹⁷ Senator Russell B. Long, quoted in *Money* (July 1973); William Dunkelberg, "Tax the Fellow Behind the Tree," *Forbes* (Aug. 23, 2024) <https://www.forbes.com/sites/williamdunkelberg/2024/08/23/tax-the-fellow-behind-the-tree/>.

⁹⁸ Reuven S. Avi-Yonah & Doron Narotzki, *The Tariffs Are Coming! The Tariffs Are Coming!*, U. MICH. PUB. L. RES. PAPER (forthcoming Jan. 3, 2025), <https://ssrn.com/abstract=5080792>.

⁹⁹ Reuven S. Avi-Yonah & Doron Narotzki, *The Tariffs Are Coming! The Tariffs Are Coming!*, U. MICH. PUB. L. RES. PAPER (forthcoming Jan. 3, 2025), <https://ssrn.com/abstract=5080792>; Doron Narotzki, *Tariffs: Back to the Future* (Oct. 28, 2024), reprinted from TAX NOTES INT'L, at 565, <https://ssrn.com/abstract=5007289>; Doron Narotzki, *Scrapping Tariffs, Spurring Growth* (Sept. 16, 2024) reprinted from TAX NOTES FEDERAL at 2289, <https://ssrn.com/abstract=5007283>; Kimberly A. Clausing & Mary E. Lovely, *Why Trump's Tariff Proposals Would Harm Working Americans* (May 20, 2024). Peterson Institute for International Economics Policy Brief 24-1, <https://ssrn.com/abstract=4834397>; Kara M. Reynolds, *Costs of Trade Wars: The Distributional Consequences of US Section 301 Tariffs Against China* (June 8, 2021), <https://ssrn.com/abstract=3862764>.

¹⁰⁰ Reuven S. Avi-Yonah & Doron Narotzki, *The Tariffs Are Coming! The Tariffs Are Coming!*, U. MICH. PUB. L. RES. PAPER (forthcoming Jan. 3, 2025), <https://ssrn.com/abstract=5080792>; Doron Narotzki, *Tariffs: Back to the Future* (Oct. 28, 2024), reprinted from TAX NOTES INT'L, at 565, <https://ssrn.com/abstract=5007289>; Doron Narotzki, *Scrapping Tariffs, Spurring Growth* (Sept. 16, 2024) reprinted from TAX NOTES FEDERAL at 2289,

protectionist measures may also encourage inefficiencies among domestic producers, who, shielded from foreign competition, have less incentive to innovate or improve productivity.¹⁰¹

Moreover, high tariffs often provoke retaliation measures from trade partners, resulting in escalating trade barriers that harm global trade volumes and disrupt international supply chains.¹⁰²

This cycle of retaliation can dramatically impact and worsen tensions between nations, transforming what might have been a mutually beneficial trading relationship into a zero-sum conflict.¹⁰³ In addition, excessively high tariffs can incentivize trade diversion and illicit activities such as smuggling, undermining their intended purpose of generating revenue or protecting domestic industries.¹⁰⁴

These unintended negative consequences highlight the importance of calibrating tariff rates carefully to avoid economic harm while achieving fiscal and policy objectives. This need for

<https://ssrn.com/abstract=5007283>; Hong Ma, Luca Macedoni, Jingxin Ning & Mingzhi Xu, *Tariffs Tax the Poor More: Evidence from Household Consumption During the US-China Trade War* (May 29, 2024),

<https://ssrn.com/abstract=4846802>; Kimberly A. Clausing & Mary E. Lovely, *Why Trump's Tariff Proposals Would Harm Working Americans* (May 20, 2024). Peterson Institute for International Economics Policy Brief 24-1, Available at SSRN: <https://ssrn.com/abstract=4834397>; Kara M. Reynolds, *Costs of Trade Wars: The Distributional Consequences of US Section 301 Tariffs Against China* (June 8, 2021), <https://ssrn.com/abstract=3862764>.

¹⁰¹ Ufuk Akcigit, [Sina T. Ates](#) & Giammario Impullitti, *Innovation, Trade Policy, and Globalization*, FEDERAL RESERVE BOARD (Sept. 30, 2019), <https://www.federalreserve.gov/econres/notes/feds-notes/innovation-trade-policy-and-globalization-20190930.html>.

¹⁰² Reuven S. Avi-Yonah & Doron Narotzki, *The Tariffs Are Coming! The Tariffs Are Coming!*, U. MICH. PUB. L. RES. PAPER (forthcoming Jan. 3, 2025), <https://ssrn.com/abstract=5080792>; Doron Narotzki, *Tariffs: Back to the Future* (Oct. 28, 2024), reprinted from TAX NOTES INT'L, at 565, <https://ssrn.com/abstract=5007289>; Doron Narotzki, *Scrapping Tariffs, Spurring Growth* (Sept. 16, 2024) reprinted from TAX NOTES FEDERAL at 2289, <https://ssrn.com/abstract=5007283>; Hong Ma, Luca Macedoni, Jingxin Ning & Mingzhi Xu, *Tariffs Tax the Poor More: Evidence from Household Consumption During the US-China Trade War* (May 29, 2024), <https://ssrn.com/abstract=4846802>; Kimberly A. Clausing & Mary E. Lovely, *Why Trump's Tariff Proposals Would Harm Working Americans* (May 20, 2024). Peterson Institute for International Economics Policy Brief 24-1, <https://ssrn.com/abstract=4834397>; Kara M. Reynolds, *Costs of Trade Wars: The Distributional Consequences of US Section 301 Tariffs Against China* (June 8, 2021), <https://ssrn.com/abstract=3862764>.

¹⁰³ Emma Farge, *Trade Wars Sparked by Trump Tariffs Would be 'Catastrophic', WTO Chief Says*, REUTERS (Jan. 23, 2025), <https://www.reuters.com/markets/trade-wars-would-be-catastrophic-global-growth-wto-chief-says-2025-01-23/>; Murad Aghayev, *The Effects of the US-China Trade Wars on the Global Economy* (Oct. 27, 2024), <https://ssrn.com/abstract=5052327>; Benjamin H. Liebman & Kara M. Reynolds, *Casualties of Trade Wars* (Dec. 2020), <https://ssrn.com/abstract=3778034>.

¹⁰⁴ Raymond Fisman, *Measuring Tariff Evasion and Smuggling*, NBER (Sept. 1, 2009), <https://www.nber.org/reporter/2009number3/measuring-tariff-evasion-and-smuggling>; International Monetary Fund, *Trade Diversion Effects from Global Tensions—Higher Than We Think*, IMF Working Paper WP/23/234, Nov. 2023, <https://www.elibrary.imf.org/view/journals/001/2023/234/article-A001-en.xml>.

balance brings into focus the concept of the "optimum tariff,"¹⁰⁵ which seeks to identify a tariff rate that maximizes a country's welfare without triggering significant adverse effects. By considering factors such as trade elasticities and terms of trade, the optimum tariff theory offers a framework for understanding how to strike this delicate equilibrium in international trade policy. Yet, the optimum tariff theory, while theoretically appealing, is not without its complexities and practical challenges. At its core, the theory speculates that a country can improve its welfare by imposing a tariff that shifts the terms of trade in its favor, effectively transferring a portion of the economic burden to its trading partners.¹⁰⁶

However, the practical application of this principle requires a nuanced understanding of several interrelated factors. One key consideration is the elasticity of import demand and export supply. The effectiveness of an optimum tariff depends on the responsiveness of trading partners to changes in price. If a country's trading partners have highly elastic supply curves, the imposition of tariffs may lead to significant reductions in trade volumes from both sides, negating potential welfare gains. Conversely, when demand is relatively inelastic, a tariff can yield improved terms of trade with minimal trade disruptions and allows different markets to specialize and reduce their production costs and prices. These dynamics underscore the importance of accurate economic modeling and data analysis in determining the feasibility and impact of optimal tariff rates.

¹⁰⁵ J. de V. Graaff, *On Optimum Tariff Structures*, 17 REV. ECON. STUD. 47, 47–59 (1949), <https://doi.org/10.2307/2295788>; Harry G. Johnson, *Optimum Welfare and Maximum Revenue Tariffs*, 19 REV. ECON. STUD. 28, 28–35 (1951–1952), <https://www.jstor.org/stable/2296268>; Harry G. Johnson, *Optimum Tariffs and Retaliation*, 21 REV. ECON. STUD. 142, 142–153 (1953–1954), <https://www.jstor.org/stable/2296006>; Ali Ibrahim, Arvind Subramanian & Luis A. Torres-Castro, *Optimal Tariffs: Theory and Practice*, INTERNATIONAL MONETARY FUND (June 1, 1993), <https://www.imf.org/en/Publications/WP/Issues/2016/12/30/Optimal-Tariffs-Theory-and-Practice-1154>; Laura Bowen, *Rethinking the Optimal Tariff Theory*, CHICAGO POLICY REVIEW (Jan. 15, 2015), <https://chicagopolicyreview.org/2015/01/15/rethinking-the-optimal-tariff-theory/>; John A. Weymark, *Welfare Optimal Tariff Revenues and Maximum Tariff Revenues*, 13 CAN. J. ECON. 615, 615–631 (1980), <http://www.jstor.com/stable/134644>; D. J. Horwell, *Optimum Tariffs and Tariff Policy*, 33 REV. ECON. STUD. 147, 147–58 (1966), <https://www.jstor.org/stable/2974438>.

¹⁰⁶ Laura Bowen, *Rethinking the Optimal Tariff Theory*, CHICAGO POLICY REVIEW (Jan. 15, 2015), <https://chicagopolicyreview.org/2015/01/15/rethinking-the-optimal-tariff-theory/>.

Moreover, the political economy of trade policy complicates the implementation of theoretically "optimal" tariffs. Historical evidence, such as the Smoot-Hawley Tariff Act of 1930 discussed earlier, demonstrates how domestic lobbying efforts can distort tariff rates,¹⁰⁷ pushing them beyond welfare-maximizing levels. Firms and labor groups, driven by protectionist motives, often exert pressure on policymakers, resulting in tariffs that prioritize political interests over economic efficiency.¹⁰⁸ This stresses the need for institutional frameworks that can insulate trade policy decisions from excessive political influence. Additionally, the risk of retaliation by trading partners must be carefully considered.¹⁰⁹ While an optimal tariff may yield short-term welfare gains, it can provoke retaliatory measures, sparking trade wars that erode the initial benefits and destabilize global markets.¹¹⁰ Such retaliatory cycles were vividly illustrated during the interwar period, where escalating tariffs led to a collapse in international trade and prolonged economic stagnation.¹¹¹

In light of these challenges, the pursuit of an optimum tariff policy requires not only technical precision but also diplomatic foresight and institutional integrity. Policymakers must weigh the theoretical benefits of optimal tariffs against the practical risks of economic retaliation, trade diversion, and domestic inefficiencies. By integrating economic modeling with a pragmatic

¹⁰⁷ D. F. Fleming, *How the Smoot-Hawley Tariff Was Made*, 9 PROC. ANN. SESS. (S. Pol. Sci. Ass'n) 14, 14–19 (1936), <http://www.jstor.org/stable/43945714>.

¹⁰⁸ D. F. Fleming, *How the Smoot-Hawley Tariff Was Made*, 9 PROC. ANN. SESS. (S. Pol. Sci. Ass'n) 14, 14–19 (1936), <http://www.jstor.org/stable/43945714>.

¹⁰⁹ David A. Lake, *Protection, Retaliation, and Response, 1930–1939*, in *Power, Protection, and Free Trade: International Sources of U.S. Commercial Strategy, 1887–1939* 184, 184–215 (Cornell Univ. Press 1988), <http://www.jstor.org/stable/10.7591/j.ctt207g6jz.10>.

¹¹⁰ David A. Lake, *Protection, Retaliation, and Response, 1930–1939*, in *Power, Protection, and Free Trade: International Sources of U.S. Commercial Strategy, 1887–1939* 184, 184–215 (Cornell Univ. Press 1988), <http://www.jstor.org/stable/10.7591/j.ctt207g6jz.10>; Doron Narotzki, *Tariffs: Back to the Future* (Oct. 28, 2024), reprinted from TAX NOTES INT'L, at 565, <https://ssrn.com/abstract=5007289>; Doron Narotzki, *Scrapping Tariffs, Spurring Growth* (Sept. 16, 2024) reprinted from TAX NOTES FEDERAL at 2289, <https://ssrn.com/abstract=5007283>.

¹¹¹ David A. Lake, *Protection, Retaliation, and Response, 1930–1939*, in *Power, Protection, and Free Trade: International Sources of U.S. Commercial Strategy, 1887–1939* 184, 184–215 (Cornell Univ. Press 1988), <http://www.jstor.org/stable/10.7591/j.ctt207g6jz.10>; Kris James Mitchener, Kirsten Wandschneider & Kevin Hjortshøj O'Rourke, *The Smoot-Hawley Trade War*, Nat'l Bureau of Econ. Rsch., Working Paper No. 28616 (2021), <https://www.nber.org/papers/w28616>.

understanding of political and global trade dynamics, nations can strive to achieve a delicate balance between protectionism and liberalization, fostering both domestic welfare and international cooperation.

IV. Designing a Tariff-Based Framework

The resurgence of protectionist trade policies, exemplified by President Donald Trump's recent proposals to impose substantial tariffs on imports from Canada, Mexico, the European Union and China, has reignited debates over the efficacy and consequences of tariff-based tax systems.¹¹² These proposed tariffs, reaching up to 25% on Canadian and Mexican goods and 60% on Chinese imports, aim to bolster domestic manufacturing and address trade imbalances.¹¹³ However, they also raise concerns about potential retaliatory measures, disruptions to global supply chains, and increased costs for American consumers.¹¹⁴

Designing a tariff-based tax system requires navigating complex structural and policy challenges to ensure fiscal sustainability and economic stability, a lesson perfectly illustrated by the Smoot-

¹¹² Jasmine Cui, Jiachuan Wu & Joe Murphy, *Trump's Tariff Threat*, in *Five Charts*, NBC NEWS (Jan. 25, 2025), <https://www.nbcnews.com/data-graphics/trumps-proposed-tariffs-mean-us-trade-five-charts-rcna189122>; Erica York, *Trump Tariffs: Tracking the Economic Impact of the Trump Trade War*, TAX FOUNDATION (Jan. 23, 2025), <https://taxfoundation.org/research/all/federal/trump-tariffs-trade-war/>; *Trump Starts Countdown Toward Tariffs on America's Largest Trading Partners*, NEW YORK TIMES, <https://www.nytimes.com/2025/01/22/us/politics/trump-tariffs-trade-mexico-canada-china.html> (last accessed Feb 4, 2025); Madison Minges, *Understanding Trump Tariffs 2.0*, AMERICAN UNIVERSITY (Dec. 5, 2024), <https://www.american.edu/sis/news/20241205-understanding-trump-tariffs-2-0.cfm>.

¹¹³ Erica York, *Trump Tariffs: Tracking the Economic Impact of the Trump Trade War*, TAX FOUNDATION (Jan. 23, 2025), <https://taxfoundation.org/research/all/federal/trump-tariffs-trade-war/>; Adam Looney & Elena Patel, *Trump Could Impose Tariffs on Day One, with Few Check on that Power*, BROOKINGS (Jan. 15, 2025), <https://www.brookings.edu/articles/trump-could-impose-tariffs-on-day-one-with-few-checks-on-that-power/>; Wendy Edelberg & Maurice Obstfeld, *Tariffs on All Imports Would Create Chaos for Business*, BROOKINGS (Oct. 7, 2024), <https://www.brookings.edu/articles/tariffs-on-all-imports-would-create-chaos-for-business/>; Douglas Rediker, *The Consequences of Trump's Tariff Threat*, BROOKINGS (Dec. 11, 2024), <https://www.brookings.edu/articles/the-consequences-of-trumps-tariff-threats/>.

¹¹⁴ Robin Brooks, *China, Tariffs, and Trump 2.0*, BROOKINGS (Jan. 16, 2025), <https://www.brookings.edu/articles/china-tariffs-and-trump-2-0/>; Erica York, *Trump Tariffs: Tracking the Economic Impact of the Trump Trade War*, TAX FOUNDATION (Jan. 23, 2025), <https://taxfoundation.org/research/all/federal/trump-tariffs-trade-war/>; Mordechai E. Kreinin, *Effect of Tariff Changes on the Prices and Volume of Imports*, 51 AM. ECON. REV. 310, 310–24 (1961), <http://www.jstor.org/stable/1814161>.

Hawley Tariff Act of 1930 and its damaging economic and non-economic consequences, as discussed in Chapter I. This historical example emphasizes the risks of poorly calibrated tariffs, including retaliatory measures, disruptions to global trade, and domestic economic harm. These lessons highlight the importance of a thoughtful approach that considers not only the immediate fiscal benefits of tariffs but also their broader economic and geopolitical repercussions.

