



Master's Thesis of Public Policy

An Analysis of the Policy-Making Process of the Virtual Currency Taxation Policy in the United States

From the Multiple Streams Framework (MSF):

미국 가상화폐 과세정책의 정책결정과정 분석: 다중흐름모형(MSF)을 중심으로

February 2023

Graduate School of Public Administration Seoul National University Public Policy Major

Hannah Kim

An Analysis of the Policy-Making Process of the Virtual Currency Taxation Policy in the United States

From the Multiple Streams Framework (MSF):

Huck-Ju Kwon

Submitting a Master's Thesis of Public Policy September 2022

Graduate School of Public Administration Seoul National University Public Policy Major

Hannah Kim

Confirming the Master's Thesis Written By

Hannah Kim

December 2022

Chair	Min Gyo Koo	(Seal)
Vice Chair	Chong Min Na	(Seal)
Examiner	Huck Ju Kwon	(Seal)

Abstract

The Biden Administration recently passed Section 80603 (*Information Reporting for Brokers and Digital Assets*) of the Infrastructure Investment and Jobs Act (IIJA), which increases the tax reporting requirements for the "brokers" of virtual currency transactions to the Internal Revenue Service (IRS), in order to crack down on the growing tax evasion on virtual currency transactions. The issue of tax evasion and the tax gap in virtual currency has emerged as related investments and transactions dramatically increased over the past few years. However, despite the tax authorities' attempts to close the tax gap, none of the bills that addressed this issue were signed into law under either the Obama or Trump administrations due to political and technological limitations. After a few stagnant years in virtual currency tax policy development, Section 80603 was finally passed by the Biden administration, during an unlikely moment and circumstance. How did Section 80603 pass against the backdrop of gridlock on virtual currency tax policy-making?

This research uses the Multiple Streams Framework (MSF) to investigate the social and political dynamics and the roles of key political players that drove the policy-making of Section 80603 under circumstances of ambiguity. The modified MSF is used to separately analyze two distinct issues at the heart of the agenda-setting and decision-making process and to emphasize and distinguish the roles of the policy entrepreneur and political entrepreneur in each process. Finally, this research provides key insights for policymakers' consideration by suggesting the implications of this legislation for the taxpayers, IRS and the government, cryptocurrency exchanges, and the new types of virtual currency such as non-fungible tokens (NFTs).

Key Words: Agenda-setting, Decision-making, Multiple Streams Framework, Virtual Currency, Tax Gap *Student Number:* 2020-25349

Table of Contents

Chapter I:	Introduction
1.	Research Background1
2.	Research Scope and Method
Chapter II	: Theoretical Background and Literature Review
1.	Multiple Streams Framework (MSF)6
	1.1. The Problem Stream
	1.2. The Policy Stream
	1.3. The Political Stream
	1.4. Policy (Agenda) Window
	1.5. Policy Entrepreneurs
2.	Literature Review
	2.1. Studies Using the MSF16
	2.2. Studies on Virtual Currency Taxation25
3.	Methodology
	3.1. Research Subject and Scope
	3.2. Research Framework
	3.3. Research Method
Chapter II	I. Virtual Currency and its Taxation
1.	Virtual Currency and Tax Gap
2.	Section 80603 of the Infrastructure Investment and Jobs Act40
Chapter IV	: Analysis of the Policy-Making Process of Section 80603 Using the MSF
1.	Increasing Reporting Requirements for Virtual Currency "Brokers"
	(Agenda-Setting)
	1.1. Increase in Virtual Currency Tax Gap (Problem Stream)43
	1.2. Advent of the Biden Administration (Political Stream)49
	1.3. Policy Alternatives by Government Agencies (Policy Stream)51
	1.4. Agenda Window: Opening from the Political Stream55
	1.5. Policy Entrepreneur: IRS Commissioner, Charles Rettig56
2.	Deciding Who Exactly Constitute "Brokers" (Decision-Making)
	2.1. Problematic Definition of "Broker" in Section 80603 (Problem Stream)

