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### Unintended Legislative Inertia

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# UNINTENDED LEGISLATIVE INERTIA

MIRIT EYAL-COHEN\*

## ABSTRACT—

Institutional and political forces create strong inertial pressures that make the updating of legislation a difficult task. As a result, laws and regulations often stagnate, leading to the continued existence of obsolete rules and policies that serve long-forgotten purposes. Recognizing the inertial power of past policies, legislatures over the last few decades have increasingly relied on a perceived solution—temporary legislation. In theory, this measure avoids inertia because it requires legislators to make a deliberate choice to extend it.

This Article argues that temporary legislation is a double-edged sword. While some temporary laws ultimately expire, many perpetuate through cycles of extension and reauthorization. Close examination reveals that temporary legislation often results in its own inertial force, leading to the unintended permanence of what is originally believed to be only a provisional measure. Using a case study from a large public subsidy adopted as a localized fix to a temporary problem, the Article demonstrates how the subsidy has inadvertently grown in scope and in size, creating its own inertial force that made its repeal exceedingly difficult.

Path-dependence dynamics of temporary legislation affect not only present-day policies, but also the ability of legislatures to resist status quo bias and bring about legal change. The Article concludes with normative insights on ways to utilize flexible rulemaking whilst circumventing legislative inaction. Careful design of expiring provisions that is aware of the inertial power of temporary legislation can effectively ensure that laws are kept or discarded given their merits, not by force of history.

## TABLE OF CONTENTS

I. INTRODUCTION.....	2
II. LEGISLATIVE INERTIA .....	8

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A. The Sources of Legislative Inaction .....	8
B. A Remedy and its Unintended Path .....	12
1. Temporary Legislation and its Promise .....	12
2. Criticism and Increased Inertia .....	17
III. PATH DEPENDENCE THEORY .....	20
A. Reactive Sequences and Critical Junctures .....	21
B. Status Quo Bias through Increasing Returns and Positive Feedback .....	23
C. Self-reinforcement and Lock-in .....	25
IV. THE RESEARCH CREDIT AS A CASE STUDY .....	27
A. <i>Positive Feedback for A New Route</i> .....	30
B. <i>The Birth of a New Temporary Path</i> .....	33
C. <i>Reactive Sequences of Renewals</i> .....	34
V. SELF-REINFORCED INERTIA .....	36
A. <i>Non-Profit Organizations and Federal Agencies</i> .....	37
B. <i>Industry Leaders and Professional Trade Associations</i> .....	39
VI. CONCLUSION .....	46
LEGISLATIVE HISTORY APPENDIX .....	49

## I. INTRODUCTION

Scholars have long recognized the dangers of statutory stagnation.<sup>1</sup> Powerful forces create inertia in our laws and statutes, leading to perverse and sometimes bizarre results, such as laws that criminalize the housing of a pirate or the mailing of a mongoose.<sup>2</sup> Less amusing, but of deep economic and social import, are a host of

<sup>1</sup> GUIDO CALABRESI, A COMMON LAW FOR THE AGE OF STATUTES 10 (1982) (noting the harms of inertia and proposing the judiciary is most suitable to hinder legislative inertia). *See also* John Copeland Nagle, *Corrections Day*, 43 UCLA L. REV. 1267, 1282-83 (1996) (noting the disadvantageous nature of legislative inertia); Jonathan H. Adler, *Judicial Federalism and the Future of Federal Environmental Regulation*, 90 IOWA L. REV. 377, 472 (2005) (“The degree of inertia in the legislative process is substantial, and it is far easier to block legislation than to enact it.”). *But See* Jeremy Waldron, *The Core of the Case Against Judicial Review*, 115 YALE L.J. 1346, 1348, 1389 (2006) (reviewing the current criticism on legislative inertia and asserting its significance).

<sup>2</sup> *See* 18 U.S.C. §1716D, 39 U.S.C. §3015(a), and 18 U.S.C. § 42 (laws dealing with nonmailable injurious animals). For a humorous overview of prohibited activities that are considered illegal by Federal Laws today *see* @CrimeADay, Twitter account managed by a criminal defense lawyer that lists every day bizarre activities that are illegal according to obsolete federal laws. *See also* MIKE CHASE, HOW TO BECOME A FEDERAL CRIMINAL: AN ILLUSTRATED HANDBOOK FOR THE ASPIRING OFFENDER 1 (2019) (the book solidifies the list of these blog examples along with citations to the federal laws and regulation); SHERYL LINDSELL-ROBERTS, TED LEVALLIANT, K. R. HOBBIE, MARCEL THEROUX, WACKY LAWS, WEIRD DECISIONS & STRANGE STATUES 7 (2014) (outlining outlandish statues and judicial decisions).

dated tax,<sup>3</sup> sanitary,<sup>4</sup> and safety regulations<sup>5</sup> meant to achieve long-forgotten goals.<sup>6</sup> The inertial force of past legislation is explained by a variety of political and institutional considerations, including limited legislative resources, a status-quo bias, and partisan interests.<sup>7</sup> There is little doubt that the inertial pull of these forces is strong.

To counter legislative inertia, lawmakers have increasingly adopted self-terminating legislation. Examples used over the past few decades include zero-base budget laws,<sup>8</sup> sunset clauses,<sup>9</sup> extenders,<sup>10</sup> temporary-effects laws,<sup>11</sup> and experimental legislation.<sup>12</sup> The common denominator to these legislative tools is that

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<sup>3</sup> For example, 26 U.S.C. §§ 5674 and 5053(e) prohibit a person to brew tax-free beer for personal consumption over a hundred gallons. *Cf. Eliminating Unnecessary Tax Regulations*, 84 C.F.R. § 9231 (2019) (the Treasury Department has proposed to repeal nearly 300 duplicative and obsolete tax regulations dating back to 1942 following an executive order signed by President Trump to review existing regulations and simplify the tax Code.).

<sup>4</sup> Under 9 C.F.R. § 93.415 removing llama manure from a quarantine facility is strictly prohibited unless the llama who made the manure has been released.

<sup>5</sup> 16 C.F.R. §1202.4 renders a federal crime for a matchbook maker to distribute matchbooks that fail to comply with a minimum friction strip, a staple size, and certain cover. Similarly, 36 C.F.R. § 250 prohibits bringing strollers, baby carriages into a zoo's exhibit buildings and public restrooms.

<sup>6</sup> See generally Larry Kramer, *Rethinking Choice of Law*, 90 COLUM. L. REV. 277, 336 (1990) (arguing the need to subordinate obsolete laws that no longer reflect strong policies); Melia Robinson and Erin McDowell, *The Most Ridiculous Law in Every State*, THE INSIDER, Sep. 13, 2019 (claiming to identify the strangest statutes still on the books).

<sup>7</sup> See *infra* Part II.A. See, e.g., Janet L. Hiebert, *New Constitutional Ideas: Can New Parliamentary Models Resist Judicial Dominance when Interpreting Rights?*, 82 TEX. L. REV. 1963, 1978 (2004) (arguing that legislators have a disproportionate interest in ensuring specific objectives rather than the accommodating individual rights).

<sup>8</sup> See Eloise Pasachoff, *The President's Budget as A Source of Agency Policy Control*, 125 YALE L. J. 2181, 2211 (2016) (noting a there is an administrative practice of agencies to use Zero-Based Budgeting to prepare their budget requests - that is, to prepare each year's request as if it were starting at zero.); David Gamage, *Preventing State Budget Crises: Managing the Fiscal Volatility Problem*, 98 CALIF. L. REV. 749, 793 (2010) (claiming Zero-base budgeting is seldom implemented in practice).

<sup>9</sup> "Sunset legislation" was coined in the 1970s by Common Cause, a prominent reformist group that relied on Theodore Lowi's idea of "tenure of statutes." Theodore Lowi, *Lowi's Intent and the Origin of Sunset*, 43 RIPON FORUM 27 (2009) (letter from Professor Lowi how his original intent behind his idea of "the tenure of statutes" transformed by the group.). Black's Law Dictionary defines "sunset laws" as "statutes that govern the continuity of a program or agency by setting an automatic termination at the end of a fixed period unless formally renewed." *Sunset Law*, BLACK'S LAW DICTIONARY (11<sup>th</sup> ed. 2019). See also Yair Listokin, *Learning through Policy Variation*, 118 YALE L.J. 480, 530 (2008) (advocating for the use of sunset provisions as a flexible legislative mechanism). See generally AM. ENTER. INST. FORPUB. POLICY RESEARCH, ZERO-BASED BUDGETING AND SUNSET LEGISLATION 25 (1978) (describing the various reasons for the use of legislation).

<sup>10</sup> See Michael Doran, *Tax Legislation in the Contemporary U.S. Congress*, 67 TAX L. REV. 555 (2014) (noting that the tax particularism that today shows up through extenders legislation has become a marginal feature of the tax legislative process); Victor Fleischer, *Commentary, Tax Extenders*, 67 TAX L. REV. 613 (2014) (defining "extenders" as tax breaks scheduled for repeal).

<sup>11</sup> See Michael Doran, *Intergenerational Equity in Fiscal Policy Reform*, 61 TAX L. REV. 241, 292 (2008) (noting that each legislature should limit the scope of its policymaking to policies having only temporary effects); George K. Yin, *Temporary-Effect Legislation, Political Accountability, and Fiscal Restraint*, 84 N.Y.U.L. REV. 174, 253 (2009) (arguing that enactment of temporary-effect rather than permanent legislation would promote political accountability greater fiscal restraint).

<sup>12</sup> See Edward L. Rubin, *Legislative Methodology: Some Lessons from the Truth-in-Lending Act*, 80 GEO. L.J. 233, 303 (1991) (describing experimental legislation as the legislature enacting a standing authorization for agencies to implement experimental rules); SOFIA RANCHORDAS, CONSTITUTIONAL SUNSETS AND EXPERIMENTAL LEGISLATION: A COMPARATIVE PERSPECTIVE 10 (2014) (noting experimental lawmaking is beneficial in times of uncertainty); Edward L. Rubin, *Legislative Methodology: Some Lessons from the Truth-in-Lending Act*, 80 GEO.

they set an “expiration date” for legislation.<sup>13</sup> The traditional view is that such measures counter inertia, as they make deliberation and intentional statutory action necessary to preserve legislation.

Public choice theorists argue that such measures serve an alternative, more sinister purpose.<sup>14</sup> In their view, temporary legislation is a tool to extract rents from industry players.<sup>15</sup> It requires interest groups to constantly seek the approval and favor of legislators so as to not lose their support. Indeed, there is some evidence to this effect.<sup>16</sup>

However, both the standard narrative and the public-choice theory approach miss a large part of the picture. This Article argues that temporary legislation results in an inertial force of its own. By applying path dependence theory to case studies of temporary legislation, the Article demonstrates how temporary legislation can often inadvertently become permanent—not through intent or design, but through the inherent inertial force of such legislation. What public choice theorists miss, then, is

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L.J. 233, 303 (1991) (describing experimental legislation as the legislature enacting a standing authorization for agencies to implement experimental rules).

<sup>13</sup> While each of these categories portrays different approaches and mechanisms, this Article will use the terms “expiring legislation” or “temporary legislation” interchangeably to denote laws that expire on their own after a set period of time. On temporary legislation *see generally* Jacob E. Gersen, *Temporary Legislation*, 74 U. CHI. L. REV. 247, 247 (2007) (describing temporary legislation as statutes containing clauses limiting the duration of their own validity.). *See also* William G. Gale & Peter R. Orszag, *Sunsets in the Tax Code*, 99 TAX NOTES 1553, 1554 (2003) (detailing the various tax extenders added in the 2001 Bush tax cuts); Elizabeth Garrett, *Comment, Accounting for the Federal Budget and Its Reform*, 41 HARV. J. ON LEGIS. 187, 190 (2004) (providing examples of the effects of sunset provisions on budget rules and fiscal policy decisions); Manoj Viswanathan, *Note, Sunset Provisions in the Tax Code: A Critical Evaluation and Prescriptions for the Future*, 82 N.Y.U. L. REV. 656, 658 (2007) (determining that the effect of tax extenders is to create permanent status through temporary sunset provisions); AM. ENTER. INST. FOR PUB. POLICY RESEARCH, *ZERO-BASED BUDGETING AND SUNSET LEGISLATION* 25 (1978) (debating the reasons for sunset legislation).

<sup>14</sup> On public choice theory and political rent seeking, *see generally* Gordon Tullock, *The Theory of Public Choice*, in GORDON TULLOCK ET AL., *GOVERNMENT FAILURE: A PRIMER IN PUBLIC CHOICE* 3, 3-6 (2002) (McChesney, 1987, 1998 ch4); FRED MCCHESENEY, *MONEY FOR NOTHING: POLITICIANS, RENT EXTRACTION, AND POLITICAL EXTORTION* 1 (1997); D. Mueller, *Public Choice* 117-19 (1979); Dennis C. Mueller *Public Choice: A Survey*, 14 J. OF ECON. LIT. 395, 396 (1976); Gordon Tullock, *the Welfare Costs of Tariffs, Monopolies, and Theft*, 5 W. Econ. J. 224 (1967).

<sup>15</sup> *See* Rebecca M. Kysar, *The Sun Also Rises: The Political Economy of Sunset Provisions in the Tax Code*, 40 GA. L. REV. 335, 337 (2006) (describing temporary provisions as “a legislative panacea to the ills of modern government and arguing that it is worthwhile for politicians to keep legislation temporary to continue to receive rent payments). *See also* Victor Fleischer, *Commentary Tax Extenders*, 67 TAX L. REV. 613, 624 (2004) (claiming that tax extenders are bad policy that create political gridlock). *See also* Theodore P. Seto, *Drafting a Federal Balanced Budget Amendment That Does What It Is Supposed to Do (and No More)*, 106 YALE L.J. 1449, 1465-66 (1997) (arguing public choice theory plays a central role in maintaining the opportunities of political players to remain relevant); Daniel Shaviro, *Beyond Public Choice and Public Interest: A Study of the Legislative Process as Illustrated by Tax Legislation in the 1980s*, 139 U. PA. L. REV. 1, 66-68 (1990) (arguing one of the main legislative motivation is rent extracting).

<sup>16</sup> *See* Julie A. Roin, *United They Stand Divided They Fall: Public Choice Theory and the Tax Code*, 74 CORNELL L. REV. 62, 63 (1988) (describing the political process by which taxpayers invest time and efforts to maximize their after-tax gains); Kysar, *The Sun Also Rises*, *supra* note 15, at 362 (discussing the role of interest groups efforts in extending sunset provisions).

the fact that so much temporary legislation expires<sup>17</sup> or becomes permanent,<sup>18</sup> in contradiction to the supposed interests of legislatures to extract rents.

Understanding the inertial power of temporary legislation is important in its own right. Yet, this Article also offers first steps in identifying the forces that are most relevant to the design of optimal policymaking today and permanence of temporary legislation. By recognizing these dynamics, policymakers can better identify which temporary measures are more likely to become irremovable fixtures and which will be amenable to future change.

This Article unfolds in four parts. Following this introduction, Part II explores the rise of temporary legislation. Legislators use this statutory mechanism to avoid inertia by requiring frequent reassessment of existing law, allowing for revisiting new information, fine-tuning policymaking errors, adjusting changes in social or technological circumstances, and rescinding ineffective rules.<sup>19</sup> Temporary legislation is also believed to increase government oversight by requiring the reevaluation of policies and programs and allowing legislators to gather information before fully committing to a permanent new policy.<sup>20</sup> Alas, as this Part will demonstrate, in some circumstances temporary legislation—a tool meant to curb inertia—may inadvertently create its own inertial force.

Part III lays out the elements of path dependence theory that go well beyond the maxim that “history matters” or that our past shapes our future. In economics and the social sciences, path dependence theory categorically focuses on *processes* of

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<sup>17</sup> Some examples of temporary legislation that expired include, but are not limited, laws that date back to the Sedition Act of 1798, 1 Stat. 596 [ch.74] (expired 1801) that permitted the deportation, fine, or imprisonment of anyone deemed a threat or publishing “false, scandalous, or malicious writing” against the government of the United States. The Federal Assault Weapons Ban was added as a subsection of the Violent Crime Control and Law Enforcement Act of 1994, Pub. L. No. 103-322 and prohibited the manufacture for civilian use of semi-automatic assault firearms with certain large capacity ammunition magazines. The ban expired on September 13, 2004. Several of the government surveillance portions in the Patriot Act, Pub. L. No. 107-56, 115 Stat. 272 (2001) expired in 2005 and reauthorized until 2011. The surveillance portion lapsed on June 1, 2015, restored in the USA Freedom Act until 2019 but has recently expired again. The Violence against Women Act of 1994 (VAWA), Pub. L. No. 103-322 signed into law by President Bill Clinton in 1994 provided government funding to battle and prosecute violent crimes against women. VAWA was reauthorized a number of times during 2000, 2013, and most recently 2019. VAWA expired in Feb. 2019.

<sup>18</sup> See, e.g., the Orphan Drug Tax Credit program was a temporary program enacted in 1983 that ultimately became permanent in 1997. The credit provides subsidy to orphan status drugs and biologics defined as intended to treat rare diseases that affect fewer than 200,000 people in the U.S. See 26 U.S.C. § 45(c); The Tax Cuts and Jobs Act of 2017 (Pub. L. No. 115-97, §13401) reduced the credit rate from 50 percent to 25 percent. At the end of the fiscal cliff in 2012, President Obama signed into law the American Taxpayer Relief Act of 2012 that made permanent 82 percent of President Bush’s tax cuts. Chye-Ching Huang, Center on Budget and Policy Priorities, *Budget Deal Makes Permanent 82 Percent of President Bush’s Tax Cuts* (Jan. 3, 2013), <https://www.cbpp.org/research/budget-deal-makes-permanent-82-percent-of-president-bushs-tax-cuts> (last visited Feb. 20, 2020).

<sup>19</sup> Listokin, *supra* note 9, at 529 (claiming temporary laws may be a good mechanism for optimal policy because it makes policies more reversible and enhances efficient policymaking in the search for an optimal solution).

<sup>20</sup> See Lewis Anthony Davis, *Review Procedures and Public Accountability in Sunset Legislation: An Analysis and Proposal for Reform*, 33 ADMIN. L. REV. 393 (1981).

change.<sup>21</sup> It attributes historical sequences to institutional patterns, increasing returns dispositions, and deterministic properties.<sup>22</sup> Identifying path dependence, therefore, involves tracing a given result back to reactive sequences—chains of inter-related unforeseen events.<sup>23</sup> This Part concludes that the ability of decision makers to break a certain pattern and divert from a chosen path critically depends on certain specific dynamics.

Part IV draws insights and applies path dependence theory using a case study to demonstrate the inertial force of temporary legislation. It focuses on a prominent measure in tax law—the “research credit” provision—a temporary measure meant to encourage research and experimentation using large financial incentives.<sup>24</sup> Over several decades, this measure faced multiple lapses, renewals, and retroactive extensions, until it finally became permanent.<sup>25</sup> The path of the research credit rose with at each “critical juncture” that provided an opportunity for lawmakers to choose between two or more policy options.<sup>26</sup> Once a selection was made, it created inherent inert force via “reactive causal sequences” of frequent extension and renewal with dynamics of “increasing returns” and “positive feedback” that helped establish this legal arrangement and prevent diversion from the initial choice.<sup>27</sup>

Thereafter, Part V reveals that non-profits and associations that organize the collective action of constituents (deriving benefits from the path) “self-reinforced” that choice (as well as their own existence) and helped curb legal change or diversion from the path.<sup>28</sup> With these elements present, the research credit, meant in 1981 to be a

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<sup>21</sup> See James Mahoney, *Path Dependence in Historical Sociology*, 29 THEORY & SOCIETY 507 (2000) (discussing the difference between general historical analysis and path dependence scholarship).

<sup>22</sup> See *infra* Part III.

<sup>23</sup> In some cases, path-dependence studies focus on deviant cases that have rare or unique outcomes that could not else have been predicted. See Mahoney, *supra* note 21, at 508.

<sup>24</sup> 26 U.S.C. § 41 was added by § 221 of the Economic Recovery Tax Act of 1981, Pub. L. No. 97-34, 95 Stat. 172 (1981).

<sup>25</sup> See generally Mirit Eyal-Cohen, *Lessons in Fiscal Cyclical Activism*, 48 CONN. L. REV. 873, 876 (2016) (detailing the historical circumstances of the creation and repeal of another form of temporary legislation).

<sup>26</sup> See *infra* Part III.A. See also Douglas J. Puffert, *Path Dependence, Network Form, and Technological Change*, in HISTORY MATTERS: ECONOMIC GROWTH, TECHNOLOGY, AND POPULATION (William Sundstrom *et al.*, eds., 2004) (arguing path dependence can be influenced by *a priori* determinant such as technology, factor endowments, preferences, and institutions, as well as specific contingent events.). See also Margaret Levi, *A Model, a Method, and a Map: Rational Choice* in MARK I. LICHGATE & ALAN S. ZUCKERMAN, *COMPARATIVE AND HISTORICAL ANALYSIS, COMPARATIVE POLITICS: RATIONALITY, CULTURE, AND STRUCTURE* 19-41 (1997) (“the branch on which a climber begins is the one she tends to follow.”).

<sup>27</sup> See *infra* Part V. See generally Mark J. Roe, *Chaos and Evolution in Law and Economics*, 109 HARV. L. REV. 641, 645-646 (1996) (pointing to the effectiveness and strength of the chosen pattern as determining the ability to break out of such pattern); Paul Pierson, *Increasing Returns, Path Dependence, and the Study of Politics*, 94 AM. POLI. SCI. REV. 251, 252 (2000) (defining positive feedback as the condition in which a path dependent is created within a polity). See also Daron Acemoglu, Simon Johnson, & James A. Robinson, *The Colonial Origins of Comparative Development: An Empirical Investigation*, 91 AM. ECON. REV. 1369, 1373-77, 1395 (2001) (exemplifying increasing returns dynamics).