Tariffs are uniquely impactful, influencing both domestic and international dynamics. Domestically, they shape economic growth, consumer prices, and industry competitiveness.¹¹⁵ Internationally, they affect trade flows, global market stability, and diplomatic relations.¹¹⁶ This dual impact makes tariffs an inherently interconnected policy tool, requiring careful calibration to balance internal priorities with external obligations.

A successful tariff policy must generate sufficient revenue without hindering economic growth, address its regressive effects to promote equity, and rely on robust administrative systems to prevent evasion. At the same time, it must anticipate potential trade retaliation, adhere to international trade rules, and account for sectoral impacts. This chapter examines these considerations, providing a comprehensive roadmap for policymakers to design a modern, sustainable, and effective tariff-based tax framework.

To build an effective tariff-based tax system and learn from past mistakes, policymakers must address several interconnected challenges and opportunities. Generally, these considerations can be grouped into three primary areas: economic and fiscal implications, administrative and

¹¹⁵ *The Impact of US Tariffs: Which Industries are Most and Least Affected*, IBISWORLD (Oct. 31, 2024), <https://www.ibisworld.com/blog/us-tariffs/1/1127/#:~:text=unaffected%20by%20tariffs,-,The%20economic%20implications%20of%20tariffs,reduced%20access%20to%20key%20markets>.

¹¹⁶ *The Impact of US Tariffs: Which Industries are Most and Least Affected*, IBISWORLD (Oct. 31, 2024), <https://www.ibisworld.com/blog/us-tariffs/1/1127/#:~:text=unaffected%20by%20tariffs,-,The%20economic%20implications%20of%20tariffs,reduced%20access%20to%20key%20markets>.

structural requirements, and global and geopolitical dynamics. Each of these areas plays a critical role in determining the success and sustainability of a tariff system.

A. Economic and Fiscal Implications

The first priority, and complicated task, is ensuring that tariffs generate reliable revenue without creating undue economic distortions. This involves assessing the elasticity of demand for imports, understanding the regressive effects on lower-income households, and determining the optimal tariff rates that balance revenue generation with economic efficiency. Historical examples, including the Smoot-Hawley era, reveal the risks of excessive tariff rates and the importance of maintaining economic stability.¹¹⁷

i. Revenue Generation and Fiscal Sustainability

Tariffs have long served as a cornerstone of government revenue, particularly in the absence of more sophisticated tax systems. Historically, tariffs provided a reliable and straightforward source of funding for nations such as the United States during the 19th century,¹¹⁸ and they continue to play a critical role in many developing countries today.¹¹⁹ However, the effectiveness of tariffs as a revenue tool is influenced by numerous factors, including the elasticity of imports, the composition of trade, and the broader economic context.¹²⁰

¹¹⁷ Kris James Mitchener, Kirsten Wandschneider & Kevin Hjortshøj O'Rourke, *The Smoot-Hawley Trade War*, NAT'L BUREAU OF ECON. RSCH., WORKING PAPER NO. 28616 (2021), <https://www.nber.org/papers/w28616>.

¹¹⁸ Kevin H. O'Rourke, *Tariffs and Growth in the Late 19th Century*, 110 *ECON. J.* 456, 456–83 (2000), <http://www.jstor.org/stable/2566243>; Douglas A. Irwin, *Tariffs and Growth in Late Nineteenth Century America*, NAT'L BUREAU ECON. RES., WORKING PAPER NO. 7639 (2000), <https://www.nber.org/papers/w7639>; D. Andrew Austin, *Tariffs and Federal Finances: A Thumbnail History*, Cong. Rsch. Serv. Insight No. IN12482 (Jan. 10, 2025), <https://crsreports.congress.gov/product/pdf/IN/IN12482>.

¹¹⁹ IMF Staff, *Global Trade Liberalization and the Developing Countries*, INTERNATIONAL MONETARY FUND (Nov, 2001), <https://www.imf.org/external/np/exr/ib/2001/110801.htm>; Chad Bown & Douglas Irwin, *Mainly Poor Countries Use Tariffs as a Major Source of Government Revenue*, PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS (July 16, 2019), <https://www.piie.com/research/piie-charts/mainly-poor-countries-use-tariffs-major-source-government-revenue>; K.S. Sundara Rajan, *Tariff Preferences and Developing Countries*, INTERNATIONAL MONETARY FUND (Dec. 1, 1996), <https://www.elibrary.imf.org/view/journals/022/0003/004/article-A004-en.xml>.

¹²⁰ W. M. Gorman, *Tariffs, Retaliation, and the Elasticity of Demand for Imports*, 25 *REV. ECON. STUD.* 133, 133–62 (1958), <https://doi.org/10.2307/2295983>; Lloyd A. Metzler, *Tariffs, International Demand, and Domestic Prices*, 57 *J. POL. ECON.* 345, 345–51 (1949), <http://www.jstor.org/stable/1826273>; Hiau Looi Kee, Alessandro Nicita &

An over-reliance on tariffs can expose economies to volatility in cross-border trade volumes (including in exporting goods assuming the other countries will counter retaliate to the imposition protective tariffs), encourage illicit practices such as smuggling, and potentially hinder economic growth. Hence, a tariff-based tax system poses risks to fiscal sustainability, requiring policymakers to strike a (very) delicate balance when integrating tariffs into a modern economic system to ensure a stable fiscal framework, and requires careful consideration of certain economic concepts, such as elasticity of goods, that must be reevaluated in response to changing economic conditions, and apply the valuable lessons learned from past experiences with tariffs.¹²¹

The elasticity of import demand plays a pivotal role in determining the effectiveness of tariffs as a governmental revenue tool.¹²² In general, elasticity measures how sensitive the quantity of imports is to changes in price and the availability of substitutability of goods produced by other countries that do not necessarily impose tariffs, which then directly influences how much revenue a tariff can generate and its indirect economic impact on domestic businesses' cross-border export.¹²³

Marcelo Olarreaga, *Import Demand Elasticities and Trade Distortions*, 90 REV. ECON. & STAT. 666, 666–82 (2008), <http://www.jstor.org/stable/40043107>; Mordechai E. Kreinin, *Effect of Tariff Changes on the Prices and Volume of Imports*, 51 AM. ECON. REV. 310, 310–24 (1961), <http://www.jstor.org/stable/1814161>.

¹²¹ See for example, Mark Bills, *Tariff Protection and Production in the Early U.S. Cotton Textile Industry*, 44 J. ECON. HIST. 1033, 1033–45 (1984), <https://www.jstor.org/stable/2122117>.

¹²² W. M. Gorman, *Tariffs, Retaliation, and the Elasticity of Demand for Imports*, 25 REV. ECON. STUD. 133, 133–62 (1958), <https://doi.org/10.2307/2295983>; Lloyd A. Metzler, *Tariffs, International Demand, and Domestic Prices*, 57 J. POL. ECON. 345, 345–51 (1949), <http://www.jstor.org/stable/1826273>; Hiau Looi Kee, Alessandro Nicita & Marcelo Olarreaga, *Import Demand Elasticities and Trade Distortions*, 90 REV. ECON. & STAT. 666, 666–82 (2008), <http://www.jstor.org/stable/40043107>; Mordechai E. Kreinin, *Effect of Tariff Changes on the Prices and Volume of Imports*, 51 AM. ECON. REV. 310, 310–24 (1961), <http://www.jstor.org/stable/1814161>; Paul E. Godek, *Industry Structure and Redistribution Through Trade Restrictions*, 28 J.L. & ECON. 687, 687–703 (1985), <http://www.jstor.org/stable/725351>.

¹²³ W. M. Gorman, *Tariffs, Retaliation, and the Elasticity of Demand for Imports*, 25 REV. ECON. STUD. 133, 133–62 (1958), <https://doi.org/10.2307/2295983>; Lloyd A. Metzler, *Tariffs, International Demand, and Domestic Prices*, 57 J. POL. ECON. 345, 345–51 (1949), <http://www.jstor.org/stable/1826273>; Hiau Looi Kee, Alessandro Nicita & Marcelo Olarreaga, *Import Demand Elasticities and Trade Distortions*, 90 REV. ECON. & STAT. 666, 666–82 (2008), <http://www.jstor.org/stable/40043107>; Mordechai E. Kreinin, *Effect of Tariff Changes on the Prices and Volume of Imports*, 51 AM. ECON. REV. 310, 310–24 (1961), <http://www.jstor.org/stable/1814161>; Paul E. Godek, *Industry Structure and Redistribution Through Trade Restrictions*, 28 J.L. & ECON. 687, 687–703 (1985), <http://www.jstor.org/stable/725351>.

Understanding these overall economic and political dynamics is critical for policymakers aiming to design a stable and sustainable tariff regime.

Goods with inelastic demand, such as essential commodities like fuel, rare earth minerals and earth gases, food, and medicine, are less sensitive to price changes. Consumers and businesses continue to purchase these goods despite tariff-induced price increases, ensuring a consistent flow of revenue.

This characteristic ensures a consistent flow of revenue, as demonstrated in developing nations that rely heavily on fuel imports; these countries often achieve stable tariff revenues because the demand for energy is both necessary and difficult to substitute. By targeting inelastic goods such as crude oil,¹²⁴ medical supplies,¹²⁵ and critical minerals¹²⁶ with moderate tariff rates, governments can establish a reliable source of revenue while minimizing distortions in trade volumes, as the demand for these essential imports remains relatively stable regardless of price increases.¹²⁷

¹²⁴ Eliana Eitches & Vera Crain, *Using Gasoline Data to Explain Inelasticity*, U.S. BUREAU OF LABOR STATISTICS (March 2016), <https://www.bls.gov/opub/btn/volume-5/using-gasoline-data-to-explain-inelasticity.htm>; Randall P. Ellis, Bruno Martins & Wenjia Zhu, *Health Care Demand Elasticities by Type of Service*, 55 J. HEALTH ECON. 232 (2017), <https://doi.org/10.1016/j.jhealeco.2017.07.007>.

¹²⁵ Jeanne S. Ringel, Susan D. Hosek, Ben A. Vollaard & Sergej Mahnovski, *The Elasticity of Demand for Health Care: A Review of the Literature and Its Application to the Military Health System*, NAT'L DEF. RSCH. INST. (2002), available at https://www.rand.org/content/dam/rand/pubs/monograph_reports/2005/MR1355.pdf.

¹²⁶ Tom Moerenhout, Lilly Yejin Lee & James Glynn, *Critical Mineral Supply Constraints and Their Impact on Energy System Models*, CENTER ON GLOBAL ENERGY POLICY (June 12, 2023), <https://www.energypolicy.columbia.edu/publications/critical-mineral-supply-constraints-and-their-impact-on-energy-system-models/>; Marc Humphries, *Critical Minerals and U.S. Public Policy*, Cong. Rsch. Serv., R45810 (June 28, 2019), <https://crsreports.congress.gov/product/pdf/R/R45810>; Gregoire Bellois & Margery Ryan, *Why Understanding Mineral Associations is Key to Maintaining the Critical Minerals Supply Gap*, WORLD ECONOMIC FORUM (Nov. 27, 2023), <https://www.weforum.org/stories/2023/11/mineral-associations-managing-supply-gap-critical-minerals/>; *Geopolitics of the Energy Transition*, IRENA, <https://www.irena.org/Digital-Report/Geopolitics-of-the-Energy-Transition-Critical-Materials> (last accessed Jan. 30, 2025).

¹²⁷ Trade distortions occur when tariffs significantly alter market behavior, such as reducing imports, shifting supply chains, or encouraging smuggling. Targeting inelastic goods with moderate tariffs reduces the likelihood of these distortions because consumers and businesses are less likely to alter their purchasing patterns due to the essential nature of the goods. Mordechai E. Kreinin, *Effect of Tariff Changes on the Prices and Volume of Imports*, 51 AM. ECON. REV. 310, 310–24 (1961), <http://www.jstor.org/stable/1814161>; W. M. Gorman, *Tariffs, Retaliation, and the Elasticity of Demand for Imports*, 25 REV. ECON. STUD. 133, 133–62 (1958), <https://doi.org/10.2307/2295983>; Lloyd A. Metzler, *Tariffs, International Demand, and Domestic Prices*, 57 J. POL. ECON. 345, 345–51 (1949), <http://www.jstor.org/stable/1826273>; Hiau Looi Kee, Alessandro Nicita & Marcelo Olarreaga, *Import Demand Elasticities and Trade Distortions*, 90 REV. ECON. & STAT. 666, 666–82 (2008),

While tariffs can provide a reliable source of revenue, their long-term viability depends on thoughtful calibration and integration into a diversified fiscal system. Policymakers must carefully consider the elasticity of imports and domestic exports, the broader economic context, and lessons from historical successes and failures to mitigate risks such as revenue volatility and economic inefficiencies. However, tariffs do not operate in isolation, they also shape domestic economic growth, economic and geopolitical influence market dynamics, and have broader implications for industries and consumers. These interconnections emphasize the need to carefully examine how tariffs affect overall economic growth and market behavior.

ii. Economic Growth and Market Dynamics

Tariffs are a powerful double-edged sword economic tool with far-reaching consequences for domestic markets, influencing consumer behavior, industrial competitiveness, and long-term growth. By increasing the cost of imported goods, tariffs directly impact on consumer prices and purchasing power, often placing a disproportionate burden on low-income households.¹²⁸ For domestic industries, tariffs can provide short-term protection against foreign competition, enabling them to stabilize and expand.¹²⁹

However, this protection can also lead to inefficiencies and complacency, as industries shielded from competitive pressures may have less incentive to innovate or improve productivity. Historical examples, such as the Smoot-Hawley Tariff Act of 1930, and more recent policies like the U.S.-China tariff escalation, demonstrate how tariffs can simultaneously bolster domestic production

<http://www.jstor.org/stable/40043107>; Paul E. Godek, *Industry Structure and Redistribution Through Trade Restrictions*, 28 J.L. & ECON. 687, 687–703 (1985), <http://www.jstor.org/stable/725351>.

¹²⁸ Elijah Asdourian & David Wessel, *What are Tariffs, and Why are They Rising?*, BROOKINGS (July 1, 2024), <https://www.brookings.edu/articles/what-are-tariffs-and-why-are-they-rising/>.

¹²⁹ Erica York, *The Impact of Trade and Tariffs on the United States*, TAX FOUNDATION (June 27, 2018), <https://taxfoundation.org/research/all/federal/impact-of-tariffs-free-trade/>.

and create unintended economic disruptions.¹³⁰ There is a very delicate balance between protection and market distortion, and tariff policies can negatively impact the trajectory of economic growth and industrial development if they are poorly designed and implemented.

William R. Dougan's *Tariffs and the Economic Theory of Regulation*,¹³¹ applied the economic theory of regulation to analyze how tariffs were determined,¹³² and argued that the level of protection (*i.e.*, tariffs) an industry received could not be justified solely by economic reasoning; rather, it was significantly influenced by the industry's political power. Dougan found that well-organized and concentrated industries tended to wield stronger political influence, often securing higher protective tariffs through lobbying.¹³³

However, Dougan also cautioned that high tariffs did not necessarily indicate strong political influence.¹³⁴ Other factors, such as supply and demand elasticity, played a critical role in determining the level of protection an industry received.¹³⁵ Dougan further found that tariffs on consumer goods tended to be higher than those on intermediate goods (such as raw materials or components) because consumer opposition to tariffs was generally weaker, whereas industries reliant on intermediate goods were often more organized and effective in resisting cost-increasing tariffs.¹³⁶ Dougan's study also highlighted the role of labor and geography in tariff determination. Industries with large workforces, particularly those with strong unions, tended to exert greater political influence.¹³⁷

¹³⁰ Douglas A. Irwin, *The Hawley-Smoot Tariff and the Great Depression, 1928– 1932*, U. CHI. PRESS., 400-05, <https://www.nber.org/system/files/chapters/c13858/c13858.pdf>; Nurullah Gur & Serif Dilek, *US-China Economic Rivalry and the Reshoring of Global Supply Chains*, 16 CHINESE J. INT'L POL. 61, 61-83 (2023).

¹³¹ William R. Dougan, *Tariffs and the Economic Theory of Regulation*, 6 RSCH. IN L. & ECON. 187 (1984).

¹³² George J. Stigler, *The Theory of Economic Regulation*, 2 BELL J. ECON. & MGMT. SCI. 3 (1971).

¹³³ William R. Dougan, *Tariffs and the Economic Theory of Regulation*, 6 RSCH. IN L. & ECON. 187 (1984).

¹³⁴ William R. Dougan, *Tariffs and the Economic Theory of Regulation*, 6 RSCH. IN L. & ECON. 187 (1984).

¹³⁵ William R. Dougan, *Tariffs and the Economic Theory of Regulation*, 6 RSCH. IN L. & ECON. 187 (1984).

¹³⁶ William R. Dougan, *Tariffs and the Economic Theory of Regulation*, 6 RSCH. IN L. & ECON. 187 (1984).