2.2. Senator Portman's Policy Proposal (Policy Stream)60
2.3. Stakeholders Supporting and Opposing an Amendment to the Original
Draft of Section 80603 (Political Stream)62
2.4. Decision Window: Decision-Making Process in Senate and House70
2.5. Political Entrepreneur: Senator Robert Portman76
3. Policy Output
3.1. Revisiting the MSF Framework (Result of the Analysis)82
3.2. Application of MSF Hypotheses to the Policy-Making of Sec.8060384
Chapter V: Conclusion
1. Summary of Findings86
2. Policy Implications
3. Limitations

Appendix

References

List of Abbreviations

СВО	Congressional Budget Office
CFTC	Commodity Futures Trading Commission
FATCA	Foreign Account Tax Compliance Act
FBAR	Foreign Bank and Financial Accounts
FinCEN	Financial Crimes Enforcement Network
GAO	U.S. Government Accountability Office
IIJA	Infrastructure Investment and Jobs Act
IRC	Internal Revenue Code
IRS	Internal Revenue Service
MSF	Multiple Streams Framework
NFT	Non-Fungible Token
SEC	U.S. Securities and Exchange Commission
TIGTA	Treasury Inspector General for Tax Administration

Chapter I. Introduction

1. Research Background

Virtual currency¹ has become an increasingly significant economic force in recent years, both in the United States (hereafter "U.S.") and worldwide. Investment in virtual currency, such as cryptocurrencies, has grown at an exponential rate, with the crypto economy reaching a market capitalization of over US\$3 trillion in less than 13 years since its first introduction.²

However, tax authorities are still struggling in considering virtual currency's tax implications. Due to its digital, anonymous, decentralized, and volatile nature, it is difficult for tax authorities and policymakers to determine how and when the virtual currency should be taxed and to track and collect all amounts taxpayers owe. The lack of consensus amongst tax authorities leaves the tax implications of purchase, ownership, and sale to differ widely between jurisdictions, bringing ambiguity, complexity, and risk to taxpayers.

One of the significant challenges for policymakers is that virtual currency bypasses intermediaries due to its decentralized system and does not follow the same tax-reporting requirements as conventional investments. The drawback for tax authorities is most noticeable in the U.S. because third parties, such as brokers, are primarily responsible for tax reporting to the government on tax-related items such as wages, capital gains, interests, and dividends. However, with virtual currency, these third parties (hereafter referred to as "brokers") are not obligated to conduct tax reports, so a significant amount of financial gain from virtual currency transactions goes unreported or underreported.

The Internal Revenue Service (IRS) estimates that virtual currency holders are paying less than half of the taxes they owe, hence creating a significant tax gap in the system. According to Abate, an analyst of money markets and Treasury Department funding, the current tax gap extrapolated from a 2017 IRS calculation is around \$50 billion per year, which accounts for about 10% of all unpaid taxes (Davison 2022). The IRS Commissioner Charles Rettig also

¹ Virtual Currency: A digital representation of value that functions as a medium of exchange, a unit of account, and a store of value. Cryptocurrency is a type of virtual currency that utilizes cryptography to validate and secure transactions digitally recorded on a distributed ledger, such as a blockchain (Internal Revenue Service).

² The cryptocurrency was first introduced in 2008 by an individual named Satoshi Nakamoto. It started to be used in 2009 when it was released as open-source software.

indicated that a significant portion of the total tax gap, which he estimated to be \$1 trillion³, was associated with unreported or underreported virtual currency income and transactions (Senate Finance Committee Hearing 2021). He also stated that the heightened use of virtual currency was possibly the source of increased tax non-compliance (Guyton et al. 2021).

While the IRS struggled for years to reduce this tax gap, the U.S. Congress also struggled to address the issue of virtual currency tax gap and tax evasion.⁴ Since its first official guidance in 2014, the IRS has ultimately had a carte blanche in governing virtual currency tax rules. On the other hand, legislation on virtual currency tax had yet to be passed into law by Congress. Despite policymakers' repeated attempts to crack down on the tax evasion and tax gap, none of the bills that tackled this issue were signed into law under either the Obama or Trump administrations.