<sup>28</sup> See *infra* Part V. See also Pierson, *supra* note 27, at 260 (arguing that organizations have a strong tendency to persist due self-reinforcing dynamics associated with collective action processes).

temporary four-year measure, has perpetuated to present-day because the cost of switching to an alternative has become too high.<sup>29</sup>

What was meant to be a temporary measure to address a localized social issue is now the source of large and entrenched subsidies. Today, almost 18,000 companies collectively receive over \$12.5 billion through the research credit program.<sup>30</sup> Whether this policy is effective or not is not the issue; rather, the main point is that such a large and consequential program arose not from careful deliberation, but from an unintended set of inertial forces created by legislation originally designed as a temporary fix.

The Article concludes with some initial thoughts and suggestions regarding more effective ways to utilize temporal rulemaking whilst circumventing legislative inertia. It demonstrates that legal adaptation of path dependence theory can provide important insights on expiring legislation recently added to the U.S. Code.<sup>31</sup> It suggests adopting certain mechanisms and default rules to allow experimentation with expiring provisions while avoiding statutory constriction through inertia.

There are many areas of the law permeated by legislative inertia. The staying power of past decisions can go well beyond present-day cost-benefit analyses. Path dependence theory serves as an important avenue to explain not only the social entrenchment of a legislative route. It also has the potential to open new frontiers of legal research and point our attention to overlooked paths and sequences.<sup>32</sup> Temporary legislation is not formed in a void; it is often created when there are critical national concerns and pressures exerted on legislators to achieve economic or social outcomes. Yet, once these exigencies are removed, rules and procedures, as well as organizations that rely on their existence, preserve and expand their path to invite

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<sup>29</sup> See generally, Lim, *supra* note 31, at 508 (describing the ability of increased switching costs to entrench customers). See also Listokin, *supra* note 9, at 530 (discussing high constitutional inertia due to the extremely high “transaction costs” of changing constitutional policy).

<sup>30</sup> See Internal Revenue Service, Statistics of Income Tax Stats- Integrated Business Data, *Table 1: Corporations Claiming a Credit, by Industrial Sector, Tax Year 2014*, <https://www.irs.gov/statistics/soi-tax-stats-corporation-research-credit> (last visited Feb. 20, 2020).

<sup>31</sup> For a list of current expiring provisions in the tax context see STAFF OF JOINT COMM. ON TAX’N, JCX-1-20, LIST OF EXPIRING FEDERAL TAX PROVISIONS 2020-2029, Jan. 16, 2020, <https://www.jct.gov/publications.html?func=startdown&id=5240> (last visited Feb. 20, 2020). See also Darla Mercado, *These Three Tax Breaks for 2018 Are Still Up in The Air*, CNBC, Feb. 6, 2019, <https://www.cnbc.com/2019/02/06/congress-has-yet-to-approve-these-valuable-tax-breaks-for-2018.html> (naming mortgage insurance, debt forgiveness of foreclosure, and tuition fees for higher education as temporary legislation that are up for renewal this year).

<sup>32</sup> See, e.g., Oona A. Hathaway, *Path Dependence in the Law: The Course and Pattern of Legal Change in a Common Law System*, 86 IOWA L. REV. 601, 604 (2001) (examining the common law concept of precedents from a path dependent doctrine); Lucian A. Bebchuk & Mark J. Roe, *A Theory of Path Dependence in Corporate Ownership and Governance*, 52 STAN. L. REV. 127 (1999) (discussing path dependence theory regarding initial choices of incorporation). See also Daryl Lim, *Copyright under Siege: An Economic Analysis of the Essential Facilities Doctrine and the Compulsory Licensing of Copyrighted Works*, 17 ALB. L.J. SCI. & TECH. 481, 508 (2007) (describing the lock in created when switching costs from one software to another are too high); Marcel Kahan & Michael Klausner, *Path Dependence in Corporate Contracting: Increasing Returns, Herd behavior and Cognitive Biases*, 74 WASH. U. L. Q. 347 (1996) (exemplifying the use of a contract term by firms, noting that the more people utilize that term, the greater the benefit from it).



more participants and increase their returns. These path dynamics may lock in temporary measures initially taken to prevent legislative inertia and encourage change, creating unintended consequences and becoming rooted in our legal system.

## II. LEGISLATIVE INERTIA

[Inertia], or innate force of matter, is a power of resisting by which everybody as much in it lies, continues in its present state, whether be it or of moving forwards in a right line.<sup>33</sup>

Isaac Newton

In physical science, dormant objects and those that move in a straight line at constant speed will continue resting or moving unless a force interrupts them.<sup>34</sup> In the legal context, inertia describes the preservation of the status quo.<sup>35</sup> Both continuity and evolution are crucial factors to the stability of any legal system.<sup>36</sup> Modern law has to be functional and responsive to financial and natural crises. Changing circumstances may render statutes inconsistent with new social or economic landscapes. Obsolescent and anachronistic laws prevent legislatures and courts from harmonizing legal rules with present-day conditions and the demands of shifting majorities.<sup>37</sup> Given continuous demands for legal reform nowadays, it is worth asking: what causes legislative inertia? Why do various aspects of the law persist and remain unchanged?

### A. *The Sources of Legislative Inaction*

There are many facets of inertia that reflect a status quo bias and that legislatures must overcome in order to enact a law.<sup>38</sup> In their seminal book *The Legal Process*, Hart and Sacks argued that lawmakers have a natural inclination to legislative inaction, as “other measures have a stronger claim on the limited time and energy of

<sup>33</sup> NEWTON'S PRINCIPIA: THE MATHEMATICAL PRINCIPLES OF NATURAL PHILOSOPHY 73 (Tr. Andrew Motte, 1846).

<sup>34</sup> See e.g., Christopher Gresov et al., *Organizational Design, Inertia and the Dynamics of Competitive Response*, 4 ORGAN. SCI. 181, 182 (1993) (describing inertia as property of system that continues to move in straight line unless acted upon by external force). See also Heather A. Haverman, *Between a Rock and a Hard Place: Organizational Change and Performance under Conditions of Fundamental Environmental Transformation*, 37 ADMIN. SCI. Q. 48, 49-50 (1992) (describing inertia dynamics in the loan industry).

<sup>35</sup> See Cass R. Sunstein, *Deciding by Default*, 162 U. PA. L. REV. 1, 17 (2013) (discussing the effect of automatic enrollment in creating inertia in people's choices and noting “[i]n view of the power of inertia and the tendency to procrastinate, people may simply continue with the status quo.”). See also JERRY L. MASHAW & DAVID L. HARFST, *THE STRUGGLE FOR AUTO SAFETY* (1990) (describing a process of administrative agencies' lack of action as inertia); Chris William Sanchirico, *Tax Inertia: A General Framework with Specific Application to Contemporary Business Tax Reform*, 69 TAX L. REV. 135, 162 (2016) (describing “tax inertia” as the tax considerations that weigh against a decisionmaker's choice to switch from a status quo investment to an alternative).

<sup>36</sup> CALABRESI, *supra* note 1, at 3.

<sup>37</sup> *Id.* at 4 (“[a]nachronistic laws, whether statutory or judicial, must be eradicated.”).

<sup>38</sup> For example, the legal doctrine of stare decisis. See generally Lawrence C. Marshall, *‘Let Congress Do It’: The Case for an Absolute Rule of Statutory Stare Decisis*, 88 MICH. L. REV. 177, 190-191 (1989) (discussing the obstacles and inertia created by the doctrine).

the [legislative] body.”<sup>39</sup> They recognized the perils of attributing “the weight of government inertia on the side of social inaction rather than of action.”<sup>40</sup> The U.S. government, in their opinion, has reached its highest state of development, and the vested interests, coinciding with institutional inertia, are already aiming toward the achievement of their settled objectives.<sup>41</sup> Taking a different view, Ronald Dworkin stated that legislative inertia stems from a lack of sufficient legislative time and priorities.<sup>42</sup> Lack of legislative time, he claimed, also prohibits legislatures from passing new laws even though they acknowledge the need to do so.<sup>43</sup> Similarly, this failure to move forward results in unsatisfactory consideration of existing statutes.

In his book *A Common Law for the Age of Statutes*, Guido Calabresi professes that over the last half-century, the U.S. has gone through a process of “statutorification,” by which written laws came to dominate our legal system.<sup>44</sup> One of the side effects of this process, he acknowledges, is that legislative inertia became a real and substantial phenomenon that threatens the integrity of the law.<sup>45</sup> He declares that we cannot continue to be “living with aging statutes and relying on time to render them totally irrelevant.”<sup>46</sup> While bringing legislation up to date would be the optimal solution, Calabresi acknowledges that the legislature is not always up to the task.<sup>47</sup> Instead, he proposes a theory that empowers the judiciary to defeat legislative inertia by transferring the burden of upholding an obsolete law to those seeking to rely on it.<sup>48</sup> He concludes that courts have better interpretative tools than legislatures for reading statutes in a manner consistent with the current legal framework.<sup>49</sup>

Nevertheless, Calabresi also warns about making legislative changes too often.<sup>50</sup> He argues that if all statutes were to be reexamined *de novo* every so often, it will create imbalance in lawmaking. Too much change, he worries, will create a statutory modern world with little continuity.<sup>51</sup> On the other hand, Professor Daniel Farber has determined that legislative inertia is of “fundamental” importance.<sup>52</sup> He argues that in order to gain the benefits of stability, we must maintain some degree of “legislative

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<sup>39</sup> ALBERT SACKS AND HENRY M. HART JR., *THE LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF LAW* 1395 (1958).

<sup>40</sup> *Id.* at 850.

<sup>41</sup> *Id.* at 106.

<sup>42</sup> See Ronald Dworkin, *Political Judges and the Rule of Law*, in *ARGUING ABOUT LAW* 193, 200 (Kavanagh ed., 2009) (“Legislative time is a scarce resource, to be allocated with some sense of political priorities...”).

<sup>43</sup> *Id.* (“...it may well be that a judicial decision would be overruled if Parliament had time to pass every law it would like to pass, but will not be overruled because Parliament does not.”).

<sup>44</sup> CALABRESI, *supra* note 1, at 4 (“we have become a nation governed by written laws.”).

<sup>45</sup> *Id.* at 3 (“Legislative inertia... [is] a fact of life.”).

<sup>46</sup> *Id.* at 80.

<sup>47</sup> See John Copeland Nagle, *Corrections Day*, 43 *UCLA L. REV.* 1267, 1286 (1996) (describing Calabresi’s approach to legislative inertia).

<sup>48</sup> CALABRESI, *supra* note 1, at 5-6.

<sup>49</sup> *Id.*

<sup>50</sup> See CALABRESI, *supra* note 1, at 1 (1982) (arguing that as statutes become the primary source of law there have been several reactions of courts and legislatures to preserve continuity and change in the law).

<sup>51</sup> CALABRESI, *supra* note 1, at 60.

<sup>52</sup> See Daniel A. Farber, *Statutory Interpretation and Legislative Supremacy*, 78 *GEO. L.J.* 281, 308 (1982) (describing the benefits of legislative inertia).

inertia” in our system. Accordingly, he proposes that we include legislative inertia in our search for optimal legislative decision.<sup>53</sup> Others reiterated this idea, claiming that we should stop treating legal inertia as a true pathology that reflects a malfunction of democracy.<sup>54</sup>

In delving into the question of how legislative inertia is created, scholars blamed the power of institutional constraints and partisan political dynamics in creating “blind spots” and blockages in the legislative process.<sup>55</sup> They criticized legislative stagnation as hindering efficiency due to high costs of legislative change.<sup>56</sup> Multiple levels of congressional approval create costs related to placing an item on the legislative agenda, learning about relevant issues, and reconciling different opinions on the optimal policy.<sup>57</sup> With such strong obstacles, enacting change is not an easy task. It needs to overcome a presumption in favor of the existing state of affairs.<sup>58</sup> Doing so involves attending to competing considerations in a way that is more challenging than merely protecting the existing state of affairs.<sup>59</sup> The degree of inertia in the legislative process is extensive, therefore, because it is far less costly to impede legislation than to pass it.<sup>60</sup>

Some commentators have attributed legislative inertia to matters beyond the control of legislators. They have identified two main categories of legislative inertia: priority-driven and coalition-driven.<sup>61</sup> Priority-driven inertia arises from the time-consuming nature of the law-making process and the need to prioritize the number of changes the legislature can enact within a legislative session.<sup>62</sup> Legislators have a packed agenda involving a variety of complex issues. Resolving these matters requires a large time commitment and policy expertise. Representatives who seek reelection must devote the majority of their time and energy to constituency service.<sup>63</sup>

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<sup>53</sup> *Id.* (“It is not at all clear that a democratic system could function”).

<sup>54</sup> *See* Waldron, *supra* note 1, at 1389 (2006) (asserting the significance of legislative inertia.).

<sup>55</sup> *See also* Nagle, *supra* note 47, at 1282-83 (noting the disadvantageous nature of legislative inertia); Jonathan H. Adler, *Judicial Federalism and the Future of Federal Environmental Regulation*, 90 IOWA L. REV. 377, 472 (2005) (“The degree of inertia in the legislative process is substantial, and it is far easier to block legislation than to enact it.”).

<sup>56</sup> *See, e.g.*, Listokin, *supra* note 9, at 530 (discussing high constitutional inertia due to the extremely high “transaction costs” of changing constitutional policy).

<sup>57</sup> *Id.* at 573.

<sup>58</sup> *Id.* at 575.

<sup>59</sup> *Id.* at 585.

<sup>60</sup> *See* Jonathan H. Adler, *Judicial Federalism and the Future of Federal Environmental Regulation*, 90 IOWA L. REV. 377, 472 (2005) (discussing legislative inertia in the environmental context). *See also* Neal E. Devins, *Appropriations Redox: A Critical Look at the Fiscal Year 1988 Continuing Resolution*, 1988 DUKE L.J. 389, 389 (1988) (noting the practice of “continuing resolutions” as funding devices enacted whenever Congress is unable to pass one or more of the thirteen regular appropriation bills by the end of the budget cycle.).

<sup>61</sup> *See infra* notes 63-70 and accompanying text. *See also* Rosalind Dixon, *The Core Case for Weak-Form Judicial Review*, 38 CARDOZO L. REV. 2193, 2194 (2017) (describing the two main forms of legislative burdens of inertia).

<sup>62</sup> Limited time and resources impose significant constraints on the legislative process. *Id.* at 2195.

<sup>63</sup> *See generally* DAVID R. MAYHEW, CONGRESS: THE ELECTORAL CONNECTION 116 (1974) (discussing the scope of time and energy devoted to constituency).

This leaves little time to devote to considering and leading major legislative change.<sup>64</sup> Legislators often lack the expertise to resolve complicated questions and have only limited legislative time and resources.<sup>65</sup> Moreover, they do not want to risk alienating more constituents than they befriend by opining on controversial questions.<sup>66</sup> Legislators decide their priorities for supporting, and the right timing to propose, new legislation. As such, they possess an institutional power of inertia by refusing to attend sooner to certain policy problems in need of legislative attention.<sup>67</sup> This is especially relevant in cases where legislators have an inherent inability to anticipate unintended consequences and future problems that may develop with the adoption of a proposed law.<sup>68</sup>

The more cynical commentators claim that legislators deliberately choose not to make difficult policy decisions for political reasons.<sup>69</sup> Coalition-driven forms of inertia arise due to the dynamics of competition between political parties.<sup>70</sup> The desire to appeal to a broader electoral base promotes inertia by encouraging politicians to adopt a legislative agenda that does not divide party members.<sup>71</sup> Accordingly, legislators assign low priority to and push aside legislative changes that do not enjoy strong majority support.<sup>72</sup> Michael Perry claims that the burden of legislative inertia involves the difficult task of “capturing the attention of a sufficient number of legislators, of surviving various institutional hurdles (such as committee votes), [and] of winning the support of a majority of legislators” by those seeking either to enact or repeal a certain law.<sup>73</sup>

To summarize, legislative inertia is a substantial limitation on legislatures that seek to instigate reform. It can block legislative change even if there is no significant opposition.<sup>74</sup> For example, if a legal rule is up for reauthorization in the future, that

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<sup>64</sup> See Richard Pierce, *Alternative Compensation Schemes, and Tort Theory: Institutional Aspects of Tort Reform*, 73 CALIF. L. REV. 917, 918 (1985) (surveying the different reasoning for legislative inertia.).

<sup>65</sup> See Richard B. Stewart, *The Reformation of American Administrative Law*, 88 HARV. L. REV. 1669, 1796 (1975) (noting representatives have limited time to be prepared and to ensure interest of constituents are met).

<sup>66</sup> See Pierce, *supra* note 64, at 919.

<sup>67</sup> See Maxwell L. Stearns, *Standing Back from the Forest: Justiciability and Social Choice*, 83 CALIF. L. REV. 1309, 1319 (1995) (arguing “legislatures are free not to decide issues presented to them for consideration in the form of bills. In other words, legislatures, unlike courts, have the institutional power of inertia.”).

<sup>68</sup> See Kenneth Culp Davis, *A New Approach to Delegation*, 36 U. CHI. L. REV. 713, 720 (1969) (arguing policymakers must decide many major questions that could not have been anticipated at the time of the statutory enactment); Aranson, Gellhorn & Robinson, *A Theory of Legislative Delegation*, 68 CORNELL L. REV. 1 (1982) (noting situations where Congress was unable to anticipate the advent of a major structural innovations).

<sup>69</sup> See Pierce, *supra* note 64, at 920.

<sup>70</sup> See Rosalind Dixon, *A Democratic Theory of Constitutional Comparison*, 56 AM. J. COMP. L. 947, 968 (2008) (discussing coalition-driven inertia in the legislative process).

<sup>71</sup> See Dixon, *supra* note 61, at 2210 (suggesting ways to overcome coalition-driven legislative burdens of inertia).

<sup>72</sup> *Id.* at 2199. See also Michael J. Perry, *Protecting Human Rights in a Democracy: What Role for Courts?*, 38 WAKE FOREST L. REV. 635, 655 (2003) (noting legislators avoid making decisions that will displease major constituencies).

<sup>73</sup> M. PERRY, MORALITY, POLITICS, AND THE LAW 304 (1988). But See Christopher H. Schroeder, *Prophets, Priests, and Pragmatists*, 87 MINN. L. REV. 1065, 1070 (2003) (pointing to the advantages of inertia in times of highly divisive environmental politics).

<sup>74</sup> See John Copeland Nagle, *Corrections Day*, 43 UCLA L. REV. 1267, 1282-83 (1996) (discussing the negative

fact, in and of itself, can operate as a disincentive for currently undertaking a legislative action.<sup>75</sup> Next, this Article demonstrates that legislative inertia can develop even in the context of temporary legislation when legislative reassessment happens on a frequent basis. It will reflect on a number of explanations the literature has invoked for the adoption of temporary legislation rather than a permanent law or mere legislative indecision.

### *B. A Remedy and its Unintended Path*

Temporary legislation contains provisions that determine the expiration of a law or regulation within a predetermined period. Such provisions automatically repeal the subject matter legislation when it is no longer necessary due to fulfilling its purpose or achieving its desired effect. Prior to its expiration, temporary legislation is subject to congressional evaluation after which it may be extended or eliminated. The following will describe how temporary legislation was sought as a way to improve the viability of public administration, tackle excessive bureaucracy, reverse legislative inertia, manage emergencies, and lessen regulatory pressures. Thereafter, unintended consequences will reveal that temporary legislation may not always deliver its goal.

#### 1. Temporary Legislation and its Promise

The idea of temporary legislation is not new. Thomas Jefferson strongly promoted legislative change by proposing that all statutes and constitutions should last no more than 19 years.<sup>76</sup> In the first Congress, Maddison proposed that the Impost Act (imposing important taxes) will contain an expiration clause.<sup>77</sup> In their eyes, excessive stability and obsolescence was not desirable, as the government ought to balance the competing concerns for continuity and change.<sup>78</sup> American political scientist Theodore Lowi was considered the “father” of the temporary legislation movement in regulations, statutes, and agency rules.<sup>79</sup> In his book *The End of Liberalism*, he proposed enacting a “Tenure of Statutes” act that would put a 5-10

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aspects of legislative inertia).

<sup>75</sup> *Id.* at 1282 (“If a statute is coming up for reauthorization in three years, that can operate as a disincentive against acting to solve a particular problem now.”).

<sup>76</sup> Letter from Thomas Jefferson to James Madison (Sept. 6, 1789), in 12 *The Papers of James Madison* 382, 385 (Charles F. Hobson et al. eds., Univ. Press of Va. 1979) (“Every constitution then, and every law, naturally expires at the end of 19 years. If it be enforced longer, it is an act of force, and not of right.”).

<sup>77</sup> *Gazette of the United States* (May 20, 1789), reprinted in Charlene Bangs Bickford, Kenneth R. Bowling, and Helen E. Veit, eds., 10 *Documentary History of the First Federal Congress of the United States of America* 676, 676 (Johns Hopkins 1992) cited in Caleb Nelson, *Originalism and Interpretive Conventions*, 70 *U. CHI. L. REV.* 519, 540 n.94 (2003) (reviewing the founders’ debates and analyzing their justifications for rejecting the idea of perpetual laws).