¹³⁷ William R. Dougan, *Tariffs and the Economic Theory of Regulation*, 6 RSCH. IN L. & ECON. 187 (1984).

Conversely, very large industries may have had less influence because their customers, who faced higher prices due to tariffs, were politically active in opposing them.¹³⁸ Additionally, industries concentrated in specific geographic regions were more likely to receive tariff protection, as politicians representing those areas had strong incentives to support policies that benefited their local economies.¹³⁹ Critical for this Article is Dougan's observation that while some economic theories suggested that tariffs were used to maximize government revenue, tariffs were often set at levels exceeding the revenue-maximizing rate.¹⁴⁰ This indicated that political considerations, rather than economic efficiency and growth, primarily drove tariff policy. Overall, Dougan's findings suggested that tariffs were not merely tools for industry protection or government revenue generation; they were shaped by political bargaining.

An important case study is the late 19th century tariff policy that was adopted by the United States. Douglas A. Irwin's *Tariffs and Growth in Late Nineteenth Century America* challenges the long-held notion that high tariffs were a driving force behind U.S. economic success during the late 19th century.¹⁴¹ Instead, Irwin highlights how factors such as capital market developments and shifts in sectoral productivity, specifically the movement of labor from agriculture to higher-productivity industries, had a far more significant role in such growth.¹⁴²

Irwin further suggests that tariffs likely had a minor or even negative impact on economic growth, as they hindered capital accumulation by raising the cost of imported capital goods and encouraged inefficiencies in labor-intensive sectors.¹⁴³ Irwin's insight offers a critical lesson for modern

¹³⁸ William R. Dougan, *Tariffs and the Economic Theory of Regulation*, 6 RSCH. IN L. & ECON. 187 (1984).

¹³⁹ William R. Dougan, *Tariffs and the Economic Theory of Regulation*, 6 RSCH. IN L. & ECON. 187 (1984).

¹⁴⁰ William R. Dougan, *Tariffs and the Economic Theory of Regulation*, 6 RSCH. IN L. & ECON. 187 (1984).

¹⁴¹ Douglas A. Irwin, *Tariffs and Growth in Late Nineteenth Century America*, Nat'l Bureau Econ. Res., Working Paper No. 7639 (2000), <https://www.nber.org/papers/w7639>.

¹⁴² Douglas A. Irwin, *Tariffs and Growth in Late Nineteenth Century America*, Nat'l Bureau Econ. Res., Working Paper No. 7639 (2000), <https://www.nber.org/papers/w7639>.

¹⁴³ Douglas A. Irwin, *Tariffs and Growth in Late Nineteenth Century America*, Nat'l Bureau Econ. Res., Working Paper No. 7639 (2000), <https://www.nber.org/papers/w7639>.

policymakers: meaningful changes in market structures, such as a transition to AI-driven technology or other transformative innovations, must be carefully analyzed and leveraged.¹⁴⁴ Identifying inelastic elements within current and emerging markets is essential to ensure that policy measures, including tariffs, do not hinder growth but instead support and harness these shifts for sustainable revenue generation.

With careful analysis of cross-border trade elasticity, global supply chain dependencies, and domestic market needs, we argue that it is possible to design a tariff framework that balances the goals of fostering innovation and raising sustainable revenue. Some of the critical issues to consider include identifying key sectors for tariff application, targeting inelastic goods to stabilize revenue, adopting flexible tariff structures, and ensuring equitable and sustainable policy outcomes. Also, such a design of a comprehensive tariff framework should also take into account counter retaliatory measures taken by cross-border trading partners that could also possibly impact domestic production and that could also possibly have a geopolitical impact.¹⁴⁵

1. Identify Key Sectors and Products:

Policymakers must carefully assess the role of goods and industries that are central to current and emerging economic transformations. For example, in a transition to AI-driven technology, products such as AI chips, rare earth minerals, and high-performance computing components are

¹⁴⁴ *Artificial Intelligence and its Potential Effects on the Economy and the Federal Budget*, CONGRESSIONAL BUDGET OFFICE (Dec. 2024), <https://www.cbo.gov/publication/61147>; Kristalina Georgieva, *AI Will Transform the Global Economy. Let's Make Sure it Benefits Humanity*, IMF (Jan. 14, 2024), <https://www.imf.org/en/Blogs/Articles/2024/01/14/ai-will-transform-the-global-economy-lets-make-sure-it-benefits-humanity>; Dylan Walsh, *A New Look at the Economics of AI*, MIT (Jan. 21, 2025), <https://mitsloan.mit.edu/ideas-made-to-matter/a-new-look-economics-ai#:~:text=This%20would%20translate%20into%20a,this%20scenario%20is%20about%201.1%25.&text=Daron%20Acemoglu%20estimates%20that%20the,that%20is%20optimistic%2C%20Acemoglu%20writes>.

¹⁴⁵ For example, following President Trump's announcements of the proposed tariffs policy changes that may affect Canada, Mexico, the European Union and China, each country announced that it would develop counter measures, <https://apnews.com/article/china-us-tariffs-farm-soy-trump-7442b02ac829347f0d4fc6ad0955d368>; <https://www.canada.ca/en/department-finance/news/2025/03/list-of-products-from-the-united-states-subject-to-25-per-cent-tariffs-effective-march-4-2025.html>; <https://apnews.com/article/trade-war-mexico-trump-9cefdded035a0b35e700a7ba0bfc34b4>.

both critical and often inelastic in demand.¹⁴⁶ While their inelasticity may make them suitable targets for tariffs from a revenue-generation perspective, the strategic importance of these components necessitates a more nuanced approach. Rather than imposing tariffs that could hinder growth or competitiveness, these sectors could be subject to low tariffs, with a focus on reinvesting revenue from other sources to subsidize and support their development. Striking this balance ensures that critical industries continue to thrive while still leveraging tariff policies to achieve broader fiscal objectives.

It should be noted though, that while strategic trade policies theoretically aim to shift profits to domestic industries, their practical application often face significant challenges.¹⁴⁷ These include political pressures, rent-seeking behavior, and flawed implementation processes, which undermine their effectiveness.¹⁴⁸ Furthermore, such policies are predicated on the assumption that markets are dominated by a few key players oligopolies, yet they frequently overlook critical complexities, such as potential market entry and the risk of international retaliation.¹⁴⁹ Governments also face limitations in accurately identifying truly 'strategic' industries and implementing policies free from the influence of lobbying and vested interests.¹⁵⁰

2. Target Inelastic Goods Strategically:

Tariffs should focus on non-essential goods or luxury items with inelastic demand, such as high-end consumer goods or non-critical imports. By targeting these goods, governments can generate

¹⁴⁶ Robert James, Ashleigh Myers & Kelsey Parker, *AI Needs Critical Materials, Fast! But From Where?*, GRAVEL2GAVEL (Jan. 6, 2025), <https://www.gravel2gavel.com/ai-critical-materials/>.

¹⁴⁷ Alan M. Rugman & Alain Verbeke, *Strategic Trade Policy is Not Good Strategy*, 25 HITOTSUBASHI J. COM. & MGMT. 75, 75–97 (1990), <http://www.jstor.org/stable/43294924>.

¹⁴⁸ Alan M. Rugman & Alain Verbeke, *Strategic Trade Policy is Not Good Strategy*, 25 HITOTSUBASHI J. COM. & MGMT. 75, 75–97 (1990), <http://www.jstor.org/stable/43294924>.

¹⁴⁹ Alan M. Rugman & Alain Verbeke, *Strategic Trade Policy is Not Good Strategy*, 25 HITOTSUBASHI J. COM. & MGMT. 75, 75–97 (1990), <http://www.jstor.org/stable/43294924>.

¹⁵⁰ Alan M. Rugman & Alain Verbeke, *Strategic Trade Policy is Not Good Strategy*, 25 HITOTSUBASHI J. COM. & MGMT. 75, 75–97 (1990), <http://www.jstor.org/stable/43294924>.

revenue without disrupting industries vital to economic innovation, and at the same time incentives the domestic manufacturing of such goods.¹⁵¹

3. Dynamic Tariff Structures:

A modern tariff system should be flexible and adaptable to economic conditions, with a built-in mechanism that evaluates and allows for prompt recalibration when needed. For example:

- Low or zero tariffs on critical inputs for transformative industries to reduce production costs and encourage investment.
- Graduated tariffs that evolve as industries mature, providing initial support through low tariffs and gradually increasing them as competitiveness improves.
- Trade elasticity analysis and detailed economic modeling should be conducted to understand the elasticity of demand for specific goods and their potential revenue impact. Elastic goods should be avoided or taxed modestly to minimize trade distortions, while inelastic goods can be targeted more effectively.

We believe that one of the key strategies is to implement a nuanced tariff system rather than a one-size-fits-all approach.¹⁵² Such a system would prioritize support for critical industries essential to innovation and economic transformation while directing revenue generation toward non-essential or inelastic goods capable of bearing the burden without hindering growth or competitiveness.

¹⁵¹ General Agreement on Tariffs and Trade, *1970 Consultation under Article XVIII:12(b)*, WORLD TRADE ORGANIZATION (1970), https://www.wto.org/gatt_docs/English/SULPDF/90070570.pdf.

¹⁵² As, for example, was suggested by President trump, see Christopher Rugaber, *Trump Favors Huge New Tariffs. How do They Work?*, PBS NEWS (Sep. 27, 2024), <https://www.pbs.org/newshour/economy/trump-favors-huge-new-tariffs-how-do-they-work>; Jim Tyson, *Trump Tariffs Would Shrink Economic Output by 0.4%: Tax Foundation*, CFO DIVE (Jan. 24, 2025), <https://www.cfodive.com/news/trump-tariffs-shrink-economic-output-tax-foundation-trade-imports-china-mexico-canada-tariff/738305/>; Alan Wolff, *Trump's Proposed Blanket Tariffs Would Risk a Global Trade War*, PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS (May 29, 2024), <https://www.piie.com/blogs/realtime-economics/2024/trumps-proposed-blanket-tariffs-would-risk-global-trade-war>.

4. Revenue Recycling for Innovation:

At least part of the revenue collected from tariffs should be earmarked and strategically reinvested to foster growth in transformative sectors. For instance:

- Subsidize research and development in AI, renewable energy, and other high-growth industries.
- Fund infrastructure projects that enhance supply chain efficiency and reduce costs for critical industries.

5. Global Collaboration and Compliance:

Tariffs are generally viewed as a tool of economic protectionism, designed to shield domestic industries from foreign competition. However, as briefly discussed in the introduction to this Article, they are sometimes also used to advance broader policy objectives, such as labor standards, environmental protection standards, national security measures, and even geopolitical strategy.¹⁵³ That said, for a tariff-based tax system to be effective, we suggest that the opposite approach be considered. A country seeking to implement such a system should engage in international cooperation to ensure that its tariff policies comply with trade agreements and minimize the risk of retaliation.¹⁵⁴ Collaborative frameworks can help manage and minimize the impact of tariffs on global supply chains and ensure that they do not stifle international innovation ecosystems, and international trade standards.

¹⁵³ Reuven S. Avi-Yonah & Doron Narotzki, *The Tariffs Are Coming! The Tariffs Are Coming!*, U. MICH. PUB. L. RES. PAPER (forthcoming Jan. 3, 2025), <https://ssrn.com/abstract=5080792>; Doron Narotzki, *Tariffs: Back to the Future* (Oct. 28, 2024), reprinted from TAX NOTES INT'L, at 565, <https://ssrn.com/abstract=5007289>.

¹⁵⁴ Itai Grinberg, *A Destination-Based Cash Flow Tax Can Be Structured to Comply with World Trade Organization Rules*, 70 NAT'L TAX J. 803 (2017), <https://www.jstor.org/stable/26418799>.

6. Equity Considerations:

Recognize and mitigate the regressive effects of tariffs on low-income households. Measures such as targeted tax credits or subsidies for essential goods can offset the disproportionate burden tariffs may place on vulnerable populations.¹⁵⁵ For example, the federal standard deduction can be increased in order to alleviate some of the economic burden that certain tariffs may place on low-income households. Similarly, expanding refundable tax credits, such as the Earned Income Tax Credit (EITC), could provide direct financial relief to socio-economically vulnerable populations, ensuring that the overall tax system remains equitable even as tariffs become more significant in our lives. By combining targeted fiscal measures with thoughtful tariff policies, governments can balance revenue generation with the need to protect economically disadvantaged groups.¹⁵⁶

iii. Optimal Tariff Rates and Economic Efficiency

Determining optimal tariff rates is a complex balancing act that requires aligning fiscal objectives with broader political and economic short and long-term goals.¹⁵⁷ As detailed previously, effective tariff policies must account for immediate fiscal needs while fostering sustainable economic growth, supporting strategic industries, and ensuring resilience in the face of global economic shifts.¹⁵⁸ Tariffs that are too high can lead to cross-border trade distortions, retaliatory measures,

¹⁵⁵ Reuven S. Avi-Yonah & Doron Narotzki, *The Tariffs Are Coming! The Tariffs Are Coming!*, U. MICH. PUB. L. RES. PAPER (forthcoming Jan. 3, 2025), <https://ssrn.com/abstract=5080792>.

¹⁵⁶ Reuven S. Avi-Yonah & Doron Narotzki, *The Tariffs Are Coming! The Tariffs Are Coming!*, U. MICH. PUB. L. RES. PAPER (forthcoming Jan. 3, 2025), <https://ssrn.com/abstract=5080792>.

¹⁵⁷ Harry G. Johnson, *Optimum Welfare and Maximum Revenue Tariffs*, 19 REV. ECON. STUD. 28, 28–35 (1951–52), <https://www.jstor.org/stable/2296268>.

¹⁵⁸ Mordechai E. Kreinin, *Effect of Tariff Changes on the Prices and Volume of Imports*, 51 AM. ECON. REV. 310, 310–24 (1961), <http://www.jstor.org/stable/1814161>.

and inefficiencies in resource allocation,¹⁵⁹ while excessively low tariffs may fail to provide adequate revenue or protection for key domestic industries.¹⁶⁰

The concept of "optimal tariffs" offers a framework for identifying rates that maximize a country's welfare by improving terms of trade without triggering significant adverse effects, such as reduced competitiveness or retaliatory actions by trading partners.¹⁶¹ Drawing on previously discussed issues and foundational studies, such as those by Yoshitomo Ogawa,¹⁶² the structure of optimal tariffs depends heavily on the elasticity of demand for imported and exported goods. For instance, Ogawa demonstrates that tariffs should be inversely proportional to the price elasticity of the foreign country's export goods, emphasizing the strategic importance of understanding trade elasticities in designing tariff structures.

Optimal tariffs also vary depending on the size of the economy and its market power. Large economies, such as the U.S. economy, can influence global prices and set tariffs to shift the terms of trade in their favor. However, this advantage is not without its limits, as retaliation from trade partners or a breakdown of cooperative trade agreements can erode some of these benefits. Recent historical examples, such as the U.S.-China trade conflict, illustrate how deviations from optimal tariffs can lead to significant economic disruptions and inefficiencies.¹⁶³

¹⁵⁹ Douglas A. Irwin, Introduction, in *Clashing Over Commerce: A History of U.S. Trade Policy* 1, 1–27 (Univ. of Chi. Press 2017), <http://www.nber.org/chapters/c13850>.

¹⁶⁰ J. Black, *Arguments for Tariffs*, 11 OXFORD ECON. PAPERS 191, 191–208 (1959), <https://www.jstor.org/stable/2662123>.

¹⁶¹ Leslie Young, *Optimal Tariffs: A Generalization*, 32 INT'L ECON. REV. 341, 341–70 (1991), <https://doi.org/10.2307/2526879>; Yoshitomo Ogawa, *The Structure of Optimal Tariff Rates in a Large Country with Market Power*, 33 ECON. THEORY 271 (2007), <https://www.jstor.org/stable/27822596>.

¹⁶² Yoshitomo Ogawa, *The Structure of Optimal Tariff Rates in a Large Country with Market Power*, 33 ECON. THEORY 271 (2007), <https://www.jstor.org/stable/27822596>.

¹⁶³ Nurullah Gur & Serif Dilek, *US-China Economic Rivalry and the Reshoring of Global Supply Chains*, 16 CHINESE J. INT'L POL. 61, 61-83 (2023).

Furthermore, policymakers must consider dynamic factors such as the substitutability of goods and the cross-elasticities within global trade systems. As Eaton and Grossman note,¹⁶⁴ tariffs can also serve as insurance in incomplete domestic markets, stabilizing the economy during periods of volatility. Yet, these benefits must be weighed against the risk of anti-trade bias, which can discourage global trade and reduce overall welfare.¹⁶⁵

The concept of Nash Equilibrium is particularly relevant in the design of comprehensive tariff policy, as it provides a framework to understand how countries interact strategically in the cross-border trade settings.¹⁶⁶ In a non-cooperative trade environment, each country seeks to maximize its own welfare by setting tariffs that consider not only its domestic priorities but also the likely responses of its trading partners.¹⁶⁷ A Nash Equilibrium occurs when no country can unilaterally improve its welfare by altering its tariff rates, given the strategies adopted by others. This theoretical construct highlights the inherent tension in unilateral tariff-setting, where short-term gains from protectionist policies may be offset by retaliatory actions, reducing overall welfare.