After a few stagnant years in virtual currency tax policy development, new legislation was finally passed in the Biden administration⁵. In order to target the issue of the tax gap, policymakers have recently passed Section 80603 of the Infrastructure Investment and Jobs Act (IIJA), stating that "brokers" must be responsible for reporting taxpayers' virtual currency transactions to the IRS. The Infrastructure Investment and Jobs Act (H.R.3684), which Biden signed on November 15, 2021, was one of the President's key policies. This bill infused \$1.2 trillion into America's traditional "hard" infrastructure, such as roads and bridges. The legislation provided \$550 billion in new federal spending for roads, bridges, mass transit, rail, airports, ports, and waterways in the U.S. and another \$65 billion for improving broadband infrastructure, electric grids, and water systems (Vasquez et al. 2022).

At first glance, the IIJA might appear irrelevant to the issue of virtual currency tax gap. However, the four pages of Section 80603 included in the 2,702 pages of the IIJA strictly targets and addresses the unresolved tax evasion issue on virtual currency. Section 80603, *Information Reporting for Brokers and Digital Assets*, is a virtual currency tax law written into the Internal

³ At the Senate Finance Committee Hearing on 2021 Tax Filing Season, Rettig commented that the total tax gap could be \$1 trillion. However, a recent National Taxpayers Union Foundation (NTUF) analysis challenged these estimates. It estimated that the tax gap on virtual currency is \$50 billion, adjusting past IRS estimates of the cryptocurrency tax gap to keep up with the total cryptocurrency market cap (Andrew 2021)

⁴ Tax evasion is the failure to pay or a deliberate underpayment of taxes, which is illegal. Tax avoidance is an action taken to lessen tax liability and maximize after-tax income, which is legal. The tax gap includes both tax evasion and tax avoidance.

⁵ A democratic president Joe Biden became the 46th President of the United States in January 2021 and introduced bills on taxation, COVID-19 pandemic recovery, investment into infrastructure, and others that mostly reversed President Trump's policies.

Revenue Code that increases reporting requirements for brokers responsible for transfers and transactions of virtual currency to track and collect unreported taxes. According to the Joint Committee on Taxation (JCT), this provision is expected to raise \$28 billion over the next ten years (See Table 1). No other provisions included in the IIJA are supposed to produce tax dollars even close to what Section 80603 is expected to raise.

Year	2024	2025	2026	2027	2028	2029	2030	2031	2022–2031
Millions of dollars	1,526	2,862	3,349	3,559	3,797	4,013	4,282	4,582	27,970

 Table 1 Estimated Tax Revenue from Section80603 of IIJA

Source: Joint Committee on Taxation.

Section 80603 was initially drafted by Senator Rob Portman (R-OH), the lead Republican negotiator for the IIJA, with respect to virtual currency tax non-compliance. However, it was subsequently added to the IIJA by the ten negotiators as a revenue source of the bill. As senators finalized the deal, Senator Portman's tax provision emerged as an option to offset \$28 billion of the IIJA's \$1.2 trillion spending for infrastructure projects.⁶ Senators were looking for ways to fund the IIJA because bills seeking to offer new government services generally must show the means to fund those services. This is usually done by raising taxes or improving tax compliance, but Republicans were firmly against the former. To gain Republican support, Senator Portman and the Democrats suggested other legislative options to fund the bill without raising more taxes. One of these options was adopting Senator Portman's tax provision into the infrastructure package and improving tax compliance. They proposed raising \$28 billion of the \$1.2 trillion by engaging in more rigorous surveillance of unreported taxes on virtual currency transfers and transactions.

⁶ Searching for new funds to pay for their infrastructure package, the White House and moderate Senate Republicans led by Sen. Rob Portman agreed to increase reporting requirements for the "brokers" to the IRS to collect unreported taxes. The provision emerged as a late potential compromise after months of disagreements over how to pay for the IIJA (Stein, Jeff 2021).

As this last-minute provision slipped into Biden's key policy, it faced furious criticism from the stakeholders. The term "broker" ⁷ was used in such a broad and unspecified manner that it could be interpreted to include anyone involved in any kind of virtual currency transaction, such as miners or developers. A concerned group of policymakers