<sup>78</sup> *See Id.* at 541. *See also* Richard E. Myers II, *Responding to the Time-Based Failures of the Criminal Law Through A Criminal Sunset Amendment*, 49 *B.C. L. REV.* 1327, 1358 (2008) (reviewing the letter exchange between Jefferson and Madison regarding Jefferson’s sunset proposal).

<sup>79</sup> Theodore Lowi, *Lowi’s Intent and the Origin of Sunset*, 43 *RIPON FORUM* 27 (2009) (letter from Professor Lowi on his original intent behind his idea of “the tenure of statutes”).

year termination date on all statutes that create federal administrative agencies.<sup>80</sup> Lowi termed his reform proposal “juridical democracy” meant to battle “interest-group liberalism.”<sup>81</sup> He proposed improving government efficiency and the integrity of laws by breaking up the capture of administrative agencies by interest groups. Lowi suggested that a legislature would routinely obtain a renewed justification as a law or an agency’s termination date approached.<sup>82</sup>

However, the idea of enacting expiring legislation was not the popular consensus. The “default” choice for promoting stability and flexibility became the practice of enacting statutes intended to persist indefinitely unless they are repealed. Expiring legislation thereafter emerged as a reaction to general discontent with unrestrained governmental growth, excessive bureaucracy, and public spending.<sup>83</sup> The use of such legislation spiked during the early 1970s in response to the unprecedented growth in the number of administrative agencies and their powers.<sup>84</sup> The mid-1970s period that followed saw a steep rise in the enactment of expiring legislation at the state level, laws that were passed in hopes of abolishing redundant programs and agencies.

It is worth noting that scholars have often discussed expiring legislation in the context of legislative entrenchment as representing a mirror image of two different approaches.<sup>85</sup> Legislative entrenchment denotes “the enactment of either statutes or internal legislative rules that are binding against subsequent legislative action in the same form.”<sup>86</sup> For example, an entrenching clause can be a requirement of a supermajority to repeal a rule, which prevents the later legislature from affirmatively rescinding the statute. In a similar manner, expiring legislation prohibits the later legislature to continue a statute by doing nothing or refusing to repeal it.<sup>87</sup> The anti-entrenchment doctrine, by which legislatures cannot make irreversible policies, supported the enactment of temporary legislation as a mechanism to avert entrenchment.

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<sup>80</sup> Theodore Lowi, *THE END OF LIBERALISM* 70 (1969) (presenting the idea of temporary legislation).

<sup>81</sup> *Id.* at 311 (denoting interest-group liberalism as a public philosophy that creates clientelism via the broad expansion of public programs such as the “Great Society.”)

<sup>82</sup> *Id.* at 342.

<sup>83</sup> Hon. Frank H. Easterbrook, Prof. William N. Eskridge, Jr., Mr. Philip K. Howard, Prof. Thomas W. Merrill and Hon. Jeffrey S. Sutton, *Showcase Panel IV: A Federal Sunset Law: The Federalist Society 2011 National Lawyers Convention*, 16 *TEX. REV. LAW & POL.* 339, 341 (2012) (discussing Lowi’s “tenure of statutes” act idea and how a reform group “Common Cause” has seized it and changed it to “sunset laws” movement.). *See also* Mark B. Blicke, *The National Sunset Movement*, 9 *SETON HALL LEGIS. J.*, 210-12 (1985).

<sup>84</sup> *See* JAMES L. SUNDQUIST, *THE DECLINE AND RESURGENCE OF CONGRESS* 419 (2002) (describing the resurgence of expiring legislation and the significance of the congressional action during the 1970s that challenged fundamental concepts of the presidential leadership model).

<sup>85</sup> Posner & Vermeule, *supra* note 93, at 1665-66 (maintaining that entrenchment is the mirror image of expiring legislation thus the anti-entrenchment doctrine is inconsistent with the undisputed congressional authority to enact temporary laws); Listokin, *supra* note 9, at 535.

<sup>86</sup> *Id.* at 1667. *See also* *Newton v. Comm’rs*, 100 *U.S.* 548, 559 (1879); 1 William Blackstone, *Commentaries* 90.

<sup>87</sup> *See* Posner & Vermeule, *supra* note 93, at 1697.

Temporary legislation has been viewed as furthering the principle of separation of powers by limiting the extraordinary powers of Congress to a shorter period and mandating legislative reconsideration and control.<sup>88</sup> It has been regarded as controlling legislative inertia by conferring a temporary character to a law.<sup>89</sup> The sustained legitimacy of a rule or a program depends upon a succeeding new legislative decision. Placing temporal limits and dispositions on a legal rule or agency curbs the duration of government powers and guarantees a more frequent dialogue between the legislature and constituents.<sup>90</sup> By confirming that laws and rules will be terminated or reevaluated, expiring provisions can improve political accountability and transparency.<sup>91</sup> They can avert inertia and continued adherence to the status quo by compelling reconsideration of inefficient laws.<sup>92</sup>

Harmonizing these ideas, expiring legislation has been used to restore legislative oversight. All statutes that change the legal status quo *de facto* shift the burden of inertia from the enacting legislature to future legislatures.<sup>93</sup> The operation of temporary legislation dictates habitual reevaluation. These periodic determinations put pressure on a future legislature by forcing it to decide whether a particular rule, program, or agency should persist by a specific date.<sup>94</sup> These evaluations should look into the effects of the legislation and whether its objectives are met efficiently. The burden of proof to renew the legislation post-expiration should be on imperative grounds and born by those requesting an extension to avoid a technical renewal process. Consequently, temporary legislation helps balance the need to adapt to rapidly changing conditions and still maintain the necessary legislative oversight.

In a similar manner, temporary legislation can be utilized to bring obsolete laws up-to-date or to eradicate redundant ones. Social practices and perceptions change over time, and what was considered unacceptable in the past can be commonly

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<sup>88</sup> See Richard C. Kearney, *Sunset: A Survey and Analysis of the State Experience*, 50 PUB. ADMIN. REV. 49, 55 (1990) (noting the extent to which actively utilize and review expiring legislation).

<sup>89</sup> See Doran, *Intergenerational Equity in Fiscal Policy Reform*, *supra* note 11, at 293.

<sup>90</sup> *Id.* at 295.

<sup>91</sup> See Lewis A. Davis, *Review Procedures and Public Accountability in Sunset Legislation: An Analysis and Proposal for Reform*, 33 ADMIN. L. REV. 393, 406 (1981) (concluding accountability is improved in laws with expiring provisions).

<sup>92</sup> See *supra* note 17 (outlining the assault weapon ban, the violence against women act, and the government surveillance portions of the Patriot act as temporary legislation that expired and was not reauthorized.). See also Listokin, *supra* note 9, at 551 (noting expiring provisions can prevent inertia in the shareholder's access to corporate ballot context).

<sup>93</sup> See Eric A. Posner & Adrian Vermeule, *Legislative Entrenchment: A Reappraisal*, 111 YALE L.J. 1665, 1697 (2002) (comparing temporary legislation and the anti-entrenchment doctrine). See Gersen, *supra* note 13, at 262 (2007) (discussing temporary legislation transaction costs and their division between current and future legislatures).

<sup>94</sup> See Mark D. Young, *A Test of Federal Sunset: Congressional Reauthorization of the Commodity Futures Trading Commission*, 27 EMORY L. J. 853, 854 (1978) ("Sunset" is the popular term for a statutory method of forcing a legislature to make a periodic determination whether to allow a particular program or agency to continue.").

acknowledged today.<sup>95</sup> Federal criminal laws still consider it illegal to shoot a fish from an airplane,<sup>96</sup> sell Swiss cheese with fewer holes,<sup>97</sup> and entertain a pirate.<sup>98</sup> Temporary legislation can help maintain the balance between continuity and change while avoiding errors and obsolescence via reexamination.<sup>99</sup> Laws containing expiring provisions function to deprive a past majority of the benefit of inertia and shifts the force of inertia to those who oppose the law by providing them legislative power.<sup>100</sup> Expiring legislation thereby imposes fiscal and political costs on future legislatures that seek to preserve the consequences of the earlier action. They place the burden of legislative action on those who wish to retain a legal rule rather than on those who wish to modify or destroy it. That way, inertial forces will no longer “serve the dead hand of the past.”<sup>101</sup>

By enacting laws with expiring provisions, Congress recognizes that greater flexibility is needed than is the norm in that policy area. On the other hand, when greater stability is needed, ordinary statutes seem to achieve that result.<sup>102</sup> According to Professor Yair Listokin, all policies are, in a way, temporary because they are eradicated when new policies are put in place. Expiring legislation merely decreases *ex ante* the cost of changing policies by reversing the policy by default.<sup>103</sup> Temporary laws make policies more reversible in the search for the optimal legislative approach. Listokin views them as “unambiguously positive,” as they enhance efficient policymaking while justifying the adoption of policies with negative expected value.<sup>104</sup> In his opinion, temporary legislation should be encouraged and used more for allowing lawmakers to reduce legislative costs, gain practical knowledge, and learn about the benefits of a bill before committing to irreversible costs.<sup>105</sup>

Temporary legislation has also been used to regulate during crises. Wars, natural disasters, and financial panics are exigencies that require swift lawmaking. The most notable type of temporary legislation in such circumstances is “emergency legislation.” Emergencies tend to be temporary and, thus, necessitate measures that

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<sup>95</sup> See *supra* note 2 (referring to various sources of over 800 obsolete rules and regulation that criminalize obscure behavior and are currently still in effect).

<sup>96</sup> See @CrimeADay, *supra* note 2 (citing 16 U.S.C. § 742j-1(a)(1)).

<sup>97</sup> *Id.* (citing 21 U.S.C. §§331, 333, 343(g) & 21 CFR §133.195(a)(1)).

<sup>98</sup> *Id.* (18 U.S.C. §1657).

<sup>99</sup> See Nathan Cortez, *Regulating Disruptive Innovation*, 29 BERKELEY TECH. L.J. 175, 219 (2014) (noting temporary legislation decreases the costs of premature or incorrect regulations by time-limiting the damage they can inflict.)

<sup>100</sup> *Id.* at 62.

<sup>101</sup> CALABRESI, *supra* note 1, at 60 (noting that expiring legislation mechanism doesn’t guarantee anachronistic laws will not get reenacted because time doesn’t serve as a good indicator of age. It does not distinguish sufficiently between those legal rules in need of a reconsideration because they have become anachronistic and those that are not.)

<sup>102</sup> See Posner & Vermeule, *supra* note 93, at 1695.

<sup>103</sup> Listokin, *supra* note 9, at 535 (“Sunset clauses therefore enhance the reversibility of policies.”).

<sup>104</sup> *Id.* at 536 (“Suppose that there are multiple policies that should be tried in a given order under the optimal search approach. Passing each of these policies in succession would be costly. ... These costs may well prevent policymakers from choosing policies according to the optimal search approach’s prescriptions.”).

<sup>105</sup> *Id.* at 537.



are terminated at the end of the exigency. In order to guarantee the discontinuance of an exceptional rule, temporary legislation is used to prevent normalization of the state of emergency and to enable legislatures to return to normalcy.<sup>106</sup> Thus, the use of temporary legislation has been viewed in the literature as a good compromise during the suspension of constitutional protections in light of severe emergencies.<sup>107</sup> It provides a form of legislative oversight of emergency powers, restrains extraordinary measures from being standardized, and contributes to building consensus around potentially controversial measures.

Counterterrorism legislation is a prominent example of such temporary legislation. In those circumstances, there is often an inevitable tension between democracy and response to emergencies. In these critical times of grave national peril, the government tends to concentrate authority and power to gain control of the situation. It may limit fundamental guarantees and enact extreme measures to protect citizens against severe threats.<sup>108</sup> Temporary emergency legislation provides a safeguard and may solve some of this tension. Emergency legislation expires after a certain date unless the government chooses to renew it or to replace it with legislation through the normal legislative process.<sup>109</sup> In the aftermath of the September 11th terrorist attacks, there has been a huge increase in the use of temporary legislation to tackle international terrorism.<sup>110</sup> The USA Patriot Act was passed swiftly and contained many expiring provisions that limited the extent to which the act constrained constitutional rights.<sup>111</sup> This temporary legislation provided a mechanism to limit the duration of a hastily adopted law through extraordinary delegation to the executive and delivered opportunities for gathering empirical support and policy reassessment after a set period.<sup>112</sup>

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<sup>106</sup> See Bruce Ackerman, *The Emergency Constitution*, 113 YALE L.J. 1029 (2004) (arguing temporary legislation is a good solution to balance the state of emergency and limiting constitutional rights). Cf. Oren Gross, *Chaos and Rules: Should Responses to Violent Crises Always Be Constitutional*, 112 YALE L. J. 1011, 1090 (2003) (noting there are risks in normalizing emergency legislation and claiming temporary legislation is not an effective rule to deal with emergencies).

<sup>107</sup> See William N. Eskridge, Jr. & John Ferejohn, *The Article I, Section 7 Game*, 80 GEO. L.J. 523, 529-32 (1992) (maintaining that temporary legislation provides a good outlet for political compromise).

<sup>108</sup> See Gross, *supra* note 106, at 1023 (arguing that “there may be circumstances where the appropriate method of tackling grave dangers and threats entails going outside the constitutional order, at times even violating otherwise accepted constitutional principles, rules, and norms.”).

<sup>109</sup> See Antonios Kouroutakis & Sofia Ranchordás, *Snoozing Democracy: Sunset Clauses, De-Juridification, and Emergencies*, 25 MINN. J. INT’L L. 29, 53 fn.110-112 (2016) (citing the UK parliament in its reasoning for adoption of temporary emergency legislation).

<sup>110</sup> See Emily Berman, *The Paradox of Counterterrorism Sunset Provisions*, 81 FORDHAM L. REV. 1777, 1790 (2013) (arguing that the high expectations for counterterrorism temporary legislation post 9/11 have not been borne out by their impact).

<sup>111</sup> USA Patriot Act, Pub. L. No. 107-56, 115 Stat. 272 (2001).

<sup>112</sup> See Berman, *supra* note 110, at 1824 (describing the enactment of the Patriot Act noting that the House agreed to vote on a bill substantively on the condition that it would be temporary legislation.); John E. Finn, *Sunset Clauses and Democratic Deliberation: Assessing the Significance of Sunset Provisions in Antiterrorism Legislation*, 48 COLUM. J. TRANSNAT’L L. 442, 485 (2010) (reviewing the enactment of the Patriot Act stating that temporary legislation appears “when there are concerns about the potential abuse of newly adopted powers and

Achieving consensus around contentious legislation is not easy. Alienated lawmakers and political resistance create high hurdles to ensure continuity of legal regimes.<sup>113</sup> Temporary legislation provides opportunities for political haggling and reaching consensus among legislators fearing the potential long-term negative effects of such laws.<sup>114</sup> Representatives who oppose a particular law will be more amenable to passing “erase and rewind” laws that provide some assurance that, by default, the law will expire and return to the previous status quo.<sup>115</sup> Temporary legislation is also instrumental in facilitating experimentation, information gathering, and risk assessing. Legislators may be more inclined to adopt temporary legislation and gather more evidence on risks and effects during the interim period between enactment and expiration before committing to a permanent new policy.<sup>116</sup>

## 2. Criticism and Increased Inertia

In the past few years, academics have criticized temporary legislation. They have condemned the practice of routinely extending temporary legislation without meaningful evaluation.<sup>117</sup> Instead of expiring after its designated date, temporary legislation most often has been extended and expanded numerous times.<sup>118</sup> Scholars argued the number of expiring provisions is too excessive, they are counter-productive, they place a disproportional review burden, and they increase statutory uncertainty.<sup>119</sup> Temporary legislation has been viewed as serving primarily as a mechanism to convince opponents of a controversial bill to vote in favor of a temporary version.<sup>120</sup> Others have described these laws as “democracy snooze

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a corresponding desire for legislative oversight.”).

<sup>113</sup> See Forrest Maltzman & Charles R. Shipan, *Change, Continuity and the Evolution of the Law*, 52 AM. J. POL. SCI. 252, 255 (2008) (claiming expiring legislation is important in times of political divide for building coalitions).

<sup>114</sup> *Id.* at 257.

<sup>115</sup> See Tom Ginsburg, Jonathan S. Masur & Richard H. McAdams, *Libertarian Paternalism, Path Dependence, and Temporary Law*, 81 U. CHI. L. REV. 291, 337 (2014) (analyzing the political advantages of temporary legislation).

<sup>116</sup> See Listokin, *supra* note 9, at 533 (discussing the advantage of temporary legislation in the optimal legislative search process); Gersen, *supra* note 13, at 248 (noting the information effects and error costs saved via temporary legislation).

<sup>117</sup> See *supra* note 15 and accompanying text (scholars criticizing temporary legislation).

<sup>118</sup> For example, The Violence against Women Act of 1994 has been extended three times and is currently pending reauthorization. See *supra* note 17. See also Yin, *supra* note 11, at 232-33 (reviewing the history of some temporary tax legislation and its repeated extension); Rebecca M. Kysar, *Lasting Legislation* 159 U. PA. L. REV. 1007, 1016 (2011) (noting that temporary legislation is being routinely extended numerous times).

<sup>119</sup> See Kysar, *The Sun Also Rises*, *supra* note 15, at 362.

<sup>120</sup> See Rebecca M. Kysar, *Dynamic Legislation*, 167 U. PA. L. REV. 809, 827 (2019) (“The uncertainty they create disrupts the planning activities of public and private actors, increasing compliance costs and distorting investment decisions) Berman, *supra* note 110, at 1824. *But see* Jacob E. Gersen & Eric A. Posner, *Timing Rules and Legal Institutions*, 121 HARV. L. REV. 543, 562 (2007) (“Sunset clauses, providing for automatic repeal of the statute, sometimes indicate that Congress is uncertain whether a statute will be beneficial.”).

buttons.”<sup>121</sup> Instead of countering legislative obsolescence, temporary legislation postpones the decisions to a later date.<sup>122</sup>

Expiring legislation has also been described as inefficient, expensive, and contributing to standardizing extraordinary measures.<sup>123</sup> Many expiring laws have been reauthorized numerous times so as to have the effect of permanency.<sup>124</sup> The repeated extensions of counterterrorism and fiscal legislation were given as classic examples to temporary laws that became entrenched and receive minimal reexamination nowadays.<sup>125</sup> Calabresi warned that without substantive review, temporary legislation will defeat itself. Legislators can create legislative procedures that treat the periodic reexamination as a mere form.<sup>126</sup>

Several theories of democracy highlight the significance of deliberation by legislators and citizens in the political process rather than merely aggregating preferences.<sup>127</sup> The reason for the importance of deliberative democracy is that preferences change over time and experience. The central problems of democratic government, as pointed out by the Founders, were the influence of factions (interest groups) and the self-interested incentives of representatives.<sup>128</sup> Accordingly, an integral part of defending democracy has been viewed as opposing political interests by rebuking the influence of technocratic elites on legislators.<sup>129</sup>

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<sup>121</sup> See David A. Fahrenthold, *In Congress, Sunset Clauses are Commonly Passed but Rarely Followed Through*, WASH. POST. (Dec. 15, 2012) (“Washington’s current crisis reveals that the sunset clause has become something unintended: democracy’s snooze button.”). See also Frank Fagan & Saul Levmore, *Legislative Sunrises: Transitions, Veiled Commitments, and Carbon Taxes*, in *THE TIMING OF LAWMAKING* 143 (Frank Fagan & Saul Levmore eds., 2017) (criticizing temporary legislation for its effects on democracy). Cf. Daniel E. Herz-Roiphe & David Singh Grewal, *Make Me Democratic, But Not Yet: Sunrise Lawmaking and Democratic Constitutionalism*, 90 N.Y.U. L. REV. 1975, 2003-04 (2015) (Viewing expiring legislation as an opportunity for democracy-enhancing);

<sup>122</sup> See Kysar, *The Sun Also Rises*, *supra* note 15, at 378.

<sup>123</sup> See Kysar, *Lasting Legislation*, *supra* note 118, at 1047. See also Cheryl D. Block, *Pathologies at the Intersection of the Budget and Tax Legislative Processes*, 43 B.C. L. REV. 863 (2002) (criticizing the use of expiring legislation as a gimmick to circumvent budget rules)

<sup>124</sup> See Kysar, *The Sun Also Rises*, *supra* note 15, at 380. But See Jeffrey J. Rachlinski & Cynthia R. Farina, *Cognitive Psychology and Optimal Government Design*, 87 CORNELL L. REV. 549, 603-06 (2002) (noting the expiring legislation can be beneficial in affording frequent examination of rules that the public considers as status quo.).

<sup>125</sup> See Gross, *supra* note 106, at 1091 (noting that expiring legislation increases risk of normalization of emergency legislation.); See also Berman, *supra* note 110, at 1781 (arguing that expiring legislation is inappropriate for dealing with terrorist threat because the reconsideration is not substantial and is not made of fully informed policy decision).

<sup>126</sup> CALABRESI, *supra* note 1, at 61 (FN 9) (noting “we would be left with obsolete laws being automatically re-enacted under a special procedure, much as today some fiscal statutes.”).

<sup>127</sup> See Posner & Vermeule, *supra* note 93, at 1692.

<sup>128</sup> The Federalist No. 51, at 320 (James Madison) (Clinton Rossiter ed., 1961); see generally Cass Sunstein, *Interest Groups in American Public Law*, 38 STAN. L. REV. 29, 43-45 (1985) (providing a thorough account of the Madisonian ideas to fight the influence of factions).

<sup>129</sup> See DANIEL A. FARBER & PHILIP P. FRICKEY, *LAW AND PUBLIC CHOICE: A CRITICAL INTRODUCTION* 10 (1991) (describing the influence of political interest groups on legislators).