In practice, policymakers can implement the Nash Equilibrium models to anticipate and evaluate the outcomes of various tariff strategies.¹⁶⁸ For example, if a country imposes high tariffs on imported goods to protect domestic industries, the equilibrium framework can help predict whether its trading partners will respond with countermeasures, such as reciprocal tariffs or non-tariff

¹⁶⁴ Eaton, Jonathan and Grossman, Gene M., Tariffs as Insurance: Optimal Commercial Policy When Domestic Markets are Incomplete (November 1981). NBER Working Paper No. w0797, Available at SSRN: <https://ssrn.com/abstract=967948>.

¹⁶⁵ Eaton, Jonathan and Grossman, Gene M., Tariffs as Insurance: Optimal Commercial Policy When Domestic Markets are Incomplete (November 1981). NBER Working Paper No. w0797, Available at SSRN: <https://ssrn.com/abstract=967948>.

¹⁶⁶ John Nash, *Non-Cooperative Games*, 54 ANNALS MATH. 286, 286–95 (1951), <https://doi.org/10.2307/1969529>. Nash has wrote two other seminal papers that are relevant in our context, see John Nash, *John Nash, Two-Person Cooperative Games*, 21 ECONOMETRICA 128, 128–40 (1953), <https://doi.org/10.2307/1906951> and John F. Nash, *The Bargaining Problem*, 18 ECONOMETRICA 155, 155–62 (1950), <https://doi.org/10.2307/1907266>.

¹⁶⁷ Ralph Ossa, *Trade Wars and Trade Talks with Data*, 104 AM. ECON. REV. 4104, 4104–46 (2014), <http://www.jstor.org/stable/43495366>; John F. Nash, *Non-Cooperative Games*, 54 ANNALS MATH. 286, 286–95 (1951), <https://doi.org/10.2307/1969529>.

¹⁶⁸ John F. Nash, *Non-Cooperative Games*, 54 ANNALS MATH. 286, 286–95 (1951), <https://doi.org/10.2307/1969529>.

barriers.¹⁶⁹ Understanding these dynamics allows for the design of tariff policies that balance domestic goals with the need to maintain stable trade relationships.

While the Nash framework emphasizes strategic competition, it also stresses the potential value of cooperative solutions.¹⁷⁰ By negotiating mutual tariff rates or trade agreements, countries can achieve outcomes that are collectively better than those arising from purely non-cooperative strategies. Cooperative trade agreements effectively move the equilibrium to a higher point of mutual benefit, mitigating the risks of trade wars and fostering economic stability.¹⁷¹

To illustrate, historical trade negotiations such as the GATT and the more recent trade frameworks under the WTO have sought to align tariff policies among nations. These agreements demonstrate how the principles of Nash Equilibrium can be extended to multilateral settings, where cooperation becomes the dominant strategy, yielding benefits for all parties involved. If countries realize that transitioning to a more focused tariff-based tax system versus income-based tax system is a necessity for them, then adopting cooperative trade agreements becomes even more critical to mitigate risks of trade conflicts and ensure stable international relations.

By leveraging frameworks such as the WTO, countries can negotiate mutually beneficial tariff rates, establish dispute resolution mechanisms, and align their trade policies to balance domestic revenue needs with global economic stability.¹⁷² This cooperative approach not only enhances the

¹⁶⁹ John F. Nash, *Non-Cooperative Games*, 54 ANNALS MATH. 286, 286–95 (1951), <https://doi.org/10.2307/1969529>; John F. Nash, *Two-Person Cooperative Games*, 21 ECONOMETRICA 128 (1953), <https://doi.org/10.2307/1906951>; Kyle Handley & Nuno Limão, *Trade and Investment under Policy Uncertainty: Theory and Firm Evidence*, 7 AM. ECON. J.: ECON. POL'Y 189, 189–222 (2015), <http://www.jstor.org/stable/24739161>; Kyle Handley & Nuno Limão, *Policy Uncertainty, Trade, and Welfare: Theory and Evidence for China and the United States*, 107 AM. ECON. REV. 2731, 2731–83 (2017), <https://www.jstor.org/stable/26527926>.

¹⁷⁰ John F. Nash, *Two-Person Cooperative Games*, 21 ECONOMETRICA 128 (1953), <https://doi.org/10.2307/1906951>.

¹⁷¹ John F. Nash, *Two-Person Cooperative Games*, 21 ECONOMETRICA 128 (1953), <https://doi.org/10.2307/1906951>; Ralph Ossa, *Trade Wars and Trade Talks with Data*, 104 AM. ECON. REV. 4104, 4104–46 (2014), <http://www.jstor.org/stable/43495366>.

¹⁷² *Principles of the Trading System*, WORLD TRADE ORGANIZATION, https://www.wto.org/english/thewto_e/whatis_e/tif_e/fact2_e.htm (last accessed Feb. 9, 2025); Brigid Callahan, Karen Prodomo & Robert Rogowsky, *Strategic Negotiation for WTO Accession*, INTERNATIONAL TRADE AND

predictability of trade systems but also fosters long-term partnerships that support innovation, economic growth, and equitable development.

Moreover, the Nash Equilibrium also provides insight into the limits of unilateral action.¹⁷³ For instance, large economies with significant market power, such as the United States or the European Union, may attempt to manipulate terms of trade through tariffs. However, even these nations must consider the retaliatory capacity of their trading partners and the long-term costs of eroding international trust.¹⁷⁴ Thus, while Nash Equilibrium helps explain the strategic motives behind tariff-setting, it also highlights the need for policies that prioritize predictability and collaboration over purely competitive dynamics and using tariffs as a diplomatic punishment.¹⁷⁵

By leveraging the insights of Nash Equilibrium, policymakers can develop tariff strategies that navigate the delicate balance between fostering domestic economic growth, maintaining international trade relationships, and optimizing national welfare.

The evolving complexities of global trade and taxation demand innovative solutions that go beyond traditional frameworks. As tariffs reemerge as a critical policy tool, it is important to consider complementary tax mechanisms that address the broader challenges of globalization. One such approach is the Destination-Based Cash Flow Tax (DBCFT),¹⁷⁶ a concept that gained prominence in recent years as a potential replacement for the corporate income tax. Although

ECONOMIC DIPLOMACY (April 2020), https://www.middlebury.edu/institute/sites/default/files/2021-04/MIIS_ITED-working-paper-series_WTO-accession_April2020.pdf.

¹⁷³ John F. Nash, *Non-Cooperative Games*, 54 ANNALS MATH. 286, 286–95 (1951), <https://doi.org/10.2307/1969529>.

¹⁷⁴ Paul R. Krugman, *Strategic Trade Policy and the New International Economics* (MIT Press 1986); Ralph Ossa, *Trade Wars and Trade Talks with Data*, 104 AM. ECON. REV. 4104, 4104–46 (2014), <http://www.jstor.org/stable/43495366>.

¹⁷⁵ See for example, Cameron Henderson, *Columbia Backs Down in Migrant Row with Trump After President Threatens Tariffs*, THE TELEGRAPH (Jan. 27, 2025), <https://www.telegraph.co.uk/world-news/2025/01/26/trump-sweeping-tariffs-colombia-deportation/>; Ayesha Rascoe & D. Parvaz, *Trump is Threatening Tariffs Against Canada and Mexico. Here's What That Would Mean*, NPR (Jan. 26, 2025), <https://www.npr.org/2025/01/26/nx-s1-5273666/trump-is-threatening-tariffs-against-canada-and-mexico-heres-what-that-would-mean>.

¹⁷⁶ Kyle Pomerleau & Stephen Entin, *The House GOP's Destination-Based Cash Flow Tax, Explained*, TAX FOUNDATION (June 30, 2018), <https://taxfoundation.org/blog/destination-based-cash-flow-tax-explained/>.

ultimately abandoned in the U.S., the DBCFT offers valuable insights into how taxation policies can adapt to modern economic realities, particularly in addressing cross-border transactions, profit shifting, and revenue stability.

iv. Destination Based Cash Flow Tax

The DBCFT represents a forward-thinking approach to taxation, designed to address the growing limitations of traditional income and corporate income tax systems in a globalized economy.¹⁷⁷

Unlike source-based taxation, which taxes profits where they are earned, the DBCFT shifts the focus to where goods and services are consumed.¹⁷⁸ By aligning taxation with less mobile economic activities, the DBCFT seeks to minimize tax avoidance strategies such as profit shifting and base erosion, while fostering a more stable and predictable revenue base.¹⁷⁹

At its core, the DBCFT replaces the traditional corporate income tax approach with a framework that allows immediate expensing of capital investments, thereby encouraging domestic investment

¹⁷⁷ Alan J. Auerbach, *Demystifying the Destination-Based Cash-Flow Tax*, Brookings Papers on Econ. Activity, Fall 2017, at 409–32, <http://www.jstor.org/stable/90019463>; Wei Cui, *Destination-Based Cash-Flow Taxation: A Critical Appraisal*, 67 U. TORONTO L.J. 301 (2017), <https://www.jstor.org/stable/90011742>; <https://www.piie.com/sites/default/files/documents/robinson-thierfelder201704.pdf>.

¹⁷⁸ Alan J. Auerbach, Michael P. Devereux, Michael Keen & John Vella, *International Tax Planning Under the Destination-Based Cash Flow Tax*, 70 NAT'L TAX J. 783 (2017), <https://www.jstor.org/stable/26418798>; Devereux, Michael P. and de la Feria, Rita, *Designing and Implementing a Destination-Based Corporate Tax* (March 2014). Oxford University Centre for Business Taxation WP 14/07, May 2014, Available at SSRN: <https://ssrn.com/abstract=3481360> or <http://dx.doi.org/10.2139/ssrn.3481360>; Daniel Shaviro, *The Rise and Fall of the Destination-Based Cash Flow Tax: What Was That All About?*, 110 Proc. Ann. Conf. on Tax'n & Minutes Ann. Meeting Nat'l Tax Ass'n 1 (2017), <https://www.jstor.org/stable/26794420>; Wei Cui, *Destination-Based Cash-Flow Taxation: A Critical Appraisal*, 67 U. TORONTO L.J. 301 (2017), <https://www.jstor.org/stable/90011742>; Lily L. Batchelder, *The Shaky Case for a Business Cash-Flow Tax Over a Business Income Tax*, 70 NAT'L TAX J. 901 (2017), <https://www.jstor.org/stable/26418804>; Sherman Robinson & Karen Thierfelder, *Taxes, Incentives, and the Exchange Rate in the Destination-Based Cash-Flow Tax System with a Border Adjustment Tax*, PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS (April 2017), <https://www.piie.com/sites/default/files/documents/robinson-thierfelder201704.pdf>.

¹⁷⁹ Daniel Shaviro, *The Rise and Fall of the Destination-Based Cash Flow Tax: What Was That All About?*, 110 Proc. Ann. Conf. on Tax'n & Minutes Ann. Meeting Nat'l Tax Ass'n 1 (2017), <https://www.jstor.org/stable/26794420>; Alan J. Auerbach, *Demystifying the Destination-Based Cash-Flow Tax*, Brookings Papers on Econ. Activity, Fall 2017, at 409–32, <http://www.jstor.org/stable/90019463>; Wei Cui, *Destination-Based Cash-Flow Taxation: A Critical Appraisal*, 67 U. TORONTO L.J. 301 (2017), <https://www.jstor.org/stable/90011742>; Sherman Robinson & Karen Thierfelder, *Taxes, Incentives, and the Exchange Rate in the Destination-Based Cash-Flow Tax System with a Border Adjustment Tax*, PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS (April 2017), <https://www.piie.com/sites/default/files/documents/robinson-thierfelder201704.pdf>; Marie Sapirie, *Year in Review: News Analysis: The Rise and Fall of the Destination-Based*

and economic growth.¹⁸⁰ Simultaneously, it eliminates deductions for interest expenses, reflecting a shift away from debt-financed business models.¹⁸¹

One of the original elements of the DBCFT approach was its border adjustment mechanisms, which exempt exports from taxation while taxing imports.¹⁸² This design effectively shifts the tax burden to domestic consumption, promoting domestic production and discouraging the manipulation of global supply chains for tax advantages.¹⁸³ However, it also raised issues with regards to international trade law and the WTO rules.¹⁸⁴

The U.S. proposal for a DBCFT, featured in the House Republican tax reform blueprint during President Trump's first term, highlighted both the promise and the complexities of implementing such a tax system.¹⁸⁵ Proponents argued that it could simplify the tax code, enhance U.S. competitiveness by reducing incentives for profit shifting, and create a sustainable governmental revenue stream.¹⁸⁶ However, significant challenges emerged. Critics pointed to potential violations

Cash Flow Tax, TAX NOTES (Dec. 18, 2017), <https://www.taxnotes.com/featured-analysis/year-review-news-analysis-rise-and-fall-destination-based-cash-flow-tax/2017/12/15/1x9jd>.

¹⁸⁰ Alan J. Auerbach, *Demystifying the Destination-Based Cash-Flow Tax*, Brookings Papers on Econ. Activity, Fall 2017, at 409–32, <http://www.jstor.org/stable/90019463>; Wei Cui, *Destination-Based Cash-Flow Taxation: A Critical Appraisal*, 67 U. TORONTO L.J. 301 (2017), <https://www.jstor.org/stable/90011742>; Lily L. Batchelder, *The Shaky Case for a Business Cash-Flow Tax Over a Business Income Tax*, 70 NAT'L TAX J. 901 (2017), <https://www.jstor.org/stable/26418804>.

¹⁸¹ Alan J. Auerbach, *Demystifying the Destination-Based Cash-Flow Tax*, Brookings Papers on Econ. Activity, Fall 2017, at 409–32, <http://www.jstor.org/stable/90019463>; Wei Cui, *Destination-Based Cash-Flow Taxation: A Critical Appraisal*, 67 U. TORONTO L.J. 301 (2017), <https://www.jstor.org/stable/90011742>; Lily L. Batchelder, *The Shaky Case for a Business Cash-Flow Tax Over a Business Income Tax*, 70 NAT'L TAX J. 901 (2017), <https://www.jstor.org/stable/26418804>.

¹⁸² Alan J. Auerbach, Michael P. Devereux, Michael Keen & John Vella, *International Tax Planning Under the Destination-Based Cash Flow Tax*, 70 NAT'L TAX J. 783 (2017), <https://www.jstor.org/stable/26418798>.

¹⁸³ Alan J. Auerbach, *Demystifying the Destination-Based Cash-Flow Tax*, Brookings Papers on Econ. Activity, Fall 2017, at 409–32, <http://www.jstor.org/stable/90019463>; Wei Cui, *Destination-Based Cash-Flow Taxation: A Critical Appraisal*, 67 U. TORONTO L.J. 301 (2017), <https://www.jstor.org/stable/90011742>; Lily L. Batchelder, *The Shaky Case for a Business Cash-Flow Tax Over a Business Income Tax*, 70 NAT'L TAX J. 901 (2017), <https://www.jstor.org/stable/26418804>.

¹⁸⁴ Alan J. Auerbach, Michael P. Devereux, Michael Keen & John Vella, *International Tax Planning Under the Destination-Based Cash Flow Tax*, 70 NAT'L TAX J. 783 (2017), <https://www.jstor.org/stable/26418798>.

¹⁸⁵ Alan J. Auerbach, *Demystifying the Destination-Based Cash-Flow Tax*, Brookings Papers on Econ. Activity, Fall 2017, at 409–32, <http://www.jstor.org/stable/90019463>.

¹⁸⁶ William B. Barker, *A Common Sense Corporate Tax: The Case for a Destination-Based, Cash Flow Tax on Corporations*, 61 CATH. U. L. REV. 955 (2012), <https://scholarship.law.edu/lawreview/vol61/iss4/2>; Kyle Pomerleau,

of WTO rules, as the border adjustment mechanisms were perceived as a prohibited export subsidy and discriminatory against imports.¹⁸⁷ Concerns also arose over the regressive nature of the tax, as consumers, especially low-income households, would face the burden of increased prices on imported goods.¹⁸⁸

Additionally, the economic mechanics of the DBCFT, such as anticipated exchange rate adjustments that would theoretically neutralize the tax's impact on trade balances, were viewed as uncertain and difficult to manage during transitional periods.¹⁸⁹ These obstacles ultimately led to the proposal's abandonment, despite its theoretical appeal.¹⁹⁰

Despite its challenges, the principles underlying the DBCFT offer valuable insights that could complement a tariff-based tax system by addressing several structural weaknesses. First, like tariffs, the DBCFT bases taxation on consumption, offering a more predictable and stable revenue stream tied to domestic economic activity. Second, a well-structured border adjustment mechanism could align with international trade norms, mitigating trade distortions and ensuring compliance with global trade agreements if designed with WTO principles in mind.¹⁹¹ Finally, the DBCFT

What is the Distributional Impact of a Destination-Based Cash-Flow Tax?, TAX FOUNDATION (Jan. 18, 2017), <https://taxfoundation.org/blog/what-distributional-impact-destination-based-cash-flow-tax/>.