Yet, scholars described the interaction between legislators and interest groups around expiring legislation as a rent-extracting mechanism.<sup>130</sup> They utilized public choice theory and argued that politicians and special interest groups began using temporary legislation as a “guise” in order to pass bills that otherwise would not obtain sufficient support. In the field of tax law, Rebecca Kysar noted that many sunset clauses were added to the Tax Code during the Bush Administration as gadgets to underestimate the real revenue cost of legislation and fit it within budget constraints.<sup>131</sup> Because the estimation of revenue costs of permanent tax provisions is too high for Congress to pass them, temporary provisions are used to bypass that issue by taking into account only the revenue costs during the period up until expiration. Alas, the intention remains to continue to renew this temporary legislation and repeatedly circumvent budget constraints.<sup>132</sup>

The consensus-gathering feature of expiring legislation has turned into one of its central points of censure.<sup>133</sup> Evaluations of legislation close to its expiration date became too cumbersome making the renewal process autogenetic and technical.<sup>134</sup> Temporary legislation has been viewed as a political shortcut to the traditional congressional legislative process and delaying discussions to the moment of expiration.<sup>135</sup> These repeated extensions with minimal or no reevaluation have *de facto* increased legislative inertia. Why has expiring legislation maintained such strong institutional bias in favor of the temporary status quo?

While discussing entrenching statutes, Posner & Vermeule commented that earlier legislatures always have greater power than later ones by virtue of making policy choices that become entrenched *de facto* through path dependence and inertia.<sup>136</sup> The next Part will explore the theoretical underpinnings and dynamic forces encompassing temporary legislation that create conditions for inertia.

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<sup>130</sup> See John W. Lee & W. Eugene Seago, *Policy Entrepreneurship, Public Choice, and Symbolic Reform Analysis of Section 198, the Brownfields Tax Incentive: Carrot or Stick or Just Never Mind?*, 26 WM. & MARY ENVTL. L. & POL'Y REV. 613, 636 (2002) (noting temporary laws increase legislators' rent-seeking opportunities). See also Kysar, *The Sun Also Rises*, *supra* note 15, at 339-340; Kysar, *Lasting Legislation*, *supra* note 118, at 1043; Edward D. Kleinbard, Professor of Law, Univ. of S. Cal. Gould Sch. of Law, *The Congress Within the Congress: How Tax Expenditures Distort Our Budget and Our Political Process*, Woodworth Memorial Lecture (May 7, 2009), in 36 OHIO N.U. L. REV. 1, 23, 24 (2010); Manoj Viswanathan, Note: *Sunset Provisions in the Tax Code: A Critical Evaluation and Prescriptions for the Future*, 82 N.Y.U. L. REV. 656, 680 (2011) (providing examples for the rent-extracting issues associated with sunsets). Cf. Gersen, *supra* note 13, at 285 (“Temporary measures could produce less rent seeking in the aggregate because the prize for winning a statute is less valuable.”).

<sup>131</sup> Kysar, *Dynamic Legislation*, *supra* note 120, at 853; Kysar, *Lasting Legislation*, *supra* note 118, at 1040.

<sup>132</sup> Kysar, *Dynamic Legislation*, *supra* note 120, at 827; Kysar, *Lasting Legislation*, *supra* note 118, at 1036.

<sup>133</sup> See Chris Mooney, *A Short History of Sunsets*, LEGAL AFF., Feb. 2004, at 67 (criticizing temporary legislation for becoming a “a clever political trap.”).

<sup>134</sup> *Id.*

<sup>135</sup> Kysar, *Lasting Legislation*, *supra* note 118, at 1028 (claiming that the history of temporary legislation demonstrates the political pressures for spending and tax cuts are great to prevent meaningful legislative reevaluation). See also Stephen Coate & Stephen Morris, *Policy Persistence*, 89 AM. ECON. REV. 1327, 1328 (1999) (noting the significance of status quo bias with taxpayers that exert political pressure to prevent termination of beneficial tax policies.).

<sup>136</sup> *Id.* at 1676 (“...upstream legislatures always have greater de facto power than downstream ones, simply

## III. PATH DEPENDENCE THEORY

Inertia is the final stage in a path dependence sequence, namely a situation of “lock-in.” Yet, path dependence theory entails more dynamics than a structural status quo.<sup>137</sup> First, a theoretical framework of the theory is needed to understand how to apply it to the legal framework, and specifically, in the context of temporary legislation.

Previous choices can influence our current selections, regardless of whether conditions today still warrant them.<sup>138</sup> The QWERTY typewriter is cited as one of the most notable examples for both path dependence and network effects.<sup>139</sup> Created in 1873, the QWERTY keyboard layout has been so entrenched by users over the years that it continues to dominate the market to this day despite the existence of better layouts.<sup>140</sup> It is an illustration of a path that has become so entrenched that the cost of switching to a different route has become restrictively high.

Scholars have utilized path dependence theory to explain unique present-day phenomena.<sup>141</sup> Economist Paul David argued it is difficult to understand the rationale (or lack thereof) for the world around us unless we investigate *how* we arrived at this state.<sup>142</sup> Brian Arthur, who developed the modern economic approach to path dependence, has hypothesized that the theory encompasses knowledge-based industries with strong externalities.<sup>143</sup> He describes path dependence as “lock-in through learning” but claims that small differences in early patterns or “historical

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by virtue of drawing on a slate that is more nearly blank. They make policy choices that become entrenched de facto through path dependence and inertia.”)

<sup>137</sup> See e.g. MICHAEL T. HANNAN & JOHN FREEMAN, ORGANIZATIONAL ECOLOGY 70 (1989) (describing “structural inertia” in organizations as involving the resistance to change itself via strong inertial pressures).

<sup>138</sup> See Stan J. Liebowitz & Stephen E. Margolis, *Path Dependence, Lock-In, and History*, 11 J. OF L., ECON. & ORG. 205, 214 (1995) (discussing the role the past play in current economic conditions).

<sup>139</sup> See Paul A. David, *Clio and the Economics of QWERTY*, 75 AM. ECON. REV. 332, 337 (1985) (describing the entrenchment of the WERTY keyboard layout); William J. Kolasky, *Network Effects: A Contrarian View*, 7 GEO. MASON L. REV. 577, 580 (1999) (noting the circumstances of the QWERTY typewriter and different alternatives over the years).

<sup>140</sup> See, e.g., CHARLES EDWARD WELLER, THE EARLY HISTORY OF THE TYPEWRITER (1918) (describing the history of the QWERTY typewriter and other options available throughout the years alongside reasons they were not adopted).

<sup>141</sup> See, e.g., Roe, *Chaos and Evolution in Law and Economics*, *supra* note 27, at 646 (arguing that the possibility of breaking out of a lock-in situation lies in the overall efficiency and strength of the pattern created in the past); Daryl Lim, *Copyright Under Siege: An Economic Analysis of the Essential Facilities Doctrine and the Compulsory Licensing of Copyrighted Works*, 17 ALB. L.J. SCI. & TECH. 481, 508 (2007) (“Consumers become ‘locked in’ to the product because of switching costs associated with moving from one network to another.”); see also Maximo Kanger, *The Rise of Managerial Judging in International Criminal Law*, 53 AM. J. COMP. L. 835, 909 n.369 (2005) (same).

<sup>142</sup> See David, *supra* note 139, at 332.

<sup>143</sup> See W. Brian Arthur, *Competing Technology, Increasing Returns, and Lock-In by Historical Events*, 99 ECON. J. 116 (1989) (describing path-efficient technology if at all times equal adoption of different technology would not have paid off better.).

accidents” may result in path divergence and will often produce large differences in final outcomes.<sup>144</sup>

Identifying path dependence involves tracing a given result back through a chain of chronicled events that are unforeseen and cannot be classified solely based on prior historical conditions.<sup>145</sup> Some of those cases have unique and unpredictable outcomes.<sup>146</sup> The following provides some basic definitions of the various elements of path dependence along with clarifying illustrations. The scholarship on path dependence recognized several dominant dynamics that contribute to the entrenchment of route sequences: critical junctures, reactive sequences, self-reinforcement, increasing returns, positive feedback, and lock-in.<sup>147</sup>

### A. *Reactive Sequences and Critical Junctures*

Does the order and correlation between historical events matter to the creation of the path? Economist Douglass Puffert claimed that a notable characteristic of a path-dependent process is the incidence of reactive sequences.<sup>148</sup> He has stated that a process of economic allocation is considered path dependent when the sequence of allocations depends not only on fundamental, a priori determinants but also on particular contingent events.<sup>149</sup>

Reactive sequences are a series of causally connected events that are “reactive” since each occurrence is in part a reaction to temporally antecedent events.<sup>150</sup> Accordingly, each event is “dependent” on prior steps or occurrences to form a path to a final outcome. The difference between a reactive sequence with an observed path-dependent trajectory and a simple chain of causally connected events lies in the historical critical juncture that set the chain into motion.<sup>151</sup> In a reactive sequence, early significant events trigger other events, not by repeating a given pattern, but by

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<sup>144</sup> *Id.* at 120.

<sup>145</sup> See James Mahoney, *supra* note 21, at 511 (2000) (describing the Polya Urn experiment included a large urn containing two balls, one black, and one red. Each time, one ball was removed, and returned to the urn, accompanied by an additional ball of the same color. This process was repeated until the urn is full. This experiment demonstrated that early draw, although random, had an increasing effect on the final result.).

<sup>146</sup> See generally Greg Hill, *History, Necessity, and Rational Choice Theory*, 9 RATIONALITY & SOC'Y 189, 198–200 (1997).

<sup>147</sup> See Scott E. Page, *Path Dependence*, 1 Q. J. OF POL. SCI. 87, 88 (2006) (identifying conditions for path dependence in an economy that faces different technological choice).

<sup>148</sup> See Douglas J. Puffert, *Path Dependence, Network Form, and Technological Change*, in HISTORY MATTERS: ESSAYS ON ECONOMIC GROWTH, TECHNOLOGY, AND POPULATION 63, 63 (Timothy W. Guinnane, William A. Sundstrom, Warren C. Whatley eds., 2004); Douglas J. Puffert, *Path Dependence*, in R. Whaples, ed., EH.NET ENCYCLOPEDIA OF ECONOMIC AND BUSINESS HISTORY (2003). Page distinguished between path dependency and *phat* dependency. He claims that in a *phat*-dependent process, the order of events does not matter. He exemplified that the Polya Urn Process as being *phat*-dependent and not path-dependent because in that experiment the order in which balls are taken out of the urn does not matter. See Page, *supra* note 147, at 91.

<sup>149</sup> Such as technology, factor endowments, preferences, and institutions. Douglas J. Puffert, *Path Dependence, Network Form, and Technological Change*, *supra* note 148, at 65.

<sup>150</sup> Mahoney, *supra* note 21, at 509.

<sup>151</sup> *Id.* (arguing it must have properties of contingency marked by processes of inherent sequentially.)

initiating a series of firmly *connected* responses and counter reactions.<sup>152</sup> How can we observe a chain of interconnected occurrences in the lawmaking context?

The legislative process, in and of itself, contains several reactive sequences. For example, representatives sponsor a legislative proposal and a bill is then assigned to a committee for study. After approval by the committee, the bill is put to a vote and, if passed by the majority, moves to the Senate. At the Senate, the bill is then assigned to another committee, voted on and, if passed, prompts a conference committee of House and Senate representatives that reconcile differences between the two versions of the bill. The reconciled bill is brought for final approval at the House and Senate and thereafter enrolled by the Government Printing Office. The President then has 10 days to sign or veto the enrolled bill.<sup>153</sup> Other than executive orders, the President cannot sign a bill into effect had the first event—the proposal to enact it—never occurred. The presidential veto or signature into law is thus highly dependent on the success of the preceding stages. Every occurrence in this reactive sequence is both responsive to previous events and a cause for consequent actions. Early incidences in the sequence matter because a small change can have a large effect on the way the sequence unfold.<sup>154</sup> For example, if the vote on the floor fails, the rule might be directed to congressional committees for further deliberation or abandoned altogether. Temporary legislation reinforces such observation as each extension is contingent upon the expiration of the previous ones. Moreover, extensions of provisions scheduled to expire is often “reactive” because such events are, to a certain degree, unforeseen, especially during periods of political divide or major legal reform.<sup>155</sup> Yet, not all temporary legislation is inevitably path dependent.

Spotting reactive sequences is not enough to identify path dependence. Another important element in the formation of entrenched route is the existence of critical junctures. Critical junctures can be described as moments during which there occurs an adoption of a specific arrangement from among at least two or more options.<sup>156</sup> These crossroads are “critical” because once a specific path is chosen it becomes increasingly hard to return to the initial point during which initial alternatives were available.<sup>157</sup>

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<sup>152</sup> See Paul Pierson, *Not Just What, But When: Issues of Timing and Sequence in Comparative Politics*, 21 *STUD. IN AM. POL. DEV.* 72, 73 (1998) (claiming that initial disturbances are crucial because they trigger action and reaction that move the system in a new direction).

<sup>153</sup> U.S. Const. art. I, § 1; How Are Laws Made?, U.S. House of Representatives, <https://www.house.gov/the-house-explained/the-legislative-process> (last visited Feb. 20, 2020).

<sup>154</sup> See, e.g., JAMES GLEICK, *CHAOS: MAKING A NEW SCIENCE* 8 (2011) (“Tiny differences in input could quickly become overwhelming differences in output—a phenomenon given the name ‘sensitive dependence on initial conditions.’”).

<sup>155</sup> See *supra* notes 17 and accompanying text.

<sup>156</sup> Mahoney, *supra* note 21, at 513.

<sup>157</sup> See Margaret Levi, *A Model, A Method, and A Map: Rational Choice in Comparative & Historical Analysis*, in MARK IRVING LICHBACH & ALAN S. ZUCKERMAN, *COMPARATIVE POLITICS: RATIONALITY, CULTURE, AND STRUCTURE* 28 (1997).

Social scientists evaluate critical junctures through counterfactual analysis—i.e. an exercise that envisions history had alternative choices been made.<sup>158</sup> During the period immediately preceding the critical juncture there are various dynamics influencing the decision of which path to take. If during that time the final result can be easily predicted, then that sequence ought not be viewed as path dependent.<sup>159</sup> On the other hand, if the final outcome is connected stochastically, that sequence may be viewed as path dependent.<sup>160</sup> Such counterfactual exercises can delineate the significance of a critical juncture by demonstrating that choosing a different path would have prompted a significantly different result. Yet, far-fetched, imaginary “what if” exercises should be avoided by comparing only alternative options that were truly viable and put “on the table” at the time of the critical juncture.

Historical investigation provides a valuable strategy for understanding the steps that set into motion a path. How do we get from a critical juncture to the final outcome? Investigating causal connections requires consideration of the following other path dynamics.<sup>161</sup>

### *B. Status Quo Bias through Increasing Returns and Positive Feedback*

The term “increasing returns” refers to a situation whereby the more often a decision is made or choice is taken, the more prominent its advantages because increasing numbers of persons select that route.<sup>162</sup> For example, with today’s complex technology we frequently observe increasing returns as more people choose to adopt a technological innovation, gain more experience with it, thus help improve its operation.<sup>163</sup> Accordingly, a notable effect of path dependence is that a minor benefit or unimportant lead for certain technology, can result in irreversible influences on the ultimate market allocation of resources. For example, when two or more smartphone manufacturers such as IBM and Apple compete for the same market of potential adopters, trivial actions such as product launching events may inadvertently give one product a market advantage over the other by providing exponentially growing experience as more customers choose that product.<sup>164</sup>

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<sup>158</sup> See James D. Fearon, *Causes and Counterfactuals in Social Science: Exploring an Analogy Between Cellular Automata and Historical Processes*, in PHILIP E. TETLOCK & AARON BELKIN, COUNTERFACTUAL THOUGHT EXPERIMENTS IN WORLD POLITICS 3 (1996) (stating “social scientists—from Max Weber (1949) and Robert Fogel (1964) have also long been aware of the pivotal role that counterfactuals play in scholarship... Nevertheless, some contemporary historians still sternly warn us to avoid “what-might-have-been” questions.).

<sup>159</sup> Mahoney, *supra* note 21, at 537.

<sup>160</sup> *Id.* at 518.

<sup>161</sup> *Id.* at 530.

<sup>162</sup> See Pierson, *supra* note 27, at 253 (defining increasing returns).

<sup>163</sup> W. Brian Arthur, *Increasing Returns and Lock-in by Historical Events*, 99 *ECON. J.* 116, 116 (March 1989) (exploring the dynamics of allocation under increasing returns in a context where increasing returns arise naturally via agents that choose between competing technologies).

<sup>164</sup> See Leibowitz & Margolis, *supra* note 138, at 214-215 (noting that the causes for increasing returns are varied, and they may, for instance, be a result of economies in production (supply side) or network effects (demand side)).



A similar phenomenon, “positive feedback,” denotes positive externalities formed when the same decision is made by additional individuals.<sup>165</sup> There exists an advantage to individuals from having their decision be the predominant one.<sup>166</sup> Positive feedback may seem similar to the dynamics of increasing returns, but it varies mathematically.<sup>167</sup> Increasing returns describes a market in which advantages grow exponentially as market share increases and more players make the same choice. Positive feedback implies enhancement of value to those that *already own* a product or made a choice. Stated differently, positive feedback are small rewards given to market player *themselves* who previously chose that option or who aim to make it later.<sup>168</sup>

It is worth noting here the differences between positive feedback and network effects, which are often conflated. Network externalities, or network effects, is a phenomenon whereby the value consumers place on goods increases the more others use those goods.<sup>169</sup> Network effects are also referred to as “positive network externalities” (a term that surely adds to the confusion) or demand-side economies of scale, since each additional customer enhances value for the network and changes the shape of the demand curve.<sup>170</sup> For example, the value of participation in a network of computers has been observed to grow exponentially with the size of the network.<sup>171</sup> Network effects have played a significant role in legal reasoning and discussions in various areas of the law such as antitrust law, intellectual property law, corporate law, and contract law to the extent they affect the behavior of participants in

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<sup>165</sup> See Paul Pierson, *POLITICS IN TIME: HISTORY, INSTITUTIONS, AND SOCIAL ANALYSIS* 21 (2011) (describing path dependence as “referring to social processes that exhibit positive feedback and thus generate branching patterns of historical development.”).

<sup>166</sup> For example, the more consumers use a certain software, the more applications are written to accompany this software and improve the software’s features, which attracts more users to purchase this software. See Marina Lao, *Reclaiming A Role For Intent Evidence In Monopolization Analysis*, 54 AM. U. L. REV. 151, 182 (2004) (describing positive feedback created when more users use Windows software).

<sup>167</sup> Paul Pierson & Theda Skocpol, *Historical Institutionalism in Contemporary Political Science*, in *POLITICAL SCIENCE: THE STATE OF THE DISCIPLINE* 693, 699–703 (Ira Katznelson & Helen V. Milner eds., 2002) (noting that what economists call “increasing returns” could generally describe self-reinforcing or positive feedback processes). See also Pierson, *supra* note 27, at 251 (claiming “for some theorists, increasing returns are the source of path dependence, for others, they typify only one form of path dependence.”).

<sup>168</sup> See Page, *supra* note 147, at 89 (defining positive feedback dynamics in path dependence); Mahoney, *supra* note 21, at 511 (providing examples of positive feedback).

<sup>169</sup> See Kolasky, *supra* note 139, at 593 (defining network effects).

<sup>170</sup> *Id.* at 579 (claiming that economists have focused primarily on the negatives of network effects that is the ways they may lead to market failure).

<sup>171</sup> *Id.* at 580.

market.<sup>172</sup> Alas, positive feedback do not involve being part of a network at all.<sup>173</sup> Rather, the value of goods increases as consumption rises, even where the goods are not themselves connected.<sup>174</sup> In conclusion, although similar to network effects positive feedback delivers increasing value to certain participants, the concept differs by the framework that provides the added value. After illustrating the phenomenon of positive feedback, other dynamics are also important in reinforcing a path.

### C. Self-reinforcement and Lock-in

A “self-reinforcement” sequence can be characterized by reproduction that strengthen early events.<sup>175</sup> It portrays a condition in which once a decision has been made, it creates complementary institutions that maintain that path and encourage its perpetuation.<sup>176</sup> Accordingly, in self-reinforcing sequences, initial strides in a specific path motivate further similar steps such that it ends up difficult to divert from that path.<sup>177</sup> “Lock-in” portrays a situation in which a wasteful decision is repeated on the grounds that a sufficient number of market players have invested resources in, and become reliant upon, that decision.<sup>178</sup> Once unforeseen critical historical events take place, path dependence is observed through inert and deterministic causal patterns.<sup>179</sup> In other words, when processes are set into motion they tend to stay on the path that results. This stage has been described in social

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<sup>172</sup> See, e.g., Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CALIF. L. REV. 479, 481-485 (1998) (detailing the scholarship on network effects in various areas of the law. See also Michael L. Katz & Carl Shapiro, *Network Externalities, Competition and Compatibility*, 75 AM. ECON. REV. 424, 424 (1985) (arguing that if network effects are significant to the point they diminish social welfare, then courts should consider legal doctrines to remedy these market failures); Michael L. Katz & Carl Shapiro, *Systems Competition and Network Effects*, 8 J. ECON. PERSP. 93, 95 (1994) (examining indirect virtual network effects). Lemley & McGowan named two main types of network effects: actual networks and virtual networks that diverge based on the degree the goods provide inherent value to a consumer apart from any network characteristics. The greater the inherent value of the goods to any value added as a result of additional consumers, the less significant the network effect. “Actual networks” encompass products whose entire value lies in enabling exchanges between a consumer and others who utilize the product. Examples of products with actual networks include telephones, fax machines, and language. “Virtual networks” provide increased value when there are additional users of identical or interrelated products. For example, as more customers use a specific software and auxiliary applications, existing users benefit from better file sharing and services. See Lemley & McGowan *supra* note 172, at 488-494.

<sup>173</sup> *Id.* at 493 (Lemley emphasized that “by definition, [positive effects] do not exhibit network effects.”).

<sup>174</sup> *Id.* at 494.

<sup>175</sup> See Mahoney, *supra* note 21, at 516 (discussing the dynamic of self-reinforcement in path dependence scholarship).

<sup>176</sup> See William J. Aceves, *Institutionalist Theory and International Legal Scholarship*, 12 AM. U. J. INT’L L. & POL’Y 227, 246 (1997) (citing Wayne Sandholtz, *Institutions and Collective Action: The New Telecommunications in Western Europe*, 45 WORLD POL. 242 (1993) (discussing the role of institutions in technological and market changes).

<sup>177</sup> See Mahoney, *supra* note 21, at 512.

<sup>178</sup> See, e.g., Lim, *supra* note 31, at 510 (discussing lock-in in the software industry where switching costs are often very high). See also Page, *supra* note 147, at 92 (describing music performance rights for theatrical motion pictures lock-in).

<sup>179</sup> See Mahoney, *supra* note 21, at 511. See Mahoney, *supra* note 21, at 511 (“...path-dependent sequences are marked by relatively deterministic causal patterns or what can be thought of as “inertia” - i.e., once processes are set into motion and begin tracking a particular outcome, these processes tend to stay in motion and continue to track this outcome.”)

science literature as state of “inertia.”<sup>180</sup> In the legislative context, inertia may ensue as a temporary legislation gets “captured” in a self-reinforcing sequence causing deviation from the renewal pattern too costly.

Self-reinforcement create dynamics that reproduce a specific pattern over time. It creates reactive sequences that comprise a chain of reaction-and-counter reaction as one event casually prompts the next leading to lock-in of the path.<sup>181</sup> Nevertheless, path dependence scholars recognize the possibility of breaking out of a lock-in situation. This option depends on the overall efficiency and strength of the inert pattern created in the past.<sup>182</sup> Unexpected shocks, they claim, can alter the course of the path.<sup>183</sup>

Political scientist Paul Pierson identified four aspects of the political domain that reinforce path dependence dynamics: (1) the centrality of collective action, meaning that the viability of individual political activity depends intensely on the activities of others and requires positive feedback to assure their support; (2) the high number of organizations urging representatives to make commitments, which elevates the cost of exit from past arrangements; (3) the existence of power asymmetry, which allows certain actors to force others to bend to their will, making open political clash pointless; and (4) the complexity and cloudiness of the political framework.<sup>184</sup> Pierson also presumes that path dependence in politics places associations in the center of forming institutional patterns.<sup>185</sup> Once adopted, institutional patterns deliver increasing benefits to current users because they continue to be adopted. This makes it difficult to divert from the selected path, even if alternative options exist.<sup>186</sup> Self-reinforcing dynamics associated with collective action processes also mean that organizations have a strong inclination to endure once they are standardized.<sup>187</sup>

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<sup>180</sup> *Id.* (“...path-dependent sequences are marked by relatively deterministic causal patterns or what can be thought of as ‘inertia.’”)

<sup>181</sup> See, e.g., Andrew Abbott, *From Causes to Events: Notes on Narrative Positivism*, 20 SOCIOLOGICAL METHODS & RES. 428, 445 (1992) (reviewing new methods for analyzing narrative data over-time).

<sup>182</sup> See Roe, *Chaos and Evolution in Law and Economics*, *supra* note 27, at 645 (describing conditions that disconnect chain of events); Maximo Kanger, *The Rise of Managerial Judging in International Criminal Law*, 53 AM. J. COMP. L. 835, 908 n.369 (2005) (exemplifying path dependent dynamics in adjudication of international criminal law).

<sup>183</sup> See Puffert, *Path Dependence, Network Forms, and Technological Change*, *supra* note 148, at 64 (“A process of economic allocation is called *path dependent* when the sequence of allocations depends not only on fundamental, *a priori* determinants—typically listed as technology, factor endowments, preferences, and institutions—but also on particular contingent events.”).

<sup>184</sup> See Pierson, *supra* note 27, at 257–62.

<sup>185</sup> *Id.* at 252.

<sup>186</sup> See W. BRIAN ARTHUR, INCREASING RETURNS AND PATH DEPENDENCE IN THE ECONOMY 7 (1994); Paul M. Romer, *Increasing Returns and Long-Run Growth*, 94 J. OF POLI. ECON. 1002, 1003 (1986) (discussing the correlation of increasing returns market dynamics to long-term economic growth).

<sup>187</sup> See Mahoney, *supra* note 21, at 509; Pierson, *supra* note 27, at 258–59.

Nobel Prize winning economist Douglass North has drawn a correlation between path dependence, institutional change, and lock-in.<sup>188</sup> He distinguishes between associations and institutions, describing institutions as the principles of the game containing rules and limits, while organizations are the market players.<sup>189</sup> Organizations, for the most part, exert their influence to justify their existence while stifling change.<sup>190</sup> This is especially so when they represent one group in society and are committed not to the general good of all constituents but only to those they represent.<sup>191</sup> Once created, organizations are hard to change, and they greatly affect the path of action.<sup>192</sup>

Indeed, as will be demonstrated, organizations have had a large impact in maintaining path dependence of temporary legislation in our society through self-reinforcement dynamics that resulted in increased inertia and lock-in.<sup>193</sup> Next, the case study of a prominent fiscal policy will illustrate the way path dynamics of expiring provisions can become rooted and inert.

#### IV. THE RESEARCH CREDIT AS A CASE STUDY

The creation of a temporary research credit program did not occur in a vacuum. That route began with the Cold War reflecting a critical juncture—a period of worldwide technological race, national security and defense anxieties, and increasing military concerns. With the rise of Soviet scientific influence, America experienced a period of self-examination in which it realized it could lose its technological superiority to the Communist bloc. During committee hearings, the National Science Foundation (“NSF”) warned about the growing scientific power of the Soviet Union, noting:

[T]he recent evidence of serious challenge to United States supremacy from the U.S.S.R. has come as a rude shock to most Americans and has brought about a period of intensely critical self-examination and analysis. ... Whether by this means they can succeed in their expressed ambition to dominate the world in scientific and technological achievement remains to be seen.<sup>194</sup>

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<sup>188</sup> See Douglass C. North, *The Historical Evolution of Politics*, 14 INT’L REV. L. & ECON. 381, 385 (1994). See generally DOUGLASS C. NORTH, INSTITUTIONS, INSTITUTIONAL CHANGE AND ECONOMIC PERFORMANCE 92–104 (1990) (considering the structure of institutions and their impact on the organizations that operate according to them).

<sup>189</sup> NORTH, INSTITUTIONS, INSTITUTIONAL CHANGE AND ECONOMIC PERFORMANCE, *supra* note 188, at 4–5.

<sup>190</sup> *Id.* at 6.

<sup>191</sup> *Id.* See also RICHARD R. NELSON & SIDNEY G. WINTER, AN EVOLUTIONARY THEORY OF ECONOMIC CHANGE (1982) (discussing path dependence and evolutionary economics processes of institutions); Page, *supra* note 147, at 88 (citing path dependence theory in the process of obtaining music performance rights for theatrical motion pictures).

<sup>192</sup> See NORTH, INSTITUTIONS, INSTITUTIONAL CHANGE AND ECONOMIC PERFORMANCE, *supra* note 188, at 8. See also Pierson, *supra* note 27, at 259 (arguing that self-reinforcing dynamics associated with collective action resolute in organizations having a strong tendency to persist after they are institutionalized.).

<sup>193</sup> See *infra* Part V.

<sup>194</sup> See *Research and Development: Hearings before the Subcomm. of the H. Comm. on Government Operations*, 85th Cong. 2, 15 (1958) (statement of Dr. Alan T. Waterman, Director, National Science Foundation, in Research and Development). The study found that research programs were executed with wasteful duplication, and financial bottlenecks. *Id.*

Achieving superiority in technology involved, among other steps, investment in research facilities and the education of engineers and scientists.<sup>195</sup> Over a decade after the test of the first nuclear bomb in Alamogordo, New Mexico, in 1945, the United States undertook an extensive study into the nation's slowdown in scientific research.<sup>196</sup> Federal sponsorship of defense and aerospace-related research was low compared to that of other nations. Research universities in the United States badly needed more funds directed toward basic research to support large-scale scientific activities.<sup>197</sup> The Soviet government and the Communist centralized bureaucracy were the main sources of industrial support for Russian research.<sup>198</sup> Representatives from the Congressional Committee on Science and Astronautics urged the U.S. government to take similar steps.<sup>199</sup> Research and development was important because it correlated to U.S. defense and weapon systems.

The sluggish rate of private investment in research placed the U.S. trade balance at a disadvantage with other industrialized nations.<sup>200</sup> During the 1960s and 1970s, while spending on research in the U.S. was in continuous decline, rival countries created a remarkable upsurge in technological research.<sup>201</sup> Reports from Japan's Ministry of International Trade and Industry described the U.S. as "a state of relative decline—politically and economically."<sup>202</sup> The United States was about to lose its standing as one of the world's most innovative countries and largest exporters of high-technology goods. Industry associations urged the U.S. government to step out of its "neutral corner" and provide effective market incentives to maintain U.S.

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<sup>195</sup> *Id.* at 20.

<sup>196</sup> In 1958, the House Government Operations committee conducted an extensive study of the government's research and experimentation activities. *Id.* at 5 (statement of Dr. Turkevich, Institute for Nuclear Studies).

<sup>197</sup> *Id.* at 25 (statement of Dr. C. C. Furnas, Chancellor of the University of Buffalo, Research and Development).

<sup>198</sup> They provided full scholarships for students and offered lower income tax rates, which contributed to the motivation of scientists to move to or remain in the Soviet Union *Id.* at 30 (statement of Dr. Turkevich, Institute for Nuclear Studies).

<sup>199</sup> See *Research and Development Deductions as Contained in the President's 1963 Tax Message: Hearing Before the H. Ways and Means Comm.* 88th Cong. 5 (1963) (statement of Congressman Emilio Q. Daddario (D-CT)) (stressing the importance of research and science to the creation of new products that would improve the nation's future, security, welfare, and economy.).

<sup>200</sup> Private research to Gross National Product ratio for the United States was 1.5 percent, compared with 1.9 percent for Japan, and 2.3 percent for West Germany. See *Hearing on the President's 1963 Tax Message, supra* note 199, at 15 (statement of Congressman Emilio Q. Daddario (D-CT)) (noting that private company-financed R&D had been greatly waning); *Business Record*, National Industrial Conference Board, Sept. 1958, at 381 (pointing to the growing time lag of 7 years between the research expenditures and their payoff in new products and new industries).

<sup>201</sup> Between 1964 and 1977, while American research expenditures as a percentage of GNP declined in 26%, it increased 58 percent in Japan, 64 percent in Germany, and 13 percent in France. 7 Legislative History of the Economic Recovery Tax Act 1981 Pub. L. No. 97-34 95 Stat. 172 August 13, 1981, 119 (1981).

<sup>202</sup> See *Tax Incentives for Exports: Hearing on S. 231, S. 700, S. 935, S. 1003, S. 1065 Before the Subcomm. on Tax'n and Debt Management Generally of the S. Comm. on Finance*, 96th Cong. 1101, 1312 (1979) ["Hearing on Taxation and Debt Management"] (Statements of John Nesheim, Representative of the Semiconductor Industry Association) ["Statement of John Nesheim"] quoting Japan's Ministry of International Trade and Industry).

technological leadership.<sup>203</sup> Businesspersons requested Congress help them compete in the “market of the futures” by investing back into research, improved products, and more efficient production facilities.<sup>204</sup> During that period, a culture of technology as key to achieving competitive advantage began to infiltrate American ethos as more and more linked technological advances and investments in research to spurring economic growth.<sup>205</sup>

There were several routes that could improve the position of the U.S. in worldwide technological race. Some options included direct and indirect subsidies for research and development. Foreign governments already provided subsidies to domestic technological advancements. For example, during the 1960s and 1970s, Canada, Japan, the United Kingdom, and West Germany provided various tax credits and cash grants to qualifying research expenditures, including capital outlays for buildings and other assets.<sup>206</sup> The Japanese Ministry of International Trade and Industry implemented Japanese laws and policies that allowed U.S. firms to invest in Japan while negotiating patents in return.<sup>207</sup> The Japanese government directly spent over \$250 million on large-scale tech programs and various incentives.<sup>208</sup> The Japanese government was not alone. Many other foreign governments provided various research assistance to domestic technological that amounted then to over \$2 billion each year.<sup>209</sup>

Other direct stimuli paths included establishing a military research and development agency, similar to the Atomic Energy Commission, which would hire civilian and military scientists in a mixed organization and report to the Secretary of Defense.<sup>210</sup> Proposals suggested providing incentives for private research

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<sup>203</sup> See Statement of John Nesheim, *supra* note 202, at 1310 (“we face a major challenge in this decade from foreign governments... to maintain America’s technological leadership.”); Leonard Silk, *The ‘Secular Slowdown’ Thesis*, N.Y. TIMES, Oct. 21, 1976, at 67 (noting the need to employ new measures to stimulate more research and development). Richard Foster, *Proper Support for Lagging R&D*, N.Y. TIMES Jul. 10, 1979 at A1 (noting a fundamental R&D problem is long term investor behavior).

<sup>204</sup> See *Hearing Concerning the President’s 1963 Tax Message*, *supra* note 199, at 10 (Statement of William M. Horne, Jr. on Behalf of the Manufacturing Chemists’ Association, Inc.) (encouraging the Kennedy administration to inspire industry to adopt new technological equipment).*Id.* at 20 (statement of Paul Robbins, Executive Director of the National Society of Professional Engineers) (same).

<sup>205</sup> See, e.g., Walter W. Heller, *Shying Away From Recovery*, WALL ST. J., Dec. 18, 1975 at 16; Christopher S. Wren, *Soviet Plans to Cut Economic Lag Behind U.S. by ‘80: Soviet Plans to Cut U.S. Economic Lead*, N.Y. TIMES, OCT. 28, 1976 at 89; *Executives Urge Tax Incentives and Cut in U.S. Budget, but Congressmen Demur*, WALL ST. J., Sep. 20, 1974 at 3; Robert W. Tucker, *The International Struggle for Power and the Question, “Does Might Make Right?”*, WASH. POST, Mar. 10, 1977 at A2; Brendan Jones, *U.S.-Japan Report Seeks Freer Trade Aid Recommended*, N.Y. TIMES, Jun. q7, 1974 at 47.

<sup>206</sup> Such as special depreciation allowances for property devoted to R&D. See *Hearing on Taxation on Debt and Management*, *supra* note 202, at 30.

<sup>207</sup> This tactic helped Japanese companies such as Hitachi, Toshiba, Mitsubishi, and Fujitsu to sustain domestic competition. See J. BRANSON, *THE JAPANESE CHALLENGE TO U.S. INDUSTRY* 40 (1981) (detailing the Japanese license technology approach with foreign companies compared to domestic competitors).

<sup>208</sup> See C. JOHNSON, *MITI AND THE JAPANESE MIRACLE: THE GROWTH OF INDUSTRIAL POLICY 1925-1975* 16 (1982) (describing the way Japan imported a great proportion of its technology from the United States).

<sup>209</sup> Statement of John Nesheim, *supra* note 202, at 1324-1331.

<sup>210</sup> *Id.* Scientist Anthony Turkevich was a veteran of the Manhattan Project to build the atomic bomb during World War II. See also *Research and Development: Hearings before the Subcomm. of the H. Comm. on Government*

expenditures in order to develop defense weapons.<sup>211</sup> Others recommended stimulating investment in basic research science by providing incentives to corporations to collaborate with universities on developing basic research.<sup>212</sup> Scholars called for not only reexamination of support granted for basic and military research, but the ability to translate such research into economic activity and increased productivity.<sup>213</sup> Economists called to utilize taxation to encourage broadening of research efforts and more participation both by the private and public sector.<sup>214</sup>

The growing concerns for technological competitiveness and the emerging culture that glorified scientific innovations marked a critical point in time. There was a need to decide which route to adopt in this crossroad to keep pace with the worldwide technological race to the top. Among the indirect alternatives was the creation of a temporary research credit shaped after another temporary provision as will be unfolded next.

#### A. *Positive Feedback for A New Route*

Indirect subsidies to stimulate private investments was not a new idea. The U.S. already utilized tax incentives for similar purposes such as immediate expensing<sup>215</sup> and a temporary “investment tax credit.”<sup>216</sup> The idea of the research credit gained mounting positive feedback based on the benefits constituents gained via the investment credit. As opposed to government grants limited by resources, companies did not compete with each other over utilizing the credit. Thus, increasing the number of people supporting the research credit amplified its advantages as more knowledge, experience, and involvement supported that route.

The National Association of Manufacturers conducted independent studies on the benefits of capital tax incentives for economic growth and encouraged the government to provide additional tax incentives for product development in the form of a new

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*Operations*, 85th Cong. 35 (1958) (Statement of T. F. Watkowicz, New York City, Research and Development).

<sup>211</sup> See William M. Horne, Jr., Director, Corporate Tax Department in Olin Mathieson Chemical Corporation, *Research and Development Expenditures*, 2 TAX REVISION COMPENDIUM OF PAPERS ON THE TAX BASE 1115 (1959).

<sup>212</sup> See *Hearing on Taxation and Debt Management*, *supra* note 202, at 50 (discussing H.R. 6632 to provide corporations with basic research credit).

<sup>213</sup> See *Destinies for American Research, Hearing Before the Subcomm. on Energy Research and Production and on Science Research and Technology of the Comm. on Science and Technology*, 96th Cong. 6 (1979) (Statement of Nobel Laureate Dr. Burton Richter, Stanford Linear Accelerator, Stanford University).

<sup>214</sup> See Gerhard Colm, *The Economics of the Current Fiscal Policy Proposals in the United States*, 23 PUB. FIN. ANALYSIS, 82, 95 (1963).

<sup>215</sup> See, e.g., 26 U.S.C. §§179, 174 (providing immediate expensing of capital expenditures in qualified property and property used for research respectively).

<sup>216</sup> See Stanley S. Surrey, *Federal Tax Policy in the 1960s*, 15 BUFF. L. REV. 477 (1966) (describing the official purpose of the investment credit). Congress added section 38 to the U.S. Code to provide a new temporary investment tax credit of 7 percent of the cost of qualified property with at least four years of useful life See 26 U.S.C. § 46(c)(2) (1962). The credit was limited to 100% of the tax liability up to \$25,000, plus 25% of any tax liability in excess of \$25,000. 26 U.S.C. §§ 46, 48 (1962). The credit aimed to encourage private investments in qualified property and to stimulate the modernization of plants and equipment.

investment credit focused on research.<sup>217</sup> While the association's overreaching proposal was not enacted into law until almost a decade later, they planted that idea of repeating the path of another temporary credit in years to come. In 1978, Senators John Danforth (R-MO) and William Bradley (D-NJ) proposed an investment credit focused on research and development designed after the investment credit precursor.<sup>218</sup> They justified selection of that route by relying on studies that, at that time, predicted positive impact of such apparatus on research spending, productivity, and inflation.<sup>219</sup> The proposed new research credit, they contended, would offset the ongoing reluctance of many companies to bear the significant costs of research. The new credit aimed to do for investment in research what the investment credit purportedly did for capital investment to reverse stagnate research trends. Yet, it took over three years for Congress to agree on a proper route and enact that measure because among other possible options, the new research credit came with much uncertainty and highest price tag.<sup>220</sup>

Treasury remained doubtful about the efficacy of yet another version of the investment credit for two main reasons.<sup>221</sup> First and foremost, a credit imposes a high price on the U.S. budget, and it was not clear how they could offset another expensive tax instrument. Second, Treasury officials questioned utilizing the tax system, rather than direct government funding routes, to spur research investments.<sup>222</sup> They tried to divert attention to different path by calling on agencies that were more familiar with administrating research activities such as the National Science Foundation or the Commerce Department to take on the endeavor of stimulating increased research efforts.<sup>223</sup>

Academics such as Nobel Laureate in Physics Dr. Burton Richter of Stanford University promoted the idea of the new credit for research.<sup>224</sup> He stressed the importance of the government adopting policies that would encourage people to take more risks not just in connection to capital but also with research.<sup>225</sup> Nobel Laureate Dr. Melvin Calvin also believed that providing a credit for research would encourage

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<sup>217</sup> *Tax Policy, Capital Formation, and Productivity, A Study Prepared for the Committee on Taxation, National Association of Manufacturers*, contained in *General Tax Reform, Hearings Before the H. Comm. on Ways and Means*, 93rd Cong. 1 (1973) at 178 (study prepared by Norman B. Ture).

<sup>218</sup> S. 700, 96th Cong. (1979) ("A Bill to Extend 10 Percent Investment Tax Credit for Research and Development Expenditures"), reprinted in *Hearing on Taxation and Debt Management*, *supra* note 202, at 6.

<sup>219</sup> See *Id.*, at 70 (statement of Mark Shepherd, Jr., Chairman & Chief Executive Officer, Texas Instruments Inc.) (describing a similar study).

<sup>220</sup> The Finance Subcommittee on Taxation estimated the revenue Cost of Senate Bills S.700 providing 10 percent "investment tax credit for R&D expenditures" to be \$1.872 billion in 1980, \$2.2 billion in 1981, \$2.5 billion in 1982, \$2.7 billion in 1983, and almost \$3 billion in 1984. *Id.* at 5.