¹⁸⁷ Alan J. Auerbach, *Demystifying the Destination-Based Cash-Flow Tax*, Brookings Papers on Econ. Activity, Fall 2017, at 409–32, <http://www.jstor.org/stable/90019463>; Marie Sapirie, *Year in Review: News Analysis: The Rise and Fall of the Destination-Based Cash Flow Tax*, TAX NOTES (Dec. 18, 2017), <https://www.taxnotes.com/featured-analysis/year-review-news-analysis-rise-and-fall-destination-based-cash-flow-tax/2017/12/15/1x9jd>.

¹⁸⁸ John K. McNulty, *Flat Tax, Consumption Tax, Consumption-Type Income Tax Proposals in the United States: A Tax Policy Discussion of Fundamental Tax Reform*, 88 CALIF. L. REV. 2095 (2000), <https://doi.org/10.2307/3481214>; Lily L. Batchelder, *The Shaky Case for a Business Cash-Flow Tax Over a Business Income Tax*, 70 NAT'L TAX J. 901 (2017), <https://www.jstor.org/stable/26418804>.

¹⁸⁹ Sherman Robinson & Karen Thierfelder, *Taxes, Incentives, and the Exchange Rate: The Destination-Based Cash Flow Tax*, Peterson Inst. for Int'l Econ. (Apr. 1, 2017), <https://www.piie.com/commentary/speeches-papers/taxes-incentives-and-exchange-rate-destination-based-cash-flow-tax>; Alan J. Auerbach, *Demystifying the Destination-Based Cash-Flow Tax*, Brookings Papers on Econ. Activity, Fall 2017, at 409–32, <http://www.jstor.org/stable/90019463>.

¹⁹⁰ Marie Sapirie, *Year in Review: New Analysis: The Rise and Fall of the Destination-Based Cash Flow Tax*, TAX NOTES (Dec. 18, 2017), <https://www.taxnotes.com/featured-analysis/year-review-news-analysis-rise-and-fall-destination-based-cash-flow-tax/2017/12/15/1x9jd>.

¹⁹¹ Itai Grinberg, *A Destination-Based Cash Flow Tax Can Be Structured to Comply with World Trade Organization Rules*, 70 NAT'L TAX J. 803 (2017), <https://www.jstor.org/stable/26418799>.

promotes domestic production by taxing imports while excluding exports,¹⁹² an approach that could be paired with compensatory measures such as tax credits and deductions to offset its regressive effects and protect low-income households.¹⁹³

However, implementing a DBCFT-like system alongside tariffs would require overcoming significant hurdles. International trade law and the international trade treaty network remain a critical concern, particularly the need to ensure WTO compliance while avoiding retaliatory actions from trading partners. Administrative complexity is another challenge, as policymakers would need to introduce robust mechanisms to calculate and enforce border adjustments accurately. Additionally, the economic transition costs of adopting such a system, especially in import-reliant sectors, could disrupt businesses and burden consumers in the short term.

v. Interim Summary

As explored throughout this subchapter, designing a tariff-based tax system involves navigating a complex interplay of economic, fiscal, international law and geopolitical factors. Tariffs, once a cornerstone of national revenue systems, have historically demonstrated both their utility and their limitations. It is critical to study these past experiences. Tariffs' ability to generate revenue depends heavily on thoughtful calibration, particularly regarding trade elasticity and sectoral priorities. Policymakers must address the inherent regressive nature of tariffs while ensuring economic stability and fairness.

The economic implications of tariffs extend far beyond revenue generation.¹⁹⁴ While tariffs can protect domestic industries and, in theory, encourage strategic growth, it is often more likely that

¹⁹² Alan J. Auerbach, *Demystifying the Destination-Based Cash-Flow Tax*, Brookings Papers on Econ. Activity, Fall 2017, at 409–32, <http://www.jstor.org/stable/90019463>.

¹⁹³ For example, increasing the standard deduction available to individual taxpayers, Reuven S. Avi-Yonah & Doron Narotzki, *The Tariffs Are Coming! The Tariffs Are Coming!*, U. MICH. PUB. L. RES. PAPER (forthcoming Jan. 3, 2025), <https://ssrn.com/abstract=5080792>.

¹⁹⁴ Which is why for example President Trump wishes to use tariffs as a way for punishing countries, see for example Cameron Henderson, *Colombia Backs Down in Migrant Row with Trump after President Threatens Tariffs*,

excessive or poorly designed tariffs risk stifling competition, encouraging inefficiencies, and provoking retaliatory measures. The need for dynamic and flexible tariff structures, delicately tailored to shifting global and domestic conditions, has been emphasized as critical to their success. Yet, frameworks such as the Nash Equilibrium and insights from historical trade agreements highlight the importance of multilateral cooperation. Unilateral actions, while potentially advantageous in the short term, often lead to global trade disruptions and eroded trust between nations. Cooperative trade policies not only mitigate these risks but also foster economic stability and shared prosperity.

Ultimately, the transition to a tariff-based tax system requires more than just fiscal and economic analysis, it demands an adaptive and forward-thinking approach that incorporates technological advancements, international collaboration, and measures to promote equity. As the following sections will demonstrate, addressing administrative challenges and geopolitical considerations will be key to making such a system viable in the modern era.

B. Administrative and Structural Requirements

Effective administration is key to the implementation of a tariff-based tax system and ensures that tariffs fulfill their dual role as a revenue-generating mechanism and a policy tool, without creating excessive burdens on trade or the broader economy. Policymakers must address the logistical, technological, and institutional challenges inherent in administering a modern tariff system while adapting to evolving global trade dynamics.

To achieve this, several key components must be considered:

YAHOO NEWS (Jan. 26, 2025), <https://www.yahoo.com/news/angry-trump-announces-sweeping-tariffs-195728746.html>.

1. Customs Infrastructure and Technology:

Efficient customs systems are vital for enforcing tariff policies and preventing evasion. Advanced technologies, such as digital customs platforms, blockchain and AI-powered risk assessments, can streamline the processing of imports and exports, reducing delays and minimizing opportunities for smuggling.¹⁹⁵ Furthermore, investments in automated systems and data sharing between agencies enhance transparency and efficiency, ensuring compliance while minimizing administrative costs.

2. Equipping Customs Authorities:

Adequate training and staffing of customs authorities are essential to enforce tariffs effectively. Governments must invest in workforce development to equip personnel with the skills to manage modern trade complexities and apply evolving tariff rules. Collaboration with international organizations, such as the World Customs Organization (WCO),¹⁹⁶ can provide technical assistance and standardize best practices across borders.

3. Policy Clarity and Legal Frameworks:

A clear and consistent legal framework is vital for the successful administration of tariffs. Ambiguities in tariff classifications, exemptions, or enforcement guidelines can lead to inefficiencies and legal disputes.¹⁹⁷ Regular updates to tariff schedules, aligned with international trade agreements and domestic policy objectives, ensure relevance and compliance.

¹⁹⁵ *The Role of Advanced Technologies in Cross-Border Trade: A Customs Perspective*, WORLD TRADE ORGANIZATION, https://www.wto.org/english/res_e/booksp_e/wcotech22_e.pdf (last accessed Jan. 31, 2025).

¹⁹⁶ WORLD CUSTOMS ORGANIZATION, <https://www.wcoomd.org/> (last accessed Jan. 30, 2025).

¹⁹⁷ See generally Scott Lincicome, *Ambiguities in U.S. Trade Laws Imperil our Economy and Constitutional Order*, CATO INSTITUTE (Nov. 29, 2016), <https://www.cato.org/blog/ambiguities-us-trade-laws-imperil-our-economy-constitutional-order>.

4. Integration with Trade Partners:

Tariff administration should not occur in isolation. Coordinating systems with major trading partners facilitate smoother trade flows and reduces friction at borders.¹⁹⁸ Also, negotiating bilateral or multilateral agreements on customs processes and data sharing enhances efficiency and mutual compliance. As stated earlier, international agreements can achieve higher tariffs rate when both parties acknowledge the need to shift more towards a tariff-based tax system.

5. Cost-Benefit Analysis and Periodic Reviews:

Regular assessment of administrative costs versus revenue generated is crucial for optimizing the tariff system.¹⁹⁹ Policymakers must ensure that administrative expenses do not erode the fiscal benefits of tariffs. Hence, periodic reviews allow for adjustments to tariffs and administrative procedures in response to changing trade patterns or technological advancements.

6. Anti-Corruption Safeguards:

Corruption in tariff enforcement undermines revenue generation and distorts trade policy objectives.²⁰⁰ Governments must implement strict oversight mechanisms, leveraging technology and independent audits to prevent misuse of tariff systems.

By addressing these administrative and structural requirements, policymakers can lay the foundation for a sustainable and efficient tariff-based tax system. One example of a comprehensive administrative customs system which policymakers should consider exploring is Singapore's

¹⁹⁸ See *Trade Integration and Implications of Global Fragmentation for Latin America and the Caribbean*, INTERNATIONAL MONETARY FUND (Oct. 2023), <https://www.imf.org/en/Publications/REO/WH/Issues/2023/10/13/regional-economic-outlook-western-hemisphere-october-2023>.

¹⁹⁹ Christian Schlereth, Tanja Stepanchuk & Bernd Skiera, *Optimization and Analysis of the Profitability of Tariff Structures with Two-Part Tariffs*, 206 EUROPEAN JOURNAL OF OPERATIONAL RESEARCH 691 (2010).

²⁰⁰ For example, see Derek Kellenberg & Arik Levinson, *Misreporting Trade: Tariff Evasion, Corruption, and Auditing Standards*, 27 REV. INT'L ECON. 106 (2019).

Customs System.²⁰¹ Singapore's TradeNet system²⁰² processes 90% of customs declarations electronically within minutes, significantly reducing bottlenecks.²⁰³ Emerging technologies, such as blockchain, offer additional opportunities for transparency and fraud prevention.²⁰⁴ For example, blockchain-based systems piloted in the UAE allow real-time tracking of goods and payments, ensuring accurate tariff collection.²⁰⁵

The following subchapter explores the geopolitical elements and considerations of tariff policies and examines their implications for international relations and trade cooperation.

C. Global and Geopolitical Dynamics

Although there is a broad consensus among researchers in economics, political science, and other fields that tariff-based tax policy harms globalization and global welfare, an examining of its impact from a U.S. perspective reveals significant doubts about its benefits. Even setting aside global disruptions, this policy would likely harm the United States, reduce American economic

²⁰¹ Singapore Customs, *Data Analysis in Risk Management: Singapore Customs' Perspective*, WCO NEWS (Feb. 20, 2017), <https://mag.wcoomd.org/magazine/wco-news-82/data-analysis-in-risk-management-singapore-customs-perspective/>; Singapore Customs, *Data Analysis for Effective Border Management*, INSYNC (2017), <https://www.customs.gov.sg/news-and-media/publications/2017-01-01-Issue44.pdf>.

²⁰² Singapore Customs, TRADENET, <https://www.customs.gov.sg/businesses/national-single-window/tradenet/> (last accessed Jan. 28, 2025).

²⁰³ *Singapore's Approach to Streamlining Trade Documentation*, WCO NEWS (Oct. 2014), https://www.wcoomd.org/~media/wco/public/global/pdf/topics/wto-atf/dev/singapores_approach_to_streamlining_trade_documentation_wco_news_october_2014.pdf?la=en; *Singapore TradeNet*, CRIMSONLOGIC, <https://www.crimsonlogic.com/case-study-singapore-tradenet/> (last accessed Jan. 28, 2025).

²⁰⁴ Arvin Ghai, *How Blockchain is Shaping the Future: Transparency, Security, and ESG*, ADVANCE ESG, <https://www.advanceseg.org/how-blockchain-is-shaping-the-future-transparency-security-and-esg/> (last accessed Jan. 31, 2025).

²⁰⁵ Ahmed Mahboob Musabih, Director General & Dubai Customs, *Dubai Customs Introduces Blockchain-based Platform to Facilitate Cross-border E-Commerce*, WCO NEWS (Feb. 27, 2020), <https://mag.wcoomd.org/magazine/wco-news-91-february-2020/dubai-customs-introduces-blockchain-based-platform-to-facilitate-cross-border-e-commerce/>; *Dubai Customs Launches Cross Border E-Commerce Platform*, GOVERNMENT OF DUBAI (Jan. 30, 2020), <https://www.dubaicustoms.gov.ae/en/mobile/pages/newsdetails.aspx?itemid=1440&NewsID=1440>; Walid Zaki, *Dubai Customs Blockchain Platform Taking E-Commerce to Another Level*, UNLOCK MEDIA (June 2, 2022), <https://www.unlock-bc.com/88017/dubai-customs-blockchain-platform-taking-e-commerce-to-another-level/>.

welfare through price increases, weaken American exports, and negatively affect foreign policy and international standing.

At first glance, some may argue that a tariff-based system would primarily disadvantage other nations while benefiting the United States through increased revenue and domestic industry protection. However, such a perspective overlooks the broader economic reality. Tariffs do not operate in isolation;²⁰⁶ instead, they often trigger retaliatory measures that can escalate into a prolonged trade war, amplifying economic harm rather than mitigating it.²⁰⁷ The results of trade war simulations and historical evidence demonstrate that such conflicts rarely produce clear winners. The economic consequences, including reduced GDP growth, rising inflation, and declining consumer purchasing power, would likely outweigh any potential revenue gains. Moreover, as key trading partners respond with countermeasures, American exports would suffer, further eroding economic stability. Rather than a sudden shift to a tariff-based model, policymakers

²⁰⁶ Matthew E. Kahn, Wen-Chi Liao, & Siqi Zheng, *How the US-China Trade War Accelerated Urban Economic Growth and Environmental Progress in Northern Vietnam* (Nov. 18, 2024). MIT Center for Real Estate Research Paper No. 24/15, Available at SSRN: <https://ssrn.com/abstract=5029672> or <http://dx.doi.org/10.2139/ssrn.5029672>.

²⁰⁷ Angwaomaodoko, Ejuchegahi Anthony, *Trade Wars and Tariff Policies: Long-Term effects on Global Trade and Economic Relationship* (August 25, 2024). Available at SSRN: <https://ssrn.com/abstract=5069005> or <http://dx.doi.org/10.2139/ssrn.5069005>; Elmurodov, Akmal, *U.S.-China Trade War through the Lenses of Theories of International Relations* (December 20, 2021). Available at SSRN: <https://ssrn.com/abstract=3995412> or <http://dx.doi.org/10.2139/ssrn.3995412>; Pujolas, Pau and Rossbach, Jack, *Trade Wars with Trade Deficits* (November 03, 2024). Available at SSRN: <https://ssrn.com/abstract=5008591> or <http://dx.doi.org/10.2139/ssrn.5008591>; Ma, Hong and Macedoni, Luca and Ning, Jingxin and Xu, Mingzhi, *Tariffs Tax the Poor More: Evidence from Household Consumption During the US-China Trade War* (May 29, 2024). Available at SSRN: <https://ssrn.com/abstract=4846802> or <http://dx.doi.org/10.2139/ssrn.4846802>; Indeevari, Rushini, *China-US Trade War: A 21st Century Thucydides Trap* (May 30, 2022). Available at SSRN: <https://ssrn.com/abstract=4148070> or <http://dx.doi.org/10.2139/ssrn.4148070>; Jiao, Yang and Liu, Zhikuo and Tian, Zhiwei and Wang, Xiaxin, *The Impacts of the U.S. Trade War on Chinese Exporters* (December 9, 2020). Available at SSRN: <https://ssrn.com/abstract=3745459> or <http://dx.doi.org/10.2139/ssrn.3745459>; DeDad, Michael and Ghosh, Sucharita, *U.S.-China Trade War: Heterogeneous Effects on the U.S. Consumer* (August 08, 2024). Kilts Center at Chicago Booth Marketing Data Center Paper (forthcoming), Available at SSRN: <https://ssrn.com/abstract=4998240> or <http://dx.doi.org/10.2139/ssrn.4998240>; Ambaw, Dessie and Cavoli, Tony and Draper, Peter, *The Indirect Impacts of the Us-China Trade War: Evidence from the Commonwealth Countries' Trade*. Available at SSRN: <https://ssrn.com/abstract=4688322> or <http://dx.doi.org/10.2139/ssrn.4688322>.

must acknowledge these risks and implement structural safeguards to mitigate economic disruptions.