<sup>221</sup> *Hearing on Taxation and Debt Management*, *supra* note 202, at 29 (statement of Emil Sunley, Deputy Assistant Secretary for Tax Analysis, Department of the Treasury).

<sup>222</sup> *Id.* at 32.

<sup>223</sup> *Id.*

<sup>224</sup> *Hearing before the Subcomm. on Energy Research and Production and the Subcommittee on Science, Research and Technology of the House Committee on Science and Technology*, 96th Cong. 70-71 (1979) (statement of Nobel Laureate Dr. Burton Richter, Stanford Linear Accelerator, Stanford University).

<sup>225</sup> *Id.* ("...it seems to me that there clearly is a problem).



firms to innovate.<sup>226</sup> Representatives from the National Academy of Sciences supported this path as well and emphasized that it was critical to implement it because the tax structure of the United States had remained unchanged over the last 25 years.<sup>227</sup> Likewise, the American Association for the Advancement of Science endorsed the proposed new research credit because they believed it would increase the return to the investor and the attractiveness of research investments.<sup>228</sup> Representatives of non-profit organizations such as the Midwest Research Institute, a large research institute that specializes in environmental research, raved about the bill noting “it is exactly the kind of help that the Federal Government should be providing to aid the economy.”<sup>229</sup>

Many businesspersons were hoping to preserve the existing structure of the investment credit with which they already had vast administrative experience and merely expand it to include research expenditures.<sup>230</sup> While the consensus seemed to favor the enactment of new incentives specifically for research, business leaders kept pushing for utilizing the existing credit structure and simply expand its application to research activities.<sup>231</sup> Yet, the investment credit had a troublesome history that pushed Congress away from simply adding “research” to its existing ambit.

Much of the backlash the investment credit route received was due to its unstable lifecycle. The U.S. government utilized the investment credit as part of its affirmative fiscal actions to achieve economic growth while responding to recurring cycles of recession and recovery.<sup>232</sup> The U.S. government used the investment credit interchangeably: suspended it in 1966, reinstated it in 1967, repealed it in 1969, reinstated it in 1971, increased it in 1975, and rescinded the investment credit

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<sup>226</sup> *Id.* at 6 (statement of Nobel Laureate Dr. Melvin Calvin, Chemistry Department, University of California, Berkeley) (noting that during the late 1960s there was a depressing effect on innovative new firms, particularly high-technology firms.).

<sup>227</sup> *Id.* at 78 (statement of Dr. Philip Handler, President, National Academy of Sciences).

<sup>228</sup> See *Hearing on Taxation and Debt Management*, *supra* note 202, at n.12 (citing to a report on the state of research).

<sup>229</sup> *Id.* at 230 (statement of John McKelvey, President, Midwest Research Institute).

<sup>230</sup> *Id.* at 53-55 (statement of Mark Shepherd, Jr., Chairman and Chief Executive Officer, Texas Instruments, Inc.) (“Among many proposals for financial incentives, we feel the most effective would be based on a change in the investment tax credit...”).

<sup>231</sup> *Id.* at 40.

<sup>232</sup> Eyal-Cohen, *supra* note 25, at 876 (detailing the historical circumstances of the birth and death of the investment credit). The operation of the investment credit relied on New Economics, Functional Finance, and Neo-Keynesian theories of government manipulation of market positions. See JOHN MAYNARD KEYNES, *THE GENERAL THEORY OF EMPLOYMENT, INTEREST AND MONEY* 199 (Atl. Publishers 2008) (1936) (drawing a connection between increasing savings to more employment and advocating for better understanding of ways to influence market demand); See Abba P. Lerner, *The Essential Properties of Interest and Money*, 66 Q.J. ECON. 172, 192 (1952) (advocating the use of monetary and fiscal measures to an employment *policy*.); GEORGE TERBORGH, *THE NEW ECONOMICS* 8 (1968) (Terborgh was an economist at the Machinery and Allied Products Institute and Council for Technological Advancement, who discusses the New Economics theory here from a critical point of view).

altogether in the tax reform of 1986.<sup>233</sup> The investment credit never reappeared again, albeit many proposals over the years to restore this temporary legislation.

### B. *The Birth of a New Temporary Path*

Although there were plenty of reactive sequences and critical junctures in the path of the temporary investment credit, its on-and-off again history, its lagging effect, and its high budgetary price tag did not cultivate inert forces and path dynamics that were strong enough to continue its route. Rather, the investment credit was sought to manipulate and influence market behavior and created mixed public reaction.<sup>234</sup> The investment credit was viewed as a failed experiment and a direct form of government intervention in market forces.<sup>235</sup> A new device disconnected enough from this failed policy experiment was needed. The research credit originated in the midst of these circumstances.

By the end of the 1970s, the U.S. faced another critical juncture. The economy was in a tailspin. Combined double-digit inflation and unemployment created the “Misery Index.”<sup>236</sup> Hopes for research upsurge became the panacea for economic recovery at that time.<sup>237</sup> In his State of the Union message, President Jimmy Carter supported government action to encourage investments in research activities.<sup>238</sup> The emerging high-tech industry, specifically the integrated circuits, telecommunications, and computer industries, greatly supported the enactment of the research credit. American Electronics Association representatives also strongly favored the new research credit as a way to stimulate long-term research growth.<sup>239</sup> The American Marketing Association,<sup>240</sup> leading aerospace manufacturing companies,<sup>241</sup> and the Semiconductor Industry Association<sup>242</sup> all recommended a similar route.

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<sup>233</sup> Eyal-Cohen, *supra* note 25, at 874.

<sup>234</sup> *Hearing on Taxation and Debt Management*, *supra* note 202, at 9.

<sup>235</sup> Eyal-Cohen, *supra* note 25, at 877. Assistant Treasury Secretary Stanley Surrey was one of the biggest critics of the investment credit and the use of the tax system to maneuver the market using New Economics theory. See *Tax Changes for Shortrun Stabilization: Hearings Before the Subcomm. on Fiscal Policy of the J. Econ. Comm.*, 89th Cong. 64 at 238 (1966) (statement of Stanley S. Surrey, Assistant Secretary of the Treasury); Leo J. Raskind, *The Federal Reserve System: An Administrative Agency for Contemporary Monetary Policy?*, 35 GEO. WASH. L. REV. 299, 313 (1967) (Questioning the significance of the New Economics theory).

<sup>236</sup> See *United States Misery Index: How Miserable do you Feel?*, U.S. MISERY INDEX, <http://www.miseryindex.us/> (last visited Feb. 20, 2020) (during the 1960s, the Misery Index averaged 7.1% but rose to an average of 13.3% during the 1970s).

<sup>237</sup> The Joint Economic Committee stated “[w]e urge consideration of additional tax and other incentives to promote industrial R&D.” *The 1979 Economic Report of the President, Hearings before the Joint Economic Committee*, 96th Cong. 22 (1979).

<sup>238</sup> See ECONOMIC REPORT OF THE PRESIDENT, 15 WEEKLY COMP. PRES. DOC. 140 (1979) (calling on Congress “to take other anti-inflation action to reassert our Nation’s technological superiority,” emphasizing that “research and development is an investment in the Nation’s future.”).

<sup>239</sup> See *Hearing on Taxation and Debt Management*, *supra* note 202, at 1302 (statement of Herbert M. Dwight, President of Spectraphysics on behalf of the American Electronics Association) [“Statement of Herbert Dwight”].

<sup>240</sup> *Marketing News*, AM. MARKETING ASS’N, Jun. 20, 1975 at 4, 10.

<sup>241</sup> See *Hearing on Taxation and Debt Management*, *supra* note 202, at 311-25 (statement of John McDonnell, Executive Vice President of the McDonnell Douglas Corp.).

<sup>242</sup> *Id.* at 1322 (the Semiconductors Industry Association dramatized the need for the credit stating “We are ready to go. We have got the ideas, and the innovations. We need the cash flow.”).

At that critical juncture in 1981, Congress enacted a temporary research credit to stimulate private sector research and development. By applying only to incremental research expenditures, the credit aimed to incentivize increases in research and development and further expansion of research spending.<sup>243</sup> The Joint Committee on Taxation explained that the main reason for the creation of the research credit was the *temporary* need to reverse a decline in private research activities, which remained at a low stable level in real terms in preceding years.<sup>244</sup> But once the path was created, strong inertia forces led to corresponding cycles of extensions. These unique conditions helped pave the research credit route. Positive feedback and self-reinforcing dynamics created strong inertia forces that helped cement that path of enactment and renewal. Industrial associations played a central role in encouraging Congress to extend, expand, and entrench the research credit program.<sup>245</sup> In these sequences, initial strides made it difficult to divert from that path.

### C. *Reactive Sequences of Renewals*

Why was the research credit maintained as a temporary provision over the years? Much of it was priority-driven inertia. First, the temporary label offered budgetary flexibility and the opportunity to look for offsetting mechanisms to the high budgetary price tag that came with it. Second, the government needed to evaluate the operation and efficacy of the research credit and assess whether it indeed stimulated additional research expenditures, or simply rewarded firms that increased their research efforts.<sup>246</sup> Lastly, the research credit was rather complex and required policy expertise.<sup>247</sup> The periodic review gave legislators opportunities to appraise the credit periodically, receive input from constituents, and refine the legislation.<sup>248</sup> Yet, the temporary marker also created incentives for legislators to “kick the can down the road” and simply renew this intricate fiscal mechanism rather than terminate or permanently add it to the Code.

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<sup>243</sup> The Economic Recovery Tax Act, Pub. L. No. 97-34, 95 Stat. 172 (1981). Under the program, firms were, and still are, allowed dollar-for-dollar offset of income taxes for additional investment in research. 26 U.S.C. § 44F (1981).

<sup>244</sup> See Joint Committee on Taxation, *General Explanation of the Economic Recovery Tax Act of 1981*, H.R. 4242, Pub. L. 97-34, 97<sup>th</sup> Cong. 119 (1981) (reporting that civilian research to GNP ratio is 1.5 percent, compared with 1.9 percent for Japan and 2.3 percent for West Germany).

<sup>245</sup> For example, Small Business tried to expand the new research credit route even further by making it refundable. See *The Targeting of Business Incentives: Small or Large Business?: Hearing Before the Select S. Comm. on Small Bus.*, 97<sup>th</sup> Cong. 194 (1981) (statement of Robert E. Berney), 67 (statement of David Tonneson, CPA, Director of the Small Business Association of New England).

<sup>246</sup> See DAVID L. BRUMBAUGH, CONG. RES. SERV. REPORT TO CONGRESS ON THE RESEARCH AND EXPERIMENTATION TAX CREDIT 2 (1993). See *General Explanation of the Economic Recovery Tax Act of 1981*, *supra* note 244, at 121 (maintaining the temporariness of the credit as a way to test its efficiency.).

<sup>247</sup> See *General Explanation of the Economic Recovery Tax Act of 1981*, *supra* note 244, at 121.

<sup>248</sup> In the case of the research credit, it allowed for periodical examination and review of categories of qualifying research expenditures and base period, as well as controversies between taxpayers and the Service. *Id.* See DAVID L. BRUMBAUGH, CONG. RES. SERV. REPORT TO CONGRESS ON THE RESEARCH AND EXPERIMENTATION TAX CREDIT 2 (1993).

A path of reactive sequences—casually connected renewals, each a reaction to temporally antecedent expiration event, ensued and created a legislative inert process of multiple mechanical extensions. The 1981 Act set the original research credit to expire at the end of 1985. Yet, soon after, the program lapsed in anticipation of comprehensive reform. Congress made the first significant set of changes to the original credit in the 1986 reform, which marked another “critical juncture” in the history of temporary legislation, especially the investment and the research credits.<sup>249</sup> The 1986 reform was portrayed as revenue-neutral by lowering individual income tax and offsetting it by increased revenues from repeal of many business incentives.<sup>250</sup> Surprisingly, the 1986 Reform did not repeal the research credit but extended it retroactively through December 31, 1988.<sup>251</sup> While the research credit survived the far-reaching 1986 Reform, its distant temporary relative, the investment credit, did not. The official reason for abolishing the investment credit was neutrality.<sup>252</sup> The latter favored investment in machines with relatively short, useful lives. Doing so, it encouraged businesses to invest in equipment rather than other more economically efficient paths.

The repeal of the investment credit served as an important turning point for one of its path offshoots—the research credit program. Technology and innovation assumed a central position in tax policy discourse due to their contribution to economic development and the rise in the standard of living. Congress acknowledged, for the first time, that the culture of research and experimentation was more significant than any other policy, including the goal of maintaining tax neutrality. The research credit portrayed the improved 2.0 model of the investment credit targeting a more direct long-term effect on the economy. The choice not to divert from the research credit initial path in the 1986 reform underscored the importance of maintaining a culture of technological innovation. Once a culture that glorified scientific research was established, corresponding industrial associations self-reinforced the path of the research credit program as the next part demonstrates.

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<sup>249</sup> Tax Reform Act of 1986, Pub. L. No. 99-514, 100 Stat. 2085. See NONNA A. NOTO, CONG. RESEARCH SERV. ECON. DIV., ISSUE BRIEF, TAX REFORM EFFECTS 2 (1987) (surveying the impact of the 1986 reform). See also Rodger A. Bolling et al., *The Tax Reform Act of 1986: Simplification or Complication?*, 39 TAX EXEC. 235, 239 (1987) (“The 1986 Act is the most sweeping tax legislation in the 73-year history of the Internal Revenue Code.”).

<sup>250</sup> The main aspects of the 1986 reform included lowering income tax rates, broadening the tax base by eliminating or restricting deductions, exclusions, and credits. see also Ajay K. Mehrotra & Joseph J. Thorndike, *From Programmatic Reform to Social Science Research: The National Tax Association and the Promise and Perils of Disciplinary Encounters*, 45 LAW & SOC’Y REV. 593, 619 (2011) (describing the public atmosphere toward the 1986 reform).

<sup>251</sup> The Tax Reform made the credit part of the general business credit, thereby subjecting it to a yearly cap. In addition, it lowered the credit to 20 percent and modified the definition of qualified research expenses. The 1986 reform also created a separate 20% incremental tax credit for corporate expenditures to support basic research payments to universities and non-profit organizations. *Id.*

<sup>252</sup> NOTO, *supra* note 249, at 5.

## V. SELF-REINFORCED INERTIA

The research credit was extended for one more year by the Technical and Miscellaneous Revenue Act of 1988.<sup>253</sup> A year later, the research credit was further prolonged in the Omnibus Budget Reconciliation Act of 1989 that made the research credit more accessible for start-up firms.<sup>254</sup> Congress routinely continued the research credit temporary inert route using extensions and renewals (see Appendix). As this Part will reveal, these reactive sequences became locked-in and resistant to change very much through the efforts of organizations and associations that self-reinforced the program's expansion. The wide support given to the research credit prior to its birth did not dwindle but grew and encompassed additional supporters as its path expanded. New coalitions encouraged shifting government funds to commercialize science and technology.<sup>255</sup> Organizations delivered positive feedback via collective action and strong rhetoric to encourage more participants to utilize the program. The research credit's path perpetuated with utmost inert force.

Accordingly, over the years, the credit received bipartisan support in spite of its high budgetary price tag.<sup>256</sup> While both political parties supported the extension of the credit, disagreement between Republicans and Democrats arose often over whether and how to offset the revenue cost of this expensive measure.<sup>257</sup> No politician wanted to be seen as cutting subsidies for research activities. No party dared to repeal a popular apparatus to support “white-coats” engaged in scientific advancements that drive future economic growth.<sup>258</sup> Technology and innovations, by that time, were deeply embedded values in the American culture. Self-reinforcement dynamics of coalitions, professional organizations, and industrial associations engaged in paving the path for the research credit and, once it was created, molded it over the years toward permanency. While such overreaching inert forces existed in the case of the research credit, they did not in circumstances surrounding other temporary legislation such as the late investment credit.

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<sup>253</sup> In addition, it curtailed the effect by obliging firms claiming the credit to reduce their “expensing” under section 174 claimed by 50% of the combined amount of the credits. See Technical and Miscellaneous Revenue Act of 1988, Pub. L. No. 100-647, §§ 1002(h)(1), 4007, 1988 U.S. CODE CONG. & ADMIN. NEWS (102 Stat.) 3342, 3370, 3652).

<sup>254</sup> Pub. L. No. 101-239, 7110(a)(1), 103 Stat. 2106, 2322-2323 (1989) (extending the research credit from January 1, 1990 to December 31, 1990).

<sup>255</sup> See Sheila Slaughter & Gary Rhoades, *The Emergence of A Competitiveness research and Development Policy Coalition and the Commercialization of Academic Science and Technology*, 21 SCI. TECH. & HUMAN VALUES, 303 304 (1996) (comparing the historical support for research granted by the defense and health coalitions).

<sup>256</sup> See Statement of Administration Policy H. R. 880 – American Research and Competitiveness Act of 2015 (May 19, 2015). Available at [https://www.whitehouse.gov/sites/default/files/omb/legislative/sap/114/saphr880r\\_20150519.pdf](https://www.whitehouse.gov/sites/default/files/omb/legislative/sap/114/saphr880r_20150519.pdf) (last visited Fe. 20, 2020) (rejecting a permanent extension unless the cost will be offset with other revenue measures.)

<sup>257</sup> See GARY GUENTHER, CONG. RES. SER., REPORT FOR CONGRESS ON RESEARCH AND EXPERIMENTATION TAX CREDIT: CURRENT STATUS AND SELECTED ISSUES FOR CONGRESS 1 (2008) (describing how republican leadership retroactively extended the research credit and certain other preferences through 2009).

<sup>258</sup> Martin A. Sullivan, *Research Credit Hits New Heights, No End in Sight*, 84 TAX NOTES, 801 (2002).

### A. Non-Profit Organizations and Federal Agencies

In 1993, the Economic Strategy Institute, a non-partisan public policy research organization (dedicated to assuring “minimal market distortions”) reported to the President that government-spending priorities should focus on providing more incentives for private investment in research.<sup>259</sup> It also reiterated the path of encouraging more public-private partnerships to fund research collaboration in government-owned facilities.<sup>260</sup> The Committee for Economic Development (“CED”), a non-partisan, business-led public policy organization, placed its priority during the 1990s on federal spending programs.<sup>261</sup> While scrutinizing other programs, it reaffirmed the research credit, citing studies that showed that technology is a major source of improved living standards. The CED acknowledged that civilian research expenditures as a percent of GNP has been quite weak during the last decade. It advocated for utilizing federal deficit to reverse the low savings rate via the research credit program.<sup>262</sup> Steven A. Zimmer, a senior economist at the N.Y. Federal Reserve Bank, discussed the cost of technology capital before the House Subcommittee on Technology and Competitiveness in 1992.<sup>263</sup> He recounted that firms remained at a disadvantage for the investing in research projects that tend to have higher cost of capital.<sup>264</sup> Thus, a research credit program was important, in his eyes, in eliminating most of such disadvantages.<sup>265</sup>

Indeed, the periodic expiration of the research credit provided opportunities for government and industry to question and reexamine the efficacy of the program.<sup>266</sup>

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<sup>259</sup> See *The 1993 Economic Report of the President: Hearings Before the Joint Econ. Comm.*, 103d Cong. 17 (1993) (statement of Lawrence Chimere, Senior Economic Counselor, DRi/McGraw Hill and Fellow, Economic Strategy Institute).

<sup>260</sup> *Id.* at 38.

<sup>261</sup> See *Investment Incentives and Capital Costs: Hearing before the Subcomm. on Tech. and Competitiveness of the H. Comm. on Sci., Space and Tech.*, 102d Cong. 19 (1992) (Statement of William Beeman, Vice President and Director of Economic Studies).

<sup>262</sup> *Id.*

<sup>263</sup> See *Hearing on Investment Incentives and Capital Costs*, *supra* note 261, at 69 (statement of Steven A. Zimmer, Warburg Investment Management International).

<sup>264</sup> *Id.* at 71.

<sup>265</sup> *Id.* at 72 (claiming the cost of capital can be reduced from 32 to 22 percent when the credit is operational).

<sup>266</sup> See Sullivan, *infra* note 311 (citing to a list of economists that claim to prove the research credit’s efficiency); U.S. GEN. ACCOUNTING OFF., TAX POLICY AND ADMINISTRATION: THE RESEARCH TAX CREDIT HAS STIMULATED SOME ADDITIONAL RESEARCH SPENDING 3 (1989) (concluding that the research credit economically justifies its cost); BRONWYN H. HALL, EFFECTIVENESS OF RESEARCH AND EXPERIMENTATION TAX CREDITS: CRITICAL LITERATURE REVIEW AND RESEARCH DESIGN 24 (1995) (arguing that the research credits induce R&D that covers their cost); Philip G. Berger, *Explicit and Implicit Tax Effects of the R&D Tax Credit*, 31 J. ACCT. RES. 131, 167 (1993) (finding the research credit incentivized additional spending above its cost to the government); Nick Bloom, Rachel Griffith & John Van Reenen, *Do R&D Tax Credits Work? Evidence from a Panel of Countries 1979-1997*, 85 J. PUB. ECON. 1, 2 (2002) (finding that the research credit is effective in increasing R&D intensity); Robert D. Atkinson, *Expanding the R&E Tax Credit To Drive Innovation, Competitiveness and Prosperity*, 32 J. TECH. TRANSFER 617, 619 (2007) (arguing all studies found investment of \$1 of research credit produces more than \$1 in R&D expenditures). *But see* Robert Eisner, Steven H. Albert & Martin A. Sullivan, *The New Incremental Tax Credit for R&D: Incentive or Disincentive?*, 37 NAT’L TAX J. 171, 181 (1984) (finding no positive impact between the research credit to R&D expenditures). *See also* Emily Chasan, *CFOs Warn Investors on Impact of Expired R&D Tax Credit*, WALL ST. J., Jan. 22, 2014 (reporting a positive effect of the temporary credit on the firm’s earnings); Joe Harpaz, *R&D Tax Credit Expiry Rears Its Head in Corporate Earnings Reports*, FORBES, May 1,

The U.S. General Accounting Office published a study concluding that the credit increased research spending.<sup>267</sup> The NSF followed suit and emphasizing the increasing patterns of research expenditures in government, civilian, and university sources since the enactment of the research credit program.<sup>268</sup> Yet, the Congressional Research Service (“CRS”) challenged the effectiveness of the research credit.<sup>269</sup> CRS staff economists raised doubts as to whether the program was the best way to support research. They believed that direct funding of research projects could be more cost effective than through the research credit.<sup>270</sup> Moreover, research conducted by firms whose research expenditures are shrinking and are not entitled to claim the credit might be equally valuable to firms that are eligible to utilize it.<sup>271</sup> The CRS held the position that the non-refundability of the credit restricted its effect to firms with positive tax liabilities viewing the multiplicity of benefits for research as unwarranted.<sup>272</sup>

With the commencement of a new century, the growth of e-commerce continued to cultivate the status of scientific advancements and global technological competitiveness.<sup>273</sup> This culture was imperative in cementing the inert path of the research credit. Representatives from all political ranges emphasized the importance of maintaining the U.S. position in international competition.<sup>274</sup> Policymakers from both parties believed technology would enable the U.S. to compete in the future global market.<sup>275</sup> This ethos facilitated a bipartisan agreement that it was essential to

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2014 (same).

<sup>267</sup> See DAVID L. BRUMBAUGH, CONG. RES. SER., REPORT TO CONGRESS ON EXPIRING TAX PROVISIONS 10 (1992) (citing to the U.S. General Accountability office studies).

<sup>268</sup> See National Science Foundation, National Patterns of R&D Resources, 1994, tables B6, B9, B12. The NSF reported that after a long-time stagnation in research expenditures during the 1970s, the 1980s marked a significant increase in industry research expenditures. In ten years, private research outlays in 1990 doubled from their 1980 level.

<sup>269</sup> See BRUMBAUGH, *supra* note 267, at 2.

<sup>270</sup> *Id.* at 5.

<sup>271</sup> See GUENTHER, *supra* note 257, at 1.

<sup>272</sup> Firms were already permitted to use immediate expensing of their research outlays in the same year those expenses were incurred. *Id.* at 7.

<sup>273</sup> See generally Henry Kissinger, *Making a Go of Globalization: For Free Trade To Work, Political Imagination Must Match Economic Growth*, WASH. POST, DEC. 20, 1999 at A33 (discussing how to attain economic growth in a time of growing globalization); Ann Scott Tyson, *Should World Wide Web Be A Tax-Free Zones*, CHRIS. SCI. MONITOR, Feb. 28, 2000, at 3 (quoting E-commerce advocates that argue a ban on Internet taxes is critical for growth).

<sup>274</sup> See, e.g., Alison Mitchell, *White House and Senate in Trade Accord: Broader Power for Bush, Help for Displaced American Workers*, N. Y. TIMES, May 10, 2002 at A30 (discussing Democrats’ proposal to provide health insurance subsidies for workers who lost jobs because of international competition); Sander Levin, *Derailing a Consensus on Trade*, WASH. POST, Dec. 5, 2004 at A29 (reporting House Republican leadership initiative on trade bill that handles international trade standards).

<sup>275</sup> Anne Swardson, *A Better Blend of Transatlantic Competition*, WASH. POST, Jul. 2, 2000 at B1 (discussing EU and U.S. relationship over technological disputes); Bob Davis & Gerald F. Seib, *Technology Will Test A Washington Culture Born in Industrial Age*, WALL ST. J., May 1, 2000 at A1 (citing the President’s agenda under the New Economy policy to break concentration of technological power); Bill Joy, *Technology Check*, WASH. POST, Apr. 18, 2000 at A29 (debating partisan policies to handle the rapidly accelerating technological progress).

maintain the research credit program.<sup>276</sup> For example, by the start of a new millennium, House Speaker Dennis Hastert (R-IL), Minority Leader Dick Gephardt (D-MO), Senate Majority Leader Trent Lott (R-MS), Minority Leader Tom Daschle (D-SD), Presidential Candidate Al Gore (D), and Governor George W. Bush (R-TX), all endorsed the research credit and expanding its scope.<sup>277</sup> The Joint Committee on Taxation routinely supported the extension cycles of the research credit program for its purported benefits in reversing declining research trends. The Joint Committee even went as far as encouraging legislators to make the research credit program permanent in order to increase certainty for firms currently utilizing it.<sup>278</sup>

### *B. Industry Leaders and Professional Trade Associations*

Over the years, the path of the research credit became more inert and harder to divert.<sup>279</sup> Industry leaders and professional organizations served a key role in sustaining increasing returns and positive feedback dynamics for repeated extensions of the research credit program.<sup>280</sup> Their firms came to rely on the research subsidy and as more utilized the program, its path entrenched and expanded. They used three main justifications to their choice and the need to make the research credit permanent: First, the temporary nature of the program increased its uncertainty and made it difficult to rely on because once projects began they represented multi-year commitments. Managers and decision-makers needed assurance that the credit would be available for future years in which the research would continue to take place. Second, due to their long-term nature, research projects have stretched schedules that develop over several years. Accordingly, firms faced long lags in harvesting returns on their research investments compared to ordinary investments in capital. They demanded stability rather than the practice of periodically extending the credit for short periods or allowing it to lapse. Lastly, assuring the research credit would be available past administrative audit was a big hurdle. The credit's complexity and rate of controversy were major issues that needed to be resolved.

The government justified continuing research subsidies under the claim that the market fails to allocate resources for research efficiently.<sup>281</sup> This was said to cause

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<sup>276</sup> See *Hearing on Investment Incentives and Capital Costs*, *supra* note 261, at 135 (Statement of Dana Rohrabacher (R-CA)).

<sup>277</sup> See *The Tax Code and the New Economy: Hearing Before the Subcomm. on Oversight of the H. Comm. on Ways and Means*, 106th cong. 10 (2000) (Statement of R. Randall Capps, Corporate Tax Director and General Tax Counsel, Electronic Data Systems Corporation, Plano, Texas).

<sup>278</sup> See Description of Revenue Provisions in the President's Fiscal Year 2000 Budget Proposal (JCS-1-99) (discussing such a move to encourage incremental research projects with increased long-term financial risk).

<sup>279</sup> See NORTH, *supra* note 188, at 100 (describing the interaction between organizations and institutions (rules and procedures)).

<sup>280</sup> See, e.g., Peter Passell, *Economic Scene*, N.Y. TIMES, Feb. 5, 1998, at D2 (citing economists standing solid behind the research credit "because it offsets what is widely viewed as the systemic failure of free markets to allocate adequate resources to research and development. Study after study has found that corporations capture only about half of the gain from in-house innovation, with the rest going to other businesses or to consumers."); John Markoff, *U.S. Planning To Extend Tax Credit For Research*, N.Y. TIMES, Jan. 28, 1998, at A21 ("...studies have shown that the credit does have a significant effect on the economy.").

<sup>281</sup> *Id.* See also U.S. CONG. BUDGET OFFICE, FEDERAL SUPPORT FOR R&D AND INNOVATION 107 (1984); U.S. GEN.



the level of private spending on research to fall short of the amount that is warranted by the social benefits of research.<sup>282</sup> Patents that protect the investment in knowledge ultimately expire and others reproduce the invention and appropriate part of its return.<sup>283</sup> Accordingly, the total return to society from research is often greater than the return that accrues to the firm that originated the investment in research.<sup>284</sup> This form of market failure for innovations was said to preclude firms from undertaking research although it is warranted by its immense return to society.<sup>285</sup>

The semiconductor industry association was particularly conducive in endorsing renewals of the research credit. While doing so, it self-reinforced its own existence by encouraging more participation in the program and preserving important benefits to its members.<sup>286</sup> After the collapse of the Soviet Union, Japan's high technology sector continued to pose the greatest competitive challenge to the telecommunications and computer industries.<sup>287</sup> In order to survive, semiconductor companies had to innovate and invest in high levels of research and development. Yet, such investments, the association noted, were highly uncertain while new facilities became obsolete quickly.<sup>288</sup> They sought tax reduction to generate new capital that would be reinvested in new technology rather than transferred to investors.<sup>289</sup> Such testimonies and statements were instrumental in reinforcing the research credit's path. Congressional representatives acknowledged the challenges of the semiconductor industry and committed to advocate for government support of technological research.<sup>290</sup>

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ACCOUNT. OFFICE, THE RESEARCH TAX CREDIT HAS STIMULATED SOME ADDITIONAL RESEARCH SPENDING, 91 (1989).

<sup>282</sup> The reason given for such market shortage was that some types of research require immense sums of capital, too much uncertainty, or lack of information or expertise to evaluate accurately the project's real prospects. See BRUMBAUGH, *supra* note 267, at 2.

<sup>283</sup> See generally Mark A. Lemley, *The Economics of Improvement in Intellectual Property Law*, 75 TEX. L. REV. 989, 990 (1997) (providing an overview of the relationship between patents and inventive improvements). See also Samuel Oddi, *Un-Unified Economic Theory of Patents-The Not-Quite Holy-Grail*, 71 NOTRE DAME L. REV. 267 (1996) (discussing the various theories on how patent rights serve as incentives for innovative activity).

<sup>284</sup> *Id.* at 10. On the uncertainty that is involved in developing innovation see generally, Eyal-Cohen, *Through the Lens of Innovation*, 43 FLA. ST. U. L. REV. 951, 978 (2016).

<sup>285</sup> See BRUMBAUGH, *supra* note 267, at 4. See also, U.S. CONG. BUDG. OFF., FEDERAL SUPPORT FOR R&D AND INNOVATION 107 (1984); U.S. GOV'T ACCOUNTABILITY OFF., GAO/GGD-89-114, TAX POLICY AND ADMINISTRATION: THE RESEARCH TAX CREDIT HAS STIMULATED SOME ADDITIONAL RESEARCH SPENDING 91 (1989), available at <http://archive.gao.gov/d26t7/139607.pdf>.

<sup>286</sup> *Id.* ("New products, new technological innovations and, indeed, whole new industries might well be created as a result of increased research.").

<sup>287</sup> Structural differences between the economic environments provided Japan significant export competitive advantages over the United States and other nations. See *Id.* at 94 (Statement of George Scalise, Senior Vice President of Administration Advanced Micro Devices Inc in Sunnyvale, CA).

<sup>288</sup> Statement of John Nesheim, *supra* note 202, at 1324.

<sup>289</sup> *Id.* at 132 ("More needs to be done—especially in capital formation and trade policy—and tax reform is needed promptly in this aggressive, fast moving industry.").

<sup>290</sup> See, e.g., *U.S.-Japanese Economic Relations: Hearings Before the Subcomm. on Int'l Trade, Fin. and Security Econ. of the Joint Econ. Comm.*, 97th Cong. 96, at 81 (1981) (Statement of Representative Frederick W. Richmond (D-NY)) (noted "we do everything that we possibly can to help keep the semiconductor business here in the United States. After all, we invented it; didn't we?").

Consequently, the inert path of the research credit persisted vigorously into its second decade of existence. Congress extended the research credit in the Omnibus Budget Reconciliation Act of 1990<sup>291</sup> and the Tax Extension Act of 1991<sup>292</sup> each for one more year. Testifying in a hearing before the House Committee on Science, Space, and Technology at that year was a delegate from the American Electronics Association (“AEA”), a trade association founded in 1943 to represent the technology industry, including firms like IBM, AT&T, Motorola and others. The AEA delegates reinforced the credit (and their own existence) by claiming that high technology companies were being hindered by the short-term mentality of investors that required long-term capital investments, especially those involving research.<sup>293</sup> This great uncertainty that involved research made it virtually impossible to raise large sums of capital. The AEA went on to fault the U.S. for being “the only country that does not protect industries which have some strategic value.”<sup>294</sup> Three months before its scheduled expiration, the AEA urged Congress not only to continue the research credit’s path but to expand it. It advocated for adoption of a permanent and more aggressive research credit program to prevent American companies from moving research overseas.<sup>295</sup> Yet, some managers such as Hewlett Packard admitted that they considered the research credit so unusable that they no longer calculated it into their long-range cost analyses and supported a refundable research credit.<sup>296</sup> These proposals did not gain traction.

During the 1990s, the research credit continued its inert path albeit severe budgetary pressures.<sup>297</sup> In 1992, President George H. W. Bush vetoed a bill that included extension of the research credit for reasons that had nothing to do with the credit.<sup>298</sup> President Bush proposed an economic growth program but claimed that Congress has “produced partisan, flawed legislation” that would not create incentives for long-term investment and growth and would increase income taxes on more than two third of taxpayers.<sup>299</sup> As a result, the research credit expired on June 30, 1992,

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<sup>291</sup> Omnibus Budget Reconciliation Act of 1990, Pub. L. No. 101-508, 11402 (a)(1), 104 Stat. 1388, 1388-473 (1990) (extending the research credit from January 1, 1991 to December 31, 1991).

<sup>292</sup> Tax Extension Act of 1991, Pub. L. No. 102-227, 102(a), 105 Stat. 1686 (1991) (extending the research credit from January 1, 1992 to June 30, 1992).

<sup>293</sup> See *Hearing on Investment Incentives and Capital Costs*, *supra* note 262, at 109 (Statement of Peter Friedman, President, Photonics Imaging, Inc., representing the American Electronics Association).

<sup>294</sup> *Id.* at 100.

<sup>295</sup> The association advocated for 40 percent credit claiming such an increase was necessary to ensure the program’s effectiveness. *Id.* at 113.

<sup>296</sup> See Rick Wartzman, *Whether or Not They Benefit, Companies Decry Instability in Tax Law as a Barrier to Planning*, WALL ST. J., Aug. 10, 1993 at A16 (citing managers respond to the extension of the research credit). Industry leaders such as George Hatsopoulos, chairman of Thermo-Electron (today Thermo-Fisher Scientific) confessed that in his firm the effect of the research credit was like a drop in the sea. See Statement of Steven A. Zimmer, *supra* note 263, at 70-71 (stating that he met with Mr. Hatsopoulos and recorded his reaction).

<sup>297</sup> See *Hearing on Investment Incentives and Capital Costs*, *supra* note 261262, at 3 (Mar. 3, 1992) (Statement of Don Ritter (R-PA)) (discussing these constraints).

<sup>298</sup> See Tax Fairness and Economic Growth Act of 1992, H.R.4210, H. Rept. 102-432; Message from the President of the United States Transmitting his Veto on H.R. 4210, the “Tax Fairness and Economic Growth Acceleration Act of 1992”, 102nd Cong. 2nd Sess., H. Doc. 102-206, Mar. 24, 1992.

<sup>299</sup> *Id.*

and lapsed for the first time, underlining its temporary nature. But not for long. Once the political crisis was negotiated, so were the terms of the program extension and the research credit was retroactively reinstated through June 30, 1995.<sup>300</sup> Retroactive renewals are extreme statutory measures and their repeated practice in the case of the research credit emphasizes the ultimate inert forces that fueled it.

President Clinton's initiative titled "Rebuild America" made it clear he prioritized support for the high-tech sector when he included an investment program of \$17 billion devoted to some technology funding for the NSF but mostly to the extension of the research credit program.<sup>301</sup> Clinton also put forth a proposal to bring back the late investment credit again in the form of a temporary program.<sup>302</sup> During that year, the Joint Economic Committee reported another decline in research investment in the U.S.<sup>303</sup> It warned about a widening gap between U.S. research outlays compared to the West Germans and Japanese.<sup>304</sup> The enactment of the Omnibus Budget Reconciliation Act of 1993 was a response to such concerns resulting in extending the research credit retroactively once more until June 30, 1995.<sup>305</sup> President Clinton's proposal for the 1993 Act was to make the credit permanent. The House approved and passed the proposal, but the Senate version of the Reconciliation Act contained only the extension.<sup>306</sup> According to scholars, this was a result of political struggle over the Republican campaign pledge to create a balanced budget.<sup>307</sup> Notwithstanding irregular extension cycles and, at times, serving as a political negotiating tool, the inert path of the credit steadily continued to entrench due to its increasing return and positive feedback dynamics as more companies utilized it and called for its permanence.

Congressional delay caused the research credit to expire again on June 30, 1995. Although the program was not utilized considerably by small mom-and-pop shops, rather by large high technology firms, Congress placed the extension of the research credit in the Small Business Job Protection Act of 1996.<sup>308</sup> The act extended the credit and retroactively reinstated it but only from July 1, 1996, leaving the first and last

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<sup>300</sup> Small Business Job Protection Act of 1996, Pub. L. No. 104-188, § 1204, 110 Stat. 1755 (1996).

<sup>301</sup> See *Hearing on 1993 Economic Report of the President*, *supra* note 259, at 133.

<sup>302</sup> *Id.* at 131. The proposal meant for businesses with over \$5 million in gross receipts on all equipment investment above 70 percent of a historical base (a three-year average). Clinton proposed a simpler version of that credit for small business. Sullivan *infra* note 311

<sup>303</sup> See *Hearing on the 1993 Economic Report of the President*, *supra* note 259, at 5. (Opening Statement of Representative Obey, Joint Committee Chairman).

<sup>304</sup> *Id.* at 7.

<sup>305</sup> Omnibus Budget Reconciliation Act of 1993, Pub. L. No. 103-66, 13111(a)(1), 107 Stat. 312, 420 (1993) (extending the research credit from July 1, 1992 to June 30, 1995).

<sup>306</sup> See BRUMBAUGH, *supra* note 267, at 4 (describing the legislative history of the 1993 extension).

<sup>307</sup> See Rebecca M. Kysar, *Tax Law and the Eroding Budget Process The Past, Present, and Future of the Federal Tax Legislative Process*, 81 L. & CONTEMP. PROBS. 61, 65 (2018) (describing the political circumstances around the enactment of the Omnibus Budget Reconciliation Act of 1993).

<sup>308</sup> Small Business Job Protection Act of 1996, Pub. L. No. 104-188, 1204(a), 110 Stat. 1755, 1773 (1996) (extending the research credit from July 1, 1996 to May 31, 1997).

one-year gap in the credit's operation since its inception in 1981. This was a critical juncture that could have ended the path of the research credit. Yet, the inert forces that maintained the credit since its inception, continued to perpetuate its route. The reactive sequences of the research credit returned and although the credit expired in 1997 and 1998 it was extended retroactively once again by the enactment of the Taxpayer Relief Act of 1997<sup>309</sup> and the Omnibus Consolidated and Emergency Supplemental Appropriations Act of 1998.<sup>310</sup> The legislative packages in which Congress placed the program serve as evidence to the status quo bias and the length legislators went to extend the research credit's inert path rather than to let it die. Once more, the credit expired in 1999 for coalition-related priorities and political divide, followed by a retroactive reinstatement and extension until 2004 through the Ticket to Work and Work Incentives Improvement Act of 1999 that Republicans advanced at that time.<sup>311</sup> That year, Congress placed great emphasis on extending expiring provisions, such as the research credit.<sup>312</sup>

During the years that the credit was due to expire, Congress introduced dozens of bills to extend the credit permanently.<sup>313</sup> These cycles and reactive sequences began with organizations, economists, and supporters of the credit self-reinforcing the positive feedback and importance of technological innovations to the economy.<sup>314</sup> Presidential candidates supported a permanent enactment of the research credit ceding to the ethos and rhetoric focused on high-technology, science, and innovations.<sup>315</sup> Eventually, for budgetary reasons, Congress preserved the program but limited its extension to one or few more years.<sup>316</sup>

The inert path of the research credit became locked-in in cycles of renewal and extensions on the grounds that a sufficient number of market players have invested resources in, and become reliant upon, the program. It was simply too costly, at this point, to revert to any other alternative route such as competitive grants, private-

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<sup>309</sup> Taxpayer Relief Act of 1997, Pub. L. No. 105-34, 601(a)(1), 111 Stat. 788, 861 (1997) (extending the research credit from June 1, 1997 to June 30, 1998).

<sup>310</sup> Tax and Trade Relief Extension Act of 1998, Pub. L. No. 105-277, 1001, 112 Stat. 2681, 2681-888 (1998) (extending the research credit from July 1, 1998 to June 30, 1999).

<sup>311</sup> The Ticket to Work and Work Incentives Improvement Act of 1999, H.R. 1180, 106th Cong. (1999). See generally Martin A. Sullivan, *The Research Credit: A Perfect Example of an Imperfect Code*, 85 TAX NOTES 128 (1999) (briefly discussing the political economy in 1999 around the research credit and arguing that the extension of the research is the closer to a sure bet). Tax Relief Extension Act of 1999, Pub. L. No. 106-170, 502(a), 113 Stat. 1918, 1919 (1999) (extending the research credit from July 1, 1999 to June 30, 2004).

<sup>312</sup> See, e.g., Extension of Expiring Provisions, H.R. 2923, 106th Cong. (1999). Commentators opined that the political push for the five-year extension of the research credit meant to provide businesspersons certainty.

<sup>313</sup> See GUENTHER, *supra* note 257, at 1. (illustrating that in the 110th Congress the following 12 bills were introduced regarding the extension of the research credit: S. 14, S. 41, S. 592, S. 833, S. 2209, S. 2884, H.R. 1712, H.R. 2138, H.R. 2734, and H.R. 5105, H.R. 5681, and H.R.5917.).