Given these challenges, we believe that any transition from an income-based tax system to a tariff-based model should be gradual in order to ensure economic stability. A 10-15 year phase-out period could provide industries and consumers with time to adapt, supported by targeted subsidies or tax credits to alleviate short-term disruptions.²⁰⁸

Moreover, policy frameworks would need to address the specific challenges of export-driven sectors, which could face retaliatory tariffs from trading partners. Additionally, integrating such a shift within global trade norms presents another hurdle. Tariff increases must comply with World Trade Organization (WTO) rules, particularly Articles II and XX of the General Agreement on Tariffs and Trade (GATT), which regulate tariff bindings and exceptions for environmental or security concerns.²⁰⁹ Bilateral negotiations would be essential to prevent trade conflicts, especially with major partners like the European Union and China.

D. From Theory to Treasury and to real numbers²¹⁰

In 2024, the U.S. federal government allocated \$6.75 trillion toward public programs, essential services, and debt interest payments,²¹¹ while at the same year the U.S. federal government

²⁰⁸ For example see Tibor Besedes, Tristan Kohl & James Lake, *Phase Out Tariffs, Phase in Trade?*, AMERICAN ECONOMIC ASSOCIATION (Dec. 12, 2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3378824.

²⁰⁹ *WTO Rules and Environmental Policies: GATT Exceptions*, WORLD TRADE ORGANIZATION, https://www.wto.org/english/tratop_e/envir_e/envt_rules_exceptions_e.htm#:~:text=GATT%20Article%20XX%20o n%20General,a%20two%2Dtier%20analysis%20proving: (last accessed Jan. 31, 2025).

²¹⁰ This chapter provides an analysis which does not constitute a comprehensive macroeconomic model or report but rather serves as an illustrative estimate of the potential revenue and economic impact of expanded tariffs. The calculations rely on standard economic assumptions, including trade elasticity estimates, fiscal multipliers, and historical tariff pass-through rates. While the model accounts for key variables such as consumer cost burden, GDP contraction, and job losses, it does not fully integrate dynamic effects such as long-term trade adjustments, shifts in supply chains, retaliatory tariffs, or broader monetary policy responses. The purpose of this estimation is to provide a structured view of the possible fiscal and economic outcomes under a significantly expanded tariff regime, rather than to present an exhaustive predictive model of economic performance.

²¹¹ *How Much Has the U.S. Government Spent This Year?*, FISCALDATA, <https://fiscaldata.treasury.gov/americas-finance-guide/federal-spending/> (last accessed Feb. 7, 2025); *Monthly Budget Review: Summary for Fiscal Year 2024*, CONGRESSIONAL BUDGET OFFICE, <https://www.cbo.gov/publication/60843/html> (last accessed Feb. 7, 2025).

generated \$4.919 trillion in revenue,²¹² from multiple sources, including individual income taxes, payroll taxes, corporate income taxes,²¹³ and excise taxes, with individual income taxes the largest contributor to its federal funding.²¹⁴ Since the federal government’s expenditures exceeded revenue, this led to a budget shortfall of \$1.83 trillion.²¹⁵

Revenue Source	Amount (\$Billion)	Amount (\$Trillion)	Percentage of Total
Total Federal Revenue	4919	4.919	100%
Individual Income Taxes	2426	2.426	49.3%
Payroll Taxes	1710	1.71	34.8%
Corporate Income Taxes	530	0.53	10.8%
Other Receipts (Excise Taxes, Customs Duties, Estate and Gift Taxes, etc.)	253	0.253	5.1%

This heavy reliance on individual taxpayers raises a key policy question: Are we maximizing our revenue sources in the most effective and equitable way? Instead of simply maintaining the status quo, where the bulk of federal revenue comes from wages and salaries, we should be focusing on those areas where revenue potential is underutilized while ensuring economic growth and overall welfare remain the priority. This means examining whether corporations, high-net-worth

²¹² *The Latest Data on Federal Revenue, Spending, Deficit, and the National Debt Understand the Basics of Federal Finances from the U.S. Treasury Department*, FISCALDATA, <https://fiscaldata.treasury.gov/americas-finance-guide/#:~:text=In%202024%2C%20the%20federal.2024%20was%20Individual%20Income%20Taxes> (last accessed Feb. 7, 2025); *Monthly Budget Review: Summary for Fiscal Year 2024*, CONGRESSIONAL BUDGET OFFICE, <https://www.cbo.gov/publication/60843/html> (last accessed Feb. 7, 2025).

²¹³ *The Latest Data on Federal Revenue, Spending, Deficit, and the National Debt Understand the Basics of Federal Finances from the U.S. Treasury Department*, FISCALDATA, <https://fiscaldata.treasury.gov/americas-finance-guide/#:~:text=In%202024%2C%20the%20federal.2024%20was%20Individual%20Income%20Taxes> (last accessed Feb. 7, 2025).

²¹⁴ In 2024, individual income taxes accounted for 49.3% of the U.S. federal government's total revenue, <https://fiscaldata.treasury.gov/americas-finance-guide/government-revenue/>.

²¹⁵ *What is the National Deficit?*, FISCALDATA, <https://fiscaldata.treasury.gov/americas-finance-guide/national-deficit/> (last accessed Feb. 7, 2025); *Monthly Budget Review: Summary for Fiscal Year 2024*, CONGRESSIONAL BUDGET OFFICE, <https://www.cbo.gov/publication/60843/html> (last accessed Feb. 7, 2025).

individuals, and untapped sectors of the economy are contributing their fair share, rather than depending so extensively on earned income taxation.

We believe that a closer look at these numbers reveals a critical reality: the reemergence of tariffs was driven not only by economic and geopolitical factors but also by the overwhelming reliance on individual taxpayers to sustain federal revenue. Even with individual income and payroll taxes contributing the majority of collections, the system still struggles to generate sufficient funds to meet federal obligations.²¹⁶

This structural challenge highlights the need for a more sustainable and diversified tax model, one that moves beyond simply adjusting rates on existing taxpayers and instead focuses on broadening the tax base in an efficient and equitable way. We further argue that a well-designed federal tax framework must achieve four key objectives:

1. Fund essential government operations efficiently, ensuring fiscal stability.
2. Maintain economic growth and overall welfare, avoiding policies that hinder investment, trade, or consumer spending.
3. Reduce reliance on any single tax source, particularly labor-based taxation, to create a more resilient system.
4. Identify and optimize underutilized revenue streams, ensuring that all economic participants (corporations, investors, and high-growth sectors) contribute appropriately.

²¹⁶ *What are the Sources of Revenue for the Federal Government?*, TAX POLICY CENTER, <https://taxpolicycenter.org/briefing-book/what-are-sources-revenue-federal-government> (last accessed Feb. 9, 2025); Richard Kogan, Joel Friedman, Sharon Parrott & Sarah Calame, *More Revenue is Required to Meet the Nation's Commitments, Needs, and Challenges*, CENTER ON BUDGET AND POLICY PRIORITIES (June 17, 2024), <https://www.cbpp.org/research/federal-budget/more-revenue-is-required-to-meet-the-nations-commitments-needs-and>.

This approach not only addresses revenue needs but also aligns with long-term economic sustainability, ensuring that no single group bears an undue burden while the economy continues to thrive.

The following table outlines the key trade-offs associated with different types of taxes. It highlights their revenue potential, economic impact, fairness, and feasibility. Understanding these factors is essential when evaluating tax policy changes, particularly in the context of shifting toward a more sustainable and diversified revenue model. By comparing these tax mechanisms, we can better assess whether tariffs and other consumption-based taxes can effectively contribute to federal revenue while balancing economic growth and equity.

Tax Type	Revenue Potential	Economic Impact	Equity & Fairness	Feasibility
Individual Income Tax	High	Can reduce incentives to work if too high	Burdens middle class heavily	Already maxed out in reliance
Corporate Tax	Moderate	Can lead to offshoring or reduced investment	Should be progressive, but loopholes exist	Needs international coordination
Tariffs	Moderate to High	Can increase domestic production but may hurt trade	Can be regressive (higher consumer prices)	Retaliation risks from other countries
Capital Gains Tax Reform	Moderate	Can slow investment but affects only wealthiest	Reduces disparity between wage and capital income	Politically challenging
Wealth Tax	Moderate	Minimal impact on economic activity if designed well	Targets ultra-high-net-worth individuals	Very difficult to enforce
Consumption Tax (VAT)	Very High	Less distortionary	Can be regressive, but	Common in most developed

		than income tax	rebates can offset this	nations except the U.S.
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Currently, tariffs and excise taxes contribute a relatively small fraction of total federal revenue:²¹⁷

- Total Federal Revenue (FY 2024): \$4.919 trillion
- Tariff Revenue: \$61.33 billion (1.25% of total revenue)²¹⁸
- Excise Tax Revenue: ~\$126.1 billion (2.56% of total revenue)
- Combined Tariff and Excise Revenue: ~\$187.44 billion (3.81% of total revenue)

This means that replacing even a portion of income and payroll taxes, tariffs and excise taxes would have to expand significantly. To evaluate the revenue potential of a tariff-based tax system, we will model different tariff rates using FY 2024 import data. Instead of applying tariff percentages to total U.S. imports, a more accurate approach is to apply them to dutiable imports, which represent the portion of imports actually subject to tariffs. Using FY 2024 data, we estimate

²¹⁷ *Monthly Budget Review: Summary for Fiscal Year 2024*, CONGRESSIONAL BUDGET OFFICE, <https://www.cbo.gov/publication/60843/html> (last accessed Feb. 7, 2025), and <https://fiscal.treasury.gov/reports-statements/mts/previous.html>.

²¹⁸ Estimates of U.S. tariff revenue for Fiscal Year 2024 vary significantly across different sources. The Treasury Department's Monthly Treasury Statement (MTS) reports \$61.33 billion in collected customs duties, while the Congressional Research Service (CRS) estimates \$77 billion, and the U.S. International Trade Commission (USITC) projects \$91 billion. These differences stem from variations in data sources, methodologies, and definitions of "tariff revenue." The Treasury (\$61B) figure, based on the Monthly Treasury Statement (MTS), represents actual customs duties collected by the federal government, excluding special tariffs such as Section 301 tariffs on China, Section 232 steel and aluminum duties, and antidumping/countervailing duties. This makes it the most precise measure of direct government receipts and aligns with Treasury's FY 2024 budget projections. By contrast, the CRS estimate (\$77B) likely includes additional import duties beyond standard customs tariffs, such as Section 301 and 232 tariffs, as well as antidumping and countervailing duties. While broader, this figure does not necessarily reflect net collections after refunds and compliance adjustments. The USITC estimate (\$91B) applies statutory tariff rates to total import values but does not account for exemptions, refunds (e.g., the drawback program), or non-compliance. As a result, it likely overstates actual tariff revenue. For discussions on tariff revenue as a funding source, the Treasury estimate (\$61B) is the most reliable. If examining total tariff-related collections, the CRS figure (\$77B) may be more relevant. The USITC estimate (\$91B) serves as an upper-bound projection rather than a reflection of actual receipts. Sources <https://dataweb.usitc.gov/trade/search/GenImp/HTS>; <https://fiscal.treasury.gov/reports-statements/mts/>; *U.S. Tariff Policy: Overview*, CONGRESSIONAL RESEARCH SERVICE (Jan. 31, 2025), <https://crsreports.congress.gov/product/pdf/IF/IF11030>.

dutiable imports at approximately \$2.19 trillion, based on the \$61.33 billion in tariff revenue collected at an average tariff rate of 2.8%.²¹⁹

By applying various tariff percentages to this base, we can generate realistic revenue projections and assess whether tariffs could meaningfully contribute to federal funding. This analysis helps determine the extent to which tariffs could supplement or replace existing tax structures without causing significant economic disruptions.

Tariff Rate (%)	Projected Revenue (\$B)	% of Federal Spending (\$6.75T)
5	109.5	1.62%
10	219	3.24%
15	328.5	4.86%
25	547.5	8.11%

This table demonstrates that even a 25 percent across-the-board tariff would generate only \$547.5 billion, covering less than 10% of the \$6.75 trillion federal budget. This highlights the inherent limitations of tariffs as a primary revenue source, such an approach would be both unsustainable and impractical. Closing the federal funding gap requires a broader, more diversified revenue strategy rather than relying solely on tariffs. One logical avenue is the expansion of excise taxes, which have historically served as a stable source of federal revenue.²²⁰

²¹⁹ The 2.8% effective tariff rate is based on historical U.S. tariff collections and dutiable imports data. Not all U.S. imports are subject to tariffs; many enter duty-free under free trade agreements (FTAs) or special programs such as the Generalized System of Preferences (GSP). As a result, dutiable imports, rather than total imports, form the relevant base for tariff revenue calculations. Historically, the effective tariff rate on dutiable imports has ranged between 2.5% and 3.0%, with increases following the implementation of Section 301 tariffs on China and Section 232 tariffs on steel and aluminum. The 2.8% rate is within this range and aligns with Treasury data and past research. In FY 2024, the U.S. government collected \$61.33 billion in tariff revenue (Monthly Treasury Statements). Assuming an effective tariff rate of 2.8%, this implies dutiable imports of approximately \$2.19 trillion, consistent with past estimates of taxable imports (Total Tariff Revenue/Effective Tariff Rate=Dutiable Imports). By using 2.8% as a baseline, we can more accurately project tariff revenue at different rates (5%, 10%, 15%, 25%) instead of applying tariffs to all imports, which would overestimate revenue potential.

²²⁰ J. Fred Giertz, *Excise Taxes*, URBAN INSTITUTE, <https://www.urban.org/sites/default/files/publication/71071/1000527-Excise-Taxes.PDF> (last accessed Feb. 9, 2025).

Excise taxes apply to specific goods and services, such as fuel, alcohol, tobacco, and transportation, and their targeted nature allows for adjustments without broadly impacting all consumers.²²¹ By evaluating the potential for increasing existing excise taxes and introducing new ones on select goods, we can assess whether they can meaningfully supplement tariff revenue. Hence, we will next model the revenue potential of excise tax expansion based on FY 2024 economic data. This will allow us to determine whether a combination of tariffs and excise taxes could provide a more viable alternative to the current income tax system.

Excise Tax Increase Scenario	Projected Revenue (\$B)	% of Federal Spending (\$6.75T)
Current Excise Taxes ²²²	126	2.56%
Moderate Expansion	259.2	3.84%
Aggressive Expansion	345.6	5.12%

This table shows that excise taxes, even if doubled, cannot replace individual income tax revenue but can serve as a meaningful supplement.

To fully assess the economic feasibility of a tariff- and excise-based tax system, we must now examine the combined impact of both revenue sources. While tariffs alone cannot generate enough revenue to replace existing tax structures, and excise tax expansion remains limited in scope, their combined effect may offer a more meaningful contribution to federal funding.

The next step is to model various scenarios that integrate both tariffs and excise taxes, allowing us to determine whether a hybrid approach can provide a sustainable alternative to the current income

²²¹ Ulrik Boesen, *Excise Tax Application and Trends*, TAX FOUNDATION (Mar. 16, 2021), <https://taxfoundation.org/research/all/federal/excise-taxes-excise-tax-trends/>.

²²² Peter N. Salib, *The Pigouvian Constitution*, 88 Chi. L. Rev. 1081 (2021); <https://fiscal.treasury.gov/reports-statements/mts/previous.html>; *How Much Revenue Has the U.S. Government Collected This Year?*, FISCALDATA, <https://fiscaldata.treasury.gov/americas-finance-guide/government-revenue/#sources-of-federal-revenue> (last accessed Feb. 9, 2025).

tax system. The following table presents different revenue projections based on varying tariffs and excise tax rates.

Scenario	Tariff Rate (%)	Tariff Revenue (\$B)	Excise Tax Revenue (\$B)	Total Revenue (\$B)
Current System ²²³	2.8	61.32	126	187.32
Moderate Increase	10	219	259.2	478.2
Aggressive Increase	25	547.5	345.6	893.1

The findings in this table highlight the extent to which a combined approach of increasing tariffs and expanding excise taxes could contribute to federal revenue. Under the current system, these sources generate only a small fraction of total government funding, making them insufficient as standalone alternatives to income taxes.

A moderate increase, with tariffs set at ten percent and a proportional rise in excise taxes, significantly improves revenue generation but still falls short of covering a substantial portion of federal spending. Even under the most aggressive scenario, where tariffs rise to twenty-five percent and excise taxes are expanded to their highest feasible levels, the total revenue remains well below what is needed to replace income and payroll taxes. This suggests that while tariffs and excise taxes can serve as valuable supplementary sources of revenue, they are not viable as the primary foundation of the tax system.

A more balanced approach, incorporating elements of consumption-based taxation alongside existing revenue mechanisms, and perhaps even paired with spending reductions would be necessary to ensure fiscal stability without introducing economic distortions, because even with

²²³ At the time of writing this article, President Trump had issued new tariffs on several countries, including China, while temporarily suspending new tariffs on Canada and Mexico. For clarity and consistency, this analysis uses the 2024 tariff rate and does not incorporate these subsequent adjustments. See <https://fiscal.treasury.gov/reports-statements/mts/previous.html>.

the highest proposed increases, over 80 percent of total revenue would still need to come from other tax sources. This also assumes an optimistic (and unrealistic) scenario that does not account for the likely consequences of such a system, including trade retaliation, inflationary pressures, and the inherent regressivity of shifting the tax burden toward consumption.

We conclude that in any economic modeling, the bottom line is always that a tariff-based and even a tariff- and excise-based tax model cannot stand alone and must be part of a broader tax strategy that offers a hybrid model that balances revenue, economic growth, and equity.

A strategic tariff system can increase revenue while minimizing trade retaliation and inflationary risks. Instead of across-the-board tariffs, the model should focus on:

- Higher tariffs on luxury and non-essential imports (*e.g.*, high-end consumer goods, luxury vehicles, yachts).
- Selective tariffs on goods from countries engaged in unfair trade practices (*e.g.*, predatory pricing, state-subsidized industries (which, for example, would be the economic and geopolitical justification for high tariffs on China)).
- Exemptions or reduced tariffs for essential raw materials and technology components to avoid supply chain disruption and inflation.

The total U.S. imports for FY 2024 are approximately \$3.3 trillion.²²⁴ However, not all imports should be taxed at higher rates due to economic and political considerations. The key categories of imports include:²²⁵

- Raw materials and industrial supplies (*e.g.*, crude oil, rare earth metals)

²²⁴ *Trade Statistics*, U.S. CUSTOMS AND BORDER PROTECTION, <https://www.cbp.gov/newsroom/stats/trade> (last accessed Feb. 9, 2025).

²²⁵ Mark Perry, *Nearly All Imports, Even Consumer Goods, are Inputs for US Firms, Retailers and Factories*, AMERICAN ENTERPRISE INSTITUTE (Aug. 19, 2016), <https://www.aei.org/carpe-diem/nearly-all-imports-even-consumer-goods-are-inputs-for-us-firms-and-factories/>.

- Intermediate goods and capital equipment (e.g., semiconductors, machinery)
- Consumer goods and non-essential products (e.g., electronics, luxury goods, cars, apparel)

To avoid tariffs on essential raw materials and production inputs (which could raise domestic manufacturing costs), the assumption is that the higher tariffs would apply primarily to non-essential and discretionary imports.

Using data taken directly from the U.S. Department of Commerce Bureau of Economic Analysis and U.S. International Trade Commission, we modeled such a hybrid tax system.²²⁶

With the most recent verified available data showing that in 2023:²²⁷

- Total U.S. Imports: \$3.826 trillion
- Goods Imports: \$3.112 trillion
- Services Imports: \$714.5 billion
- Total U.S. Exports: \$3.05 trillion
- Goods Exports: \$2.05 trillion
- Services Exports: \$1.00 trillion
- Trade Deficit: \$773.4 billion

With FY 2024 data available, U.S. goods imports totaled approximately \$3.3 trillion for the year, which represents an increase of \$187.1 billion compared to the previous period.²²⁸

The breakdown of imports by category in 2024 is as follows:²²⁹

²²⁶ *International Trade in Goods and Services*, BUREAU OF ECONOMIC ANALYSIS, <https://www.bea.gov/data/intl-trade-investment/international-trade-goods-and-services> (last accessed Feb. 7, 2025); *U.S. Trade & Tariff Data*, DATA WEB, <https://dataweb.usitc.gov/> (last accessed Feb. 7, 2025).

²²⁷ *U.S. International Trade in Goods and Services, December and Annual 2023*, BUREAU OF ECONOMIC ANALYSIS, <https://www.bea.gov/news/2024/us-international-trade-goods-and-services-december-and-annual-2023> (last accessed Feb. 7, 2025).

²²⁸ <https://www.bea.gov/news/2025/us-international-trade-goods-and-services-december-and-annual-2024>; Overall the data shows the following: Imports of Goods in 2024: \$3,295.6 billion, Total Imports of Services in 2024: \$814.4 billion, Total Imports (Goods + Services) in 2024: \$4,110.0 billion.

²²⁹ *U.S. International Trade in Goods and Services November 2024*, BUREAU OF ECONOMIC ANALYSIS (Jan. 7, 2025), https://www.bea.gov/sites/default/files/2025-01/trad1124_0.pdf; *U.S. International Trade in Goods and Services*,

Category	Import Value (\$B)
Electrical, electronic equipment	463.36
Machinery, nuclear reactors, boilers	459.20
Vehicles other than railway, tramway	381.04
Mineral fuels, oils, distillation products	266.59
Pharmaceutical products	177.85
Optical, photo, technical, medical apparatus	118.32
Pearls, precious stones, metals, coins	85.49
Capital goods (other categories)	400
Consumer goods (other categories)	300
Automotive parts (additional imports)	75
Foods, Feeds, Beverages	75
Industrial supplies & Miscellaneous	494.75

As stated earlier, not all imports should be taxed equally, and we argue that a selective tariff approach ensures that revenue is maximized without disproportionately affecting essential industries or consumers.

The following table categorizes imports based on economic necessity, ensuring that luxury and discretionary goods bear a higher tax burden, while essential goods remain largely unaffected to prevent economic distortions.

High Tariffs Goods (luxury and non-essential consumer goods):²³⁰

Category	2024 Import Value (\$B)	Proposed Tariff Rate (%)	Projected Revenue (\$B)
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December and Annual 2024, BUREAU OF ECONOMIC ANALYSIS (Feb. 5, 2025), <https://www.bea.gov/news/2025/us-international-trade-goods-and-services-december-and-annual-2024>; *Trade in Goods with World, Seasonally Adjusted*, THE UNITED STATES CENSUS BUREAU, <https://www.census.gov/foreign-trade/balance/c0004.html> (last accessed Feb. 9, 2025); The data in this table is based on the U.S. Bureau of Economic Analysis (BEA) report on U.S. International Trade in Goods and Services for 2024 and the U.S. Census Bureau trade report. While the BEA provides the total import value of goods (\$3,295.6 billion), it primarily reports year-over-year increases rather than absolute values for each category. Categories explicitly reported by the BEA and Census Bureau with total values were included directly, while missing categories were estimated based on reported 2024 increases, historical import shares, and prior trade data trends. Specifically, values for capital goods, consumer goods, automotive parts, foods, and industrial supplies were inferred using proportional allocations to ensure consistency with the total goods import figure. The remaining balance necessary to reconcile the total was allocated to industrial supplies and miscellaneous goods, which include petroleum products, textiles, and other manufacturing inputs. These estimates ensure that the sum of all categories aligns with the official trade data, though actual values may vary based on future BEA and Census Bureau releases with more detailed breakdowns.

²³⁰ The rationale for this is that these products do not directly impact industrial supply chains or essential consumer needs, making them strong candidates for higher tariffs.

High-end Vehicles & Auto Parts	381.04	15%	57.16
Luxury Goods (Watches, Jewelry, Designer Apparel)	85.49	20%	17.10
High-End Electronics (Smartphones, Gaming, Laptops)	463.36	10%	46.34
Alcohol, Tobacco, and High-Tier Consumer Goods	100.00 (est.)	20%	20.00
Total for High-Tariff Goods	1,029.89	-	140.60

Moderate Tariffs Goods (discretionary imports, non-critical consumer goods):²³¹

Category	2024 Import Value (\$B)	Proposed Tariff Rate (%)	Projected Revenue (\$B)
General Consumer Electronics (TVs, Appliances)	150.00	10%	15.00
Mid-Tier Vehicles & Auto Components	200.00	10%	20.00
Fashion & Mid-Tier Apparel	50.00	12%	6.00
Pharmaceuticals (Non-Essential)	50.00	5%	2.50
Total for Moderate-Tariff Goods	450.00	-	43.50

²³¹ The rationale for this is that a moderate tariff ensures that consumers contribute to tax revenue without causing excessive inflationary effects.

Low-Tariff or Exempted Goods (essential industrial & raw materials):²³²

Category	2024 Import Value (\$B)	Proposed Tariff Rate (%)	Projected Revenue (\$B)
Industrial Machinery & Equipment	459.20	2%	9.18
Medical Equipment & Supplies	118.32	1%	1.18
Energy Products (Oil, Gas, Coal)	266.59	3%	8.00
Agricultural & Food Imports	90.00	0% (Exempt)	0.00
Total for Low-Tariff or Exempted Goods	934.11	-	18.36

Total Projected Revenue from the Tariff System:

Tariff Category	Projected Revenue (\$B)
High-Tariff Goods	140.60
Moderate-Tariff Goods	43.50
Low-Tariff / Exempted Goods	18.36
Total Estimated Tariff Revenue	202.46

This structured model ensures that the tax burden falls primarily on luxury and discretionary goods, minimizing the impact on essential economic sectors. Moderate tariffs on consumer goods help distribute costs gradually, avoiding sudden price shocks. Meanwhile, essential imports remain largely unaffected, safeguarding industrial stability and preventing inflationary pressures on necessities.

²³² The rationale for this is that these goods are critical to U.S. manufacturing, energy production, and healthcare, hence we believe tariffs should remain low or be waived.

Furthermore, the proposed hybrid tariff system is expected to generate \$202.46 billion, compared to the current \$61.33 billion collected from tariffs in FY 2024 but without taking into account the potential adverse economic impact such measures would have over domestic production and American exports which indirectly possibly impact other (non-tariff) federal funding sources. This represents an increase of \$141.13 billion, or approximately 230% more revenue than the existing system.

However, to better estimate the revenue potential of tariffs within a broader tax framework, it is crucial to account for potential behavioral shifts in response to higher import costs. While tariffs can generate substantial revenue, they also influence trade flows, as businesses and consumers adjust by sourcing alternatives, absorbing costs, or reducing demand.

Predicting the precise impact of these shifts is challenging, as real-world reactions depend on factors such as price sensitivity, availability of substitutes, and global supply chain adjustments. The following table models' different elasticity scenarios to approximate how much trade volume may decline due to tariff increases and the corresponding impact on revenue. While these projections provide valuable insights, they remain rough estimates, given the complexity of global trade dynamics and policy responses.

Cross-border Trade Volume Decline and Tariff Revenue Impact.²³³

Tariff Rate (%)	Elasticity	Trade Volume Reduction (\$B)	Adjusted Import Volume (\$B)	Projected Tariff Revenue (\$B)
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²³³ This table models the impact of tariffs on trade volume and revenue generation by applying various elasticity assumptions. Elasticity measures the responsiveness of trade volume to price changes, with higher elasticity values (-1.5) indicating greater sensitivity. The "Trade Volume Reduction" column quantifies the expected decline in imports due to tariff-induced price increases, calculated as a percentage of total imports based on assumed elasticities. The "Adjusted Import Volume" reflects the revised import levels after incorporating this contraction. Finally, "Projected Tariff Revenue" is derived by applying the tariff rate to the adjusted import volume. The model assumes a baseline U.S. import volume of \$3.3 trillion and estimates trade elasticity impacts at three levels: -0.5 (low response), -1.0 (moderate response), and -1.5 (high response). The "Trade Volume Reduction" is calculated using the formula: (Tariff Rate × Baseline Import Volume × Elasticity). For example, at a 10% tariff and -

5	-0.5	-82.5	3217.5	160.875
5	-1.0	-165.0	3135.0	156.75
5	-1.5	-247.5	3052.5	152.625
10	-0.5	-165.0	3135.0	313.5
10	-1.0	-330.0	2970.0	297.0
10	-1.5	-495.0	2805.0	280.5
15	-0.5	-247.5	3052.5	457.875
15	-1.0	-495.0	2805.0	420.75
15	-1.5	-742.5	2567.5	385.125
20	-0.5	-330.0	2970.0	594.0
20	-1.0	-660.0	2640.0	528.0
20	-1.5	-990.0	2310.0	462.0
25	-0.5	-412.5	2887.5	721.875
25	-1.0	-825.0	2475.0	618.75
25	-1.5	-1237.5	2062.5	515.625

This table highlights the projected impact of tariff-enhanced trade volume declines on revenue generation. Across different elasticity scenarios, even a moderate response to tariffs could reduce imports by 5 to 37 percent, leading to a proportional decline in revenue. However, despite these reductions, tariff revenues remain substantial, ranging from 152 billion to 722 billion dollars, depending on elasticity levels and the tariff rate applied. The revenue-maximizing range appears to fall between 10% and 15% tariffs, where collections remain robust without triggering significant economic contraction. At higher tariff levels (20-25%), however, the reduction in trade volume substantially limits revenue gains, emphasizing the need for careful calibration of tariff rates.

While higher tariffs will inevitably result in some trade volume contraction, they can still provide a significant and stable revenue source within a broader tax framework. The degree of decline depends on how businesses and consumers adjust, whether through shifting suppliers, absorbing costs, or reducing purchases. Even in the most elastic scenario, where trade volume shrinks by up

1.0 elasticity, imports decline by \$330 billion. The "Adjusted Import Volume" represents the new import level after this reduction. The "Projected Tariff Revenue" is computed by multiplying this adjusted import value by the respective tariff rate, illustrating how revenue generation evolves under different trade elasticity assumptions. This methodology provides policymakers with a structured framework to assess potential revenue outcomes while considering trade behavior adjustments.

to 37 percent, projected tariff revenues still far exceed the FY 2024 collection level of 61.33 billion dollars, with estimates ranging from 152 billion to 515 billion dollars, reinforcing the potential role of tariffs in enhancing fiscal sustainability.

These findings reinforce that while tariffs can contribute meaningfully to federal revenue, they cannot serve as a standalone tax system and must be complemented by other mechanisms, such as excise taxes or adjustments to existing tax structures. The next step is to evaluate how this revenue interacts with income and payroll taxes to determine whether it could offset a portion of their burden. Potential Offsets of Income and Payroll Taxes with Increased Tariffs:²³⁴

Tax Type	Current Revenue (\$B)	Potential Reduction (\$B) (Low Estimate) ²³⁵	Potential Reduction (%)	Potential Reduction (\$B) (High Estimate) ²³⁶	Potential Reduction (%)
Individual Income Tax	2426	118.87	4.9%	202.46	8.35%
Payroll Tax	1710	83.59	4.89%	202.46	11.84%

The analysis shows that while increased tariff revenue can help reduce reliance on individual income and payroll taxes, the effect is relatively modest. Currently, the federal government collects 2,426 billion dollars from individual income taxes and 1,710 billion dollars from payroll taxes.

If tariffs are increased as modeled, generating an additional 141 billion dollars more than the current system, this would offset 4.9% of individual income tax revenue and 4.89% of payroll tax revenue in a proportional distribution scenario. Under an alternative scenario, where all of the

²³⁴ *Monthly Budget Review: Summary for Fiscal Year 2024*, CONGRESSIONAL BUDGET OFFICE, <https://www.cbo.gov/publication/60843/html> (last accessed Feb. 7, 2025). This table assumes tariff revenue to be \$202.46 billion, following the hybrid tariffs system described earlier.

²³⁵ The Low Estimate is splitting the tariff revenue proportionally. Total relevant tax revenue = Individual Income Tax (\$2,426B) + Payroll Tax (\$1,710B) = \$4,136B. Individual Income Tax: $2426 / 4136 = 58.7\%$. Payroll Tax: $1710 / 4136 = 41.3\%$. Hence, need to apply these proportions to the \$202.46 billion tariff revenue. Individual Income Tax Reduction: $202.46 \times 0.587 = 118.87B$. Payroll Tax Reduction: $202.46 \times 0.413 = 83.59B$.

²³⁶ The High Estimate is applying the full tariff revenue to each tax type separately.

\$202.46 billion in projected tariff revenue is applied to a single tax category, it could offset up to 8.35% of individual income tax revenue or 11.84% of payroll tax revenue.

This means that while tariffs can serve as a supplementary revenue source, they cannot meaningfully replace the existing tax structure. Even under the most optimistic projections, the additional tariff revenue would not be enough to substantially lower income or payroll tax burdens. Incorporating excise taxes into the hybrid tax model provides another avenue for revenue generation while targeting specific consumption behaviors. Excise taxes are levied on goods such as alcohol, tobacco, fuel, and luxury items, making them an effective tool for raising revenue without directly increasing income or payroll tax burdens.

Projected Revenue from Expanded Excise Taxes:²³⁷

Scenario	Increase Over Current (%)	Additional Revenue Generated (\$B)	Projected Excise Tax Revenue (\$B)
Moderate Increase	25	31.5	157.5
Aggressive Increase	50	63	189
High Expansion	100	126	252

This table presents projections for excise tax revenue under different expansion scenarios. A moderate increase (25 percent) would generate approximately additional 31.5 billion dollars, while an aggressive increase (50 percent) would generate 63 billion dollars in new revenue. A high expansion (100 percent increase) would double excise tax revenue to 252 billion dollars, providing a 126-billion-dollar boost over current levels. These estimates highlight the potential role of excise taxes in diversifying the federal revenue base, though their impact on consumer behavior and economic activity must also be considered.

²³⁷ Based on a previous table indicating that excise tax revenue in FY 2024 was approximately \$126 billion, which was 2.6% of total federal revenue (\$6.75 trillion), see *How Much Revenue Has the U.S. Government Collected This Year?*, FISCALDATA, <https://fiscaldata.treasury.gov/americas-finance-guide/government-revenue/> (last accessed Mar. 6, 2025), and <https://fiscal.treasury.gov/reports-statements/mts/previous.html>.

The combined increased tariffs and expanded excise taxes model may impact income and payroll taxes revenue the following way.

Impact of Increased Tariffs and Excise Taxes on Income and Payroll Taxes:²³⁸

Tariff Revenue (\$B)	Excise Tax Revenue (\$B)	Total Additional Revenue (\$B)	Income Tax Offset (%)	Payroll Tax Offset (%)
109.5 ²³⁹	259.2 ²⁴⁰	116.7	4.81%	6.82%
109.5	345.6 ²⁴¹	203.1	8.37%	11.88%
219 ²⁴²	259.2	226.2	9.32%	13.23%
219	345.6	312.6	12.89%	18.28%

This analysis demonstrates that combining increased tariffs with expanded excise taxes significantly enhances federal revenue and reduces reliance on income and payroll taxes. With moderate excise tax expansion and lower-bound tariff revenue of \$109.5 billion, total additional revenue would amount to \$116.7 billion, offsetting 4.81% of income taxes and 6.82% of payroll taxes.

Under an aggressive excise tax expansion and tariff revenue of \$109.5 billion, total additional revenue would increase to \$203.1 billion, reducing reliance on income taxes by 8.37% and on payroll taxes by 11.88%. If excise taxes are doubled while tariff revenue remains at \$109.5 billion, the combined system would generate \$203.1 billion, further lowering income tax dependence by 8.37% and payroll tax reliance by 11.88%.

²³⁸ Some of the amounts in this table are estimations based on FY 2023 revenue. See *Overview of the Federal Tax System in 2024*, CONGRESSIONAL RESEARCH SERVICE (Dec. 18, 2024), <https://crsreports.congress.gov/product/pdf/R/R48313>; *Taxes*, CONGRESSIONAL BUDGET OFFICE, <https://www.cbo.gov/topics/taxes> (last accessed Mar. 6, 2025); *Payroll Taxes Revenues and Forecast in the United States from 2000 to 2034*, STATISTA, <https://www.statista.com/statistics/217500/revenues-from-social-insurance-tax-and-forecast-in-the-us/> (last accessed Mar. 6, 2025).

²³⁹ Based on the previous analysis that a moderate tariff increase (~5%) should generate \$109.5B.

²⁴⁰ Based on the previous analysis that a moderate excise tax increase should generate \$259.2B.

²⁴¹ Based on the previous analysis that a moderate excise tax increase should generate \$345.6B.

²⁴² Based on the previous analysis that an aggressive tariff increase (~10%) should generate \$219B.

Alternatively, with higher tariff revenue of \$219 billion and moderate excise tax expansion, total additional revenue would amount to \$226.2 billion, offsetting 9.32% of income taxes and 13.23% of payroll taxes. Under an aggressive excise tax expansion and \$219 billion in tariff revenue, total additional revenue would rise to \$312.6 billion, reducing reliance on income taxes by 12.89% and on payroll taxes by 18.28%.

While still not a full replacement for these revenue sources, the results suggest that a hybrid approach could meaningfully supplement federal revenue, easing the tax burden on wages and salaries while maintaining economic stability.

The following analysis examines how the additional revenue generated from increased tariffs and expanded excise taxes could help reduce the federal budget deficit. By comparing the projected additional revenue with the current federal deficit, we estimate the percentage of the shortfall that could be covered under different revenue scenarios. While these tax changes can contribute meaningfully to deficit reduction, they are not sufficient to eliminate the deficit entirely, highlighting the need for a broader fiscal strategy.

Scenario	Additional Revenue (\$B)	Federal Deficit (\$B)	Deficit Coverage (%)
Lower Revenue Estimate	116.7	1831	6.37
Higher Revenue Estimate	312.6	1831	17.07

The results indicate that the proposed increases in tariff revenue and excise taxes could cover between 6.37 percent and 17.07 percent of the federal budget deficit. Under the lower revenue estimate, an additional 116.7 billion dollars would reduce the deficit by approximately 6.37 percent, while under the higher estimate, 312.6 billion dollars in new revenue would offset approximately 17.07 percent of the shortfall. Although these figures demonstrate that tariffs and

excise taxes could serve as valuable revenue source they alone would not be sufficient to fund the governmental expenses and clearly cannot close the existing deficit gap (even without taking into account the impact of such taxes would have over American production and export).

Though these findings reinforce the need for a more comprehensive fiscal approach, incorporating spending adjustments, economic growth strategies, or further tax policy changes to achieve long-term sustainability, if those are adopted they can also signal the global economy that the United States is focusing on a more balanced and resilient revenue system, reducing dependence on labor-based taxation while leveraging targeted consumption and trade-based taxes. This shift could enhance investor confidence, stabilize long-term fiscal planning, and position the U.S. as a leader in pragmatic, adaptive tax policy amid evolving global economic dynamics.

To assess the broader fiscal implications of increased tariff and excise tax revenue, the following analysis examines how these funds could be allocated within the federal budget. The additional revenue, ranging from 96.75 billion to 216 billion dollars, could either reduce reliance on deficit spending or be directed toward strategic reinvestments. This table estimates how much of key federal expenditures could be covered under the new revenue structure, highlighting potential offsets in areas such as Social Security, Medicare, Medicaid, defense, and education. While the revenue generated is not sufficient to fully fund these programs, it could provide meaningful fiscal relief and support targeted investments in economic growth and social stability.

Impact of Additional Revenue on Government Expenditures:²⁴³

Category	Current Spending (\$B)	Coverage with Lower	Coverage with Higher	Percentage Covered (Lower)	Percentage Covered (Higher)
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²⁴³ *Monthly Budget Review: Summary for Fiscal Year 2024*, CONGRESSIONAL BUDGET OFFICE, <https://www.cbo.gov/publication/60843/html> (last accessed Feb. 7, 2025); *The Budget and Economic Outlook: 2024 to 2034*, CONGRESSIONAL BUDGET OFFICE, <https://www.cbo.gov/publication/59710> (last accessed Feb. 7, 2025); *An Update to the Budget and Economic Outlook: 2024 to 2034*, CONGRESSIONAL BUDGET OFFICE, <https://www.cbo.gov/publication/60039> (last accessed Feb. 7, 2025).

		Revenue (\$B)	Revenue (\$B)		
Social Security	1448	116.7	312.6	8.06%	21.59%
Medicare	870	116.7	312.6	13.41%	35.93%
Medicaid	616	116.7	312.6	18.94%	50.75%
Defense	883	116.7	312.6	13.22%	35.4%
Education & Training	130	116.7	130	89.77%	100%
Infrastructure & Transportation	200	116.7	200	58.35%	100%
Interest on Debt	659	116.7	312.6	17.71%	47.44%
Other Programs	825	116.7	216	14.15%	37.89%

This analysis shows that while additional revenue from tariffs and excise taxes could offset a meaningful portion of key government expenditures, it would not be sufficient to eliminate the need for broader fiscal planning.

For Social Security and Medicare, the new revenue would cover between 8.06 and 21.59 percent and 13.41 and 35.93 percent of their costs, respectively. Medicaid spending could see an even greater offset, with 18.94 to 50.75 percent of its costs covered, indicating a significant potential impact on healthcare funding. Defense spending, one of the largest discretionary budget items, could have 13.22 to 35.40 percent of its costs offset, freeing up funds for other priorities. Education and workforce training programs could be fully funded at the higher revenue estimate, covering 100 percent of current spending. While these contributions would not be enough to fully fund these programs, they could help reduce reliance on deficit spending and allow for strategic reinvestments in areas such as infrastructure, education, and targeted social programs.

It should be noted that the increased tariffs and excise taxes would have an impact on the final cost of goods and on consumers' disposable income.²⁴⁴ In other words, we should expect a loss of purchasing power across households.

To assess the potential impact of tariffs on consumer spending, the following analysis estimates how much of the increased tariff revenue would be passed on to consumers through higher prices.²⁴⁵ Assuming that 75 percent of tariff costs are transferred to consumers, we estimate the resulting reduction in disposable income.²⁴⁶

Scenario	Tariff Revenue (\$B)	Estimated Consumer Cost Impact (\$B)	Percentage Reduction in Disposable Income
Lower Tariff Revenue Impact	109.5	82.13	0.37
Higher Tariff Revenue Impact	219	164.25	0.75

²⁴⁴ See *Federal Excise Taxes: An Introduction and General Analysis*, CONGRESSIONAL RESEARCH SERVICE (Aug. 26, 2013), <https://crsreports.congress.gov/product/pdf/R/R43189/4>.

²⁴⁵ The estimated reduction in disposable income is based on the assumption that 75% of the tariff burden is passed on to consumers through higher prices, while the remaining 25% is absorbed by businesses. This assumption aligns with findings from the Tax Foundation (<https://taxfoundation.org/blog/who-really-pays-tariffs>), Chicago Booth Review (<https://www.chicagobooth.edu/review/are-us-households-losing-trade-war>), and NBER (https://www.nber.org/system/files/working_papers/w26610/w26610.pdf) which reported that U.S. firms and consumers bore the entire burden of tariffs, resulting in significant economic losses. Additionally, the total U.S. disposable personal income for 2024 is projected at approximately \$21.88 trillion, based on data from the U.S. Bureau of Economic Analysis and the Federal Reserve Economic Data. The consumer cost impact is calculated by applying the assumed consumer burden percentage to the total tariff revenue, and this figure is then divided by the projected total disposable income to determine the relative reduction in consumer spending power. Also see <https://www.cato.org/publications/separating-tariff-facts-tariff-fictions>; and Alberto Cavallo, Gita Gopinath, Brent Neiman & Jenny Tang, *Tariff Pass-Through at the Border and at the Store: Evidence from U.S. Trade Policy*, 3 AM. ECON. REV.: INSIGHTS 19, 19–34 (2021).

²⁴⁶ DPI is defined as personal income minus personal current taxes. It represents the amount of income available to individuals for spending and saving after accounting for taxes, <https://www.bea.gov/data/income-saving/disposable-personal-income>. The estimate of total U.S. DPI for 2024 is based on seasonally adjusted annual rates provided by the Bureau of Economic Analysis (BEA) and Federal Reserve Economic Data (FRED). Monthly DPI figures from August to December 2024 are averaged to approximate the annual DPI: August (\$21.70T), September (\$21.77T), October (\$21.92T), November (\$21.98T), and December (\$22.06T). The computed average is \$21.88T, representing the estimated total DPI for 2024, *Personal Income and Outlays, December 2024*, BUREAU OF ECONOMIC ANALYSIS (Jan. 31, 2025), <https://www.bea.gov/news/2025/personal-income-and-outlays-december-2024>; Also see *United States Disposable Personal Income*, TRADING ECONOMICS, <https://tradingeconomics.com/united-states/disposable-personal-income> (last accessed Mar. 6, 2025).

This analysis estimates that tariff-induced price increases could lead to a consumer cost impact of \$82.13 billion to \$164.25 billion, depending on the tariff revenue scenario. This translates to a 0.37 to 0.75 percent reduction in disposable income. While this reduction may seem small in percentage terms, it represents a significant loss of purchasing power across households, potentially leading to shifts in spending behavior, decreased demand for discretionary goods, and an overall dampening of economic activity.

While the consumer impact of tariffs is a critical factor, American businesses will also need to adapt to higher import costs. We believe that businesses would respond to increased tariffs in three primary ways: (a) absorbing costs, (b) passing them on to consumers (depending on the elasticity of demand), or (c) relocating production. An estimated 40 percent of businesses may absorb tariff-related costs, reducing profit margins but avoiding immediate price increases. Around 50 percent are expected to pass the costs on to consumers, further contributing to the previously calculated impact on consumer spending. Meanwhile, approximately 10 percent of firms may opt to relocate production, with total relocation costs estimated at 100 billion dollars.

This shift could have long-term implications for domestic manufacturing and supply chain stability. While some production returning to the U.S. could create jobs, it also carries significant upfront costs and transition periods, potentially disrupting industries in the short term.

Since GDP shrinks as consumer spending declines, tariff-enhanced price increases could have broader macroeconomic consequences. As higher costs reduce disposable income, overall consumption contracts leading to a measurable impact on GDP. Using standard economic multipliers, we estimate that the resulting decline in spending could reduce GDP by \$172.45 billion to \$344.93 billion, representing a 0.64% to 1.28% contraction. This slowdown can then translate into 7.07 million to 14.14 million job losses, disproportionately affecting consumer-driven

industries such as retail, manufacturing, and services. The table below quantifies the projected economic damage caused by these tariffs.²⁴⁷

Scenario	Consumer Cost Impact (\$B)	GDP Loss (\$B)	GDP Loss (%)	Estimated Job Losses
Lower Estimate	82.13	172.47	0.64%	7,040
Higher Estimate	164.25	344.93	1.28%	14.14

V. Conclusion

In theory, a tariff-based tax system presents both opportunities and challenges. While it offers a potential significant federal revenue source that can supplement existing tax structures, its regressive nature and susceptibility to global trade dynamics pose substantial challenges that must be addressed. The analysis demonstrates that even with significant tariff increases, the resulting revenue would cover only a fraction of federal expenditures, and would not be sufficient to replace corporate income, personal income and payroll taxes altogether. Moreover, the economic consequences, ranging from increased consumer costs to business supply chain disruptions, must be carefully considered especially in light of its regressive nature.

Historical lessons, from the successes of early 19th-century tariffs to the failures of Smoot-Hawley, highlight the risks of over-reliance on trade taxes would likely be even greater in the 21st century, given the increased dependence on cross-border trade.²⁴⁸ Additionally, our modeling indicates that

²⁴⁷ The economic damage estimates are based on the assumption that 75% of tariff costs are passed to consumers, leading to a consumer cost impact of \$82.13B–\$164.25B. The GDP impact is calculated using a fiscal multiplier of 2.1 (Source: Congressional Budget Office, <https://www.cbo.gov/publication/49925>), with GDP losses ranging from \$172.45B to \$344.93B, representing a 0.64% to 1.28% contraction of the \$27T U.S. GDP (Source: BEA, 2024, <https://www.bea.gov/data/gdp/gross-domestic-product>). Job losses are estimated using the labor-output ratio of 41,000 jobs lost per \$1B GDP decline, which translates into 7.07M to 14.14M projected job losses (Sources: BLS <https://www.bls.gov/emp/documentation/projections-methods.htm>, NBER <https://www.nber.org/papers/w25672>). These figures illustrate the broader economic risks of tariff-induced price increases.

²⁴⁸ Kevin O’Rourke, *Tariffs and Growth in the Late 19th Century*, 110 *ECON. J.* 456, 457-58 (2001); Kris Mitchener, Kevin O’Rourke & Kirsten Wandschneider, *The Smoot-Hawley Trade War*, 132 *ECON. J.* 2500, 2500-01 (Feb. 1, 2022), <https://doi.org/10.1093/ej/ueac006>.

while tariffs could contribute meaningfully to federal fundings, they alone cannot bridge the fiscal gap without severe economic trade-offs, including inflationary pressures and retaliatory tariffs from key trade partners.

For tariffs to serve as a viable component of a modern tax system, they would need to be strategically integrated into a broader hybrid model that includes excise taxes and other consumption-based revenue sources. Our findings show that excise taxes, when expanded, could provide a more stable and predictable revenue stream, reducing the need for extreme tariff increases. However, even then, tariffs and excise taxes together would not eliminate the need for income, payroll, or corporate taxation but could allow for modest reductions in those burdens.

Furthermore, successful implementation would require careful tax or fiscal policy design, leveraging advanced technology for enforcement (especially on intangible cross-border trade), targeted exemptions to protect essential goods, and compensatory mechanisms to mitigate regressivity. Most importantly, international coordination would be necessary to minimize risks of trade conflicts, retaliatory measures, and economic disruptions.

Overall, we conclude that while tariffs can play a role in diversifying revenue sources, their feasibility as the backbone of a national tax system remains highly contentious. Without a balanced and well-coordinated approach, including international agreements with trade partners, adaptive economic policies, and alternative revenue measures, we believe the risks may far outweigh the benefits from a global perspective altogether but also from an American perspective.