<sup>314</sup> See, e.g., Peter Passell, *Economic Sense: The Tax Credit for Research and Development: Free Lunch.*, N.Y. TIMES, Feb. 5, 1998, at D2 (pointing to the political consensus of lobbying in advancing the research credit).

<sup>315</sup> See, e.g., Joel Kurtzman, *A Fed Chairman in Search of His Economic Leviathan*, N.Y. TIMES, July 26, 1992 at A2 ("The Perot plan proposed a bullish-on-business five-year moratorium on taxes for startup businesses and a permanent research and development tax credit.").

<sup>316</sup> GARY GUENTHER, CONG. RES. SER., REPORT FOR CONGRESS ON RESEARCH AND EXPERIMENTATION TAX CREDIT: CURRENT STATUS AND SELECTED ISSUES FOR CONGRESS 9 (2005).

public collaborations, and expanding basic research programs. As time passed, the research program benefitted from greater positive feedback. The more constituents utilized the research credit subsidy and supported it, the more the program received positive feedback for its alleged success in spurring additional research. With every cycle of extension and renewal the program enjoyed increasing returns of its path. As more taxpayers claimed the research credit, their tax professionals became familiar with its intricacies, thus helping improve its operation. While other programs for direct funding and research collaborations also competed for the same government allocation of funding, high switching costs from the research credit path prioritized it over other options.

Path dependence scholars prescribe that organizations often exercise their influence to prevent change.<sup>317</sup> When organizations represent only certain groups of constituents, they focus on maintaining and reinforcing the path that promotes the interests of that group the most.<sup>318</sup> During 1997 a new player entered the political arena. The “R&D Credit Coalition” (“Coalition”) was created to join forces in a cross-industry effort. Although there were already other coalitions that acted on behalf of technology companies, this coalition was the first to be named upon, and design its agenda after, a specific temporary legislation.<sup>319</sup> It aimed to ensure the research credit is made permanent.<sup>320</sup> This network was comprised of over 87 trade and professional associations,<sup>321</sup> several think tanks, professional networks, advocacy and advisory groups,<sup>322</sup> and over 1,000 companies including major conglomerates such as Microsoft, Apple, Oracle, and so on.<sup>323</sup>

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<sup>317</sup> See generally Douglass C. North, *The Historical Evolution of Politics*, 14 INT'L REV. L. & ECON. 381 (1994) (providing an account of political evolution from an institutional perspective); DOUGLASS C. NORTH, INSTITUTIONS, INSTITUTIONAL CHANGE AND ECONOMIC PERFORMANCE 92-104 (1990) (considering the structure of institutions (rules) and their impact on the organizations that operate according to them.).

<sup>318</sup> See, e.g., Greg Hitt, *Businesses Bet Dollars-to-Doughnuts That Tactics Win Tax Breaks*, WALL ST. J., Mar. 29, 2001 at A16 (noting the groups advocating for including permanently extending the research credit similar to other nations).

<sup>319</sup> See *Savings and Investment Provisions in the Administration's Fiscal Year 1998 Budget Proposal: Hearing Before the Comm. on House Ways and Means* 105th Cong. 265 (1997) (naming other coalitions that followed their agenda such as the Savings Coalition of America, the Blue Dog Coalition, the Capital Gains Coalition, the Entrepreneurs Coalition, American Business Conference, A Coalition of Growth Companies, the Family Business Estate Tax Coalition, Silicon Valley Software Industry Coalition, Software Industry Coalition, California).

<sup>320</sup> See Objectives, R&D Coalition, <https://investinamericasfuture.org/#page> (last visited Feb. 20, 2020).

<sup>321</sup> Such as U.S. Chamber of Commerce, the Aerospace Industries Association, the Association for Manufacturing Technology, Association of Clinical Research Organization, National Association of Manufacturers, Pharmaceutical Research and Manufacturers of America, Semiconductor Industry Association, The Plastics Industry Trade Association, American Chemical Society, and National Tooling and Machining Association, and others. *Id.*

<sup>322</sup> Such as Business Roundtable, Ernst & Young Washington Council, Financial Executives International, Research! America, and Silicon Valley Leadership Group. See Members, R&D Coalition, <https://investinamericasfuture.org/#members> (last visited Fe. 20, 2020).

<sup>323</sup> Other companies included HP, Texas Instruments Incorporated, Honeywell International, Boeing, Lockheed Martin Corporation, DuPont, Exxon Mobil Corporation, Johnson & Johnson, and even motorcycle manufacturer Harley Davidson participated in the R&D Credit Coalition. *Id.*

The Coalition strongly reinforced the narrative of technological competitiveness as an integral part of economic growth policy. It advocated for extending and reshaping the rules governing the research credit.<sup>324</sup> It argued that while the research credit was made temporary so that industry and government could evaluate its operation, the program had long proven to be an effective incentive for companies to increase their domestic research.<sup>325</sup> The Coalition emphasized that the transient nature of the program and the many gaps in its extension reduced its certainty and incentivizing effect.<sup>326</sup> It cited studies that highlighted that research outlays are primarily spent on salaries for engineers, researchers and technicians; thus, the benefits derived from successful new products trickle to higher salaries for employees and higher standard of living.<sup>327</sup> These studies also posited that a dollar reduction in the after-tax price of research stimulates approximately one dollar of additional private research spending in the short run, and about two dollars of additional research in the long run.<sup>328</sup>

The Research Credit Coalition was an instrumental player in the research credit path and led the way to other legislation-oriented coalitions.<sup>329</sup> Its self-reinforcement efforts were fruitful in upholding the credit's inert path and in the 2003<sup>330</sup> and 2004<sup>331</sup> Tax Cuts Acts. The Working Families Tax Relief Act of 2004<sup>332</sup> extended the credit again until the end of 2005 and the Tax Relief and Health Care Act of 2006 prolonged the credit until the end of 2007.<sup>333</sup> This pattern repeated until 2014.<sup>334</sup> The research

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<sup>324</sup> See Letters, R&D Coalition, <https://investinamericasfuture.org/Communications/letters/> (last visited Feb. 20, 2020).

<sup>325</sup> See *Hearing on the Tax Code and the New Economy*, *supra* note 277, at 94 (Statement of Bill Sample, Chairman, R&D Credit Coalition, Redmond, Washington, and Senior Director, Domestic Taxes and Tax Affairs, Microsoft Corporation) ["Statement of Bill Sample].

<sup>326</sup> *Id.* at 98 (stating that to maximize the program's effectiveness and to sustain global technological competitiveness, the U.S. research community needed a stable, consistent research credit.).

<sup>327</sup> *Id.*

<sup>328</sup> Statement of Bill Sample, *supra* note 325, at 99 (citing to a study by Coopers & Lybrand estimating that a permanent extension of the research credit would create \$58 billion of economic growth over the 1998-2010 period, including \$33 billion of additional domestic consumption and \$12 billion of additional business investment.). See also Ernst & Young LLP, *Supporting Innovation and Economic Growth*, A Report Prepared for the R&D Credit Coalition, April 2008 (claiming that research credit program was a meaningful, market-driven tool).

<sup>329</sup> See Michael J. Graetz and Rachael Doud, *Technological Innovation, International Competition, and the Challenges of International Income Taxation*, 113 COLUM. L. REV. 347, 393 (2013) ("the R&D Credit Coalition has become legendary for its ability to maintain R&D tax incentives"). See, e.g., *Legislative and Policy Coalitions*, DATA MARKETING & ANALYTICS, <https://thedma.org/advocacy/legislative-and-government-affairs-coalitions/> (a coalition that advances and protects data-driven marketing at the legislative and regulatory levels on the Federal and state levels in the United States).

<sup>330</sup> The Jobs and Growth Tax Relief Reconciliation Act of 2003, Pub. L. No. 108-27, 117 Stat. 752 (2003).

<sup>331</sup> The American Jobs Creation Act of 2004, Pub. L. No. 108-357, 118 Stat. 1418, 1514 (2004).

<sup>332</sup> The Working Families Tax Relief Act of 2004, Pub. L. No. 108-311 301(1), 118 Stat. 1166 (2004) (extending the research credit from June 30, 2004 until December 31, 2005).

<sup>333</sup> The act added simpler alternative method that firms could use to calculate the credit. See Tax Relief and Health Care Act of 2006, Pub. L. No. 109-432, 120 Stat. 2922, 2991 (2006). See BRUMBAUGH, *supra* note 267, at 7.

<sup>334</sup> See Jackie Calmes, *Obama to Pitch Permanent Tax Credit*, N.Y. TIMES, Sep. 5, 2010, at 22 (reporting that two months before the election and part of his pre-election push to spur the slumping economy President Obama announced he will increase and permanently extend the popular but costly research credit and pay for it by closing other corporate tax breaks).

credit was the largest and most popular part of a group of about 50 temporary provisions set to expire. Certain policymakers objected an extension without offsetting the corresponding budgetary cost through budget cuts or other means.<sup>335</sup> They argued that the price tag of a permanent extension of the research credit was too high and would cost the government about \$180 billion over a decade.<sup>336</sup> The year 2015 was prime for an election-year showdown. The White House threatened to veto the permanent research credit if funding was not found for highways and health care.<sup>337</sup> Each party accused its rival of irresponsible legislation. Democrats blamed the GOP for creating massive budget deficit. Republicans accused Democrats of driving research jobs overseas. The research credit was in the midst of this power struggle. After some arm twisting, a political vote of 274 to 145 made the research credit permanent for the first time in its long, transient life.<sup>338</sup> For over three decades, a temporary mechanism meant to allow legislative change and flexibility formed an inert path that ended in the ultimate lock-in.

## VI. CONCLUSION

Legislative inertia has come to reflect a malfunction of democracy.<sup>339</sup> Insufficient legislative time and priorities prevent legislatures from considering the efficacy of existing statutes in attaining their goal.<sup>340</sup> A presumption in favor the status quo creates an extensive barrier for statutory action because it is more time-consuming and politically costly to uphold legislative action than to elude to inaction.<sup>341</sup> The result today is legislative stagnation and numerous obsolete rules that do not accord to present-day social practices.<sup>342</sup> In search for optimal legislative policies, the last few decades saw an increasing use of temporary legislation that expires on its own after a set period of time.<sup>343</sup>

Temporary legislation is one of the most confounding issues for constituents, lawmakers, and professionals.<sup>344</sup> Every year, Congress adds new expiring provisions

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<sup>335</sup> See John D. McKinnon, *House Votes to Permanently Extend Research Tax Credit; Move Sets Up Likely Clash between Republicans and Obama*, WALL ST. J., May 20, 2015 (describing the political scuttle in 2015 surrounding the research credit).

<sup>336</sup> *Id.*

<sup>337</sup> See Stephen Ohlemacher, *House Votes to Make Research Credit Permanent*, SUN. GAZETTE, May 11, 2014, at E5 (noting the white house threatened to veto the bill since extending permanently the 50-plus temporary tax breaks would add \$500 billion or more to the deficit.).

<sup>338</sup> In 2015, President Obama signed into law the Protecting Americans from Tax Hikes (PATH) Act, Pub. L. No. 114–113 (2015) that made the credit permanent and, for the first time, permitted small businesses to use the credit to offset both their regular, Alternative Minimum Tax and payroll tax liabilities.

<sup>339</sup> See Waldron, *supra* note 1, at 1389.

<sup>340</sup> See Dixon, *supra* note 61, at 2194 (legislators tend to allocate low priority to lawmaking that are complex and does not benefit from robust majoritarian backing).

<sup>341</sup> See Listokin, *supra* note 9, at 530 (arguing high “transaction costs” preclude constitutional policy change).

<sup>342</sup> See *supra* note 2 and accompanying text.

<sup>343</sup> See STAFF OF JOINT COMM. ON TAX’N, JCX-1-20, LIST OF EXPIRING FEDERAL TAX PROVISIONS 2020-2029, Jan. 16, 2020, <https://www.jct.gov/publications.html?func=startdown&id=5240> (last visited Feb. 20, 2020) (providing a list of current expiring dozens of tax provisions).

<sup>344</sup> See, e.g., Ian Ayres, *Extempore*, 81 U. CHI. L. REV. DIALOGUE 72, 74 (2014) (suggesting a variety of existing

and extends existing ones. Despite their vast economic impact, our understanding of expiring legislation is limited by explanations that rely primarily on rent-seeking, leaving key questions about the life-cycle of temporary legislation unaddressed. This Article provided the first comprehensive explanation of this phenomenon by drawing on path dependence theory. It revealed that path-dependent dynamics of temporary legislation often result in their own inertial force that can explain why some temporary legislation enjoy many decades of extensions and renewals, while other such laws are kept in place for only a few years. By offering a deeper understanding of temporary legislation and its evolutionary path, this Article contributes to on-going debates on optimal design of present-day policies and the ability of legislatures to resist status quo bias and bring about legal change.

Like other meta-legal theories, path dependence does not prescribe “mystical aphorisms of the fortune cookie.”<sup>345</sup> Rather, it can inform legislatures about important facets of legal reality. This Article urges policymakers and scholars in diverse areas of the law to consider the ways our legal system employ temporary bills in light of path dependence dynamics. In its current practice, temporary legislation may not reduce but rather exacerbate unintended legislative inertia, thus reinforcing the status quo bias in our legal system. By amplifying coalition- and priority-inertia along with switching costs, certain path dynamics eventually convert many temporary fixes into permanent fixtures of the U.S. Code. Instead of curtailing inertia, temporary legislation may, under certain circumstances, cultivate forces that further entrench policies and programs regardless of their efficacy.

Path dependent dynamics may also provide normative insights for achieving flexible lawmaking while averting inaction. Surprisingly, the solution may lie in adding more expiring limitations rather than abolishing them. For example, Congress can create a new expiring rule that sets a “three strikes and you’re out” policy by which temporary legislation cannot be extended more than three times.<sup>346</sup> In the search for optimal statutory change, lawmakers can adopt default rules that cause enacted temporary legislation to revert to a previous iteration of law, bringing back the alternatives that were available before choosing that particular policy route. This may not be desirable for either party because it imposes high switching costs on the legislature and constituents relying on the current policy. At the same time, these

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practices and contexts in which temporary law might provide a net benefit). See also *Joint Letter: Don't Revive the Expired Tax Extenders Taxes*, TAXES (May 6, 2019) available at <https://www.crfb.org/sites/default/files/12OrganizationsOpposedToTaxExtenders.pdf> (describing a letter urging Congress not to extend temporary legislation by a coalition of twelve organizations from across the political spectrum). Recently, scholars have also demonstrated empirically the increasing practice of temporary legislation. See, e.g., Ittai Bar-Siman-Tov, *Temporary Legislation, Better Regulation, and Experimentalist Governance: An Empirical Study*, 12 REG. & GOV. 192 (2018) (finding that temporary legislation is not a rarely used legislative tool but very prevalent).

<sup>345</sup> *Obergefell v. Hodges*, 135 S. Ct. 2584, 2630 n. 22 (2015) (Scalia, J., dissenting) (criticizing the majority opinion usage of clichés in their opening line of reasoning).

<sup>346</sup> See also Sunstein, *supra* note 128, at 43 (proposing in the context of default rules utilizing a mechanism of “active choice” which would require people to overcome procrastination and incur effort costs that might otherwise lead them to focus on other matters.).



kind of default rules may put pressure on legislators to reach a consensus.<sup>347</sup> Lastly, when choosing between several policy-alternatives, legislators can adopt a temporary rule that enables policy experimentation. If one policy option is deemed unsuccessful by predetermined objective measures, the law can default to any number of set alternatives. If it is evident that the first enacted policy is effective in achieving its goal, it should be made permanent. These solutions can potentially enable policymakers to gain more of the benefits of learning and experimenting with different policies, while avoiding path dependence through irreversible switching costs. It will allow programs and policies to perpetuate due to their merits, rather than historical accidents.

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<sup>347</sup> See Listokin, *supra* note 9, at 536 (suggesting a penalty default rule that would introduce an unpleasant final law that would legislators to overcome policymaking inertia.).

## LEGISLATIVE HISTORY APPENDIX

<u>Year</u>	<u>Legislative Change</u>
1981	Creation of the R&D tax credit scheduled to expire 12/31/1985. <sup>348</sup>
1986	Credit lapsed but was retroactively extended and the rate cut from 25 percent to 20 percent. <sup>349</sup>
1988	Credit extended for one year, but its effectiveness was reduced by decreasing the deduction for R&D expenditures by 50% of the credit. <sup>350</sup>
1989	Credit extended for another year further reducing the effectiveness of the credit by decreasing the deduction for R&D expenditures by a full 100% of the credit and introducing a focus on start-up companies. <sup>351</sup>
1990	Credit extended for 15 months through the end of 1991. <sup>352</sup>
1991	Credit extended through June 30, 1992. <sup>353</sup>
1993	Credit was retroactively extended through June 30, 1995. <sup>354</sup>
July 1, 1995 to June 30, 1996	Credit lapsed.
1996	Credit extended for eleven months, through May 31, 1997, but was not extended retroactively. The elective Alternative Incremental Research Credit (“AIRC”) added, increasing its flexibility and making the credit available to R&D intensive industries that could not qualify for the credit under the regular criteria. <sup>355</sup>
1997	Credit extended for thirteen months and made available for expenditures incurred from June 1, 1997 through June 30, 1998, with no gap between this and the previous extension. <sup>356</sup>
1998	Credit extended for one-year until June 30, 1999. <sup>357</sup>

<sup>348</sup> Economic Recovery Tax Act of 1981, Pub. L. No. 97–34, § 221, 95 Stat. 172 (1981).

<sup>349</sup> Tax Reform Act of 1986, Pub. L. No. 99–514, § 231, 100 Stat. 2085 (1986).

<sup>350</sup> Technical and Miscellaneous Revenue Act of 1988, Pub. L. No. 100–647, § 4008, 102 Stat. 3342 (1988).

<sup>351</sup> Omnibus Budget Reconciliation Act of 1989, Pub. L. No. 101–239, § 7110, 103 Stat. 2106 (1989).

<sup>352</sup> Omnibus Budget Reconciliation Act of 1990, Pub. L. No. 101–508, § 11402, 104 Stat. 1388 (1990).

<sup>353</sup> Tax Extension Act of 1991, Pub. L. No. 102–227, § 102, 105 Stat. 1686 (1991).

<sup>354</sup> Omnibus Budget Reconciliation Act of 1993, Pub. L. No. 103–66, § 13111, 107 Stat. 312 (1993).

<sup>355</sup> Small Business Job Protection Act of 1996, Pub. L. No. 104–188, § 1204, 110 Stat. 1755 (1996).

<sup>356</sup> Taxpayer Relief Act of 1997, Pub. L. No. 105–34, § 601, 111 Stat. 788 (1997).

<sup>357</sup> Omnibus Consolidated and Emergency Supplemental Appropriations Act, 1999, Pub. L. No. 105–277, § 1001, 112 Stat. 2681 (1998).

1999	Credit extended until June 30, 2004 and a modest increase in the AIRC rates was adopted. <sup>358</sup>
2004	Credit extended through December 31, 2005 <sup>359</sup>
2005	Credit revised by adding a 20% credit of payments for energy research by certain qualified groups. <sup>360</sup>
2006	Credit extended retroactively through the end of 2007, increased the AIRC rates, and established the alternative simplified credit. <sup>361</sup>
2008	Credit extended retroactively through 2009. <sup>362</sup>
2010	Credit extended through 2011. <sup>363</sup>
2012	After a one-year lapse, the credit extended retroactively through 2013. <sup>364</sup>
2014	All four components of the credit extended through 2014. <sup>365</sup>
2015	PATH Act of 2015 retroactively extended the credit, made it permanent, and expanded credit provisions by allowing small businesses to take the credit against their Alternative Minimum Tax (AMT) liability for tax years beginning after December 31, 2015 and allowing startup businesses with no federal tax liability and gross receipts of less than \$5 million to take the credit against their payroll taxes for tax years beginning after December 31, 2015. <sup>366</sup>
2017	Credit preserved and enhanced while eliminating section 199 incentives and reducing the value of the Orphan Drug Credit. <sup>367</sup>

<sup>358</sup> Ticket to Work and Work Incentives Improvement Act of 1999, Pub. L. No. 106–170, § 502, 113 Stat. 1860 (1999).

<sup>359</sup> Working Families Tax Relief Act of 2004, Pub. L. No. 108–311, § 301, 118 Stat. 1166 (2004).

<sup>360</sup> Energy Policy Act of 2005, Pub. L. No. 109–58, § 102, 119 Stat. 594 (2005).

<sup>361</sup> Tax Relief and Health Care Act of 2005, Pub. L. No. 109–432, § 104, 120 Stat. 2922 (2006).

<sup>362</sup> Emergency Economic Stabilization Act of 2008, Pub. L. No. 110–313, § 301, 122 Stat. 3765 (2008).

<sup>363</sup> Tax Relief, Unemployment Compensation, and Job Creation Act of 2010, Pub. L. No. 111–312, 124 Stat. 3296, 3317 (2010).

<sup>364</sup> American Taxpayer Relief Act of 2012, Pub. L. No. 112–240, 126 Stat. 2313, 2326 (2013).

<sup>365</sup> Tax Increase Prevention Act of 2014, Pub. L. No. 113–295, 128 Stat. 4010, 4014 (2014).

<sup>366</sup> Protecting Americans from Tax Hikes Act of 2015, Pub. L. No. 114–113, 129 Stat. 2242, 3051 (2016).

<sup>367</sup> An Act to Provide for Reconciliation pursuant to Titles II and V of the Concurrent Resolution on the Budget for Fiscal Year 2018, Pub. L. No. 115–97, 131 Stat. 2112, 2113 (2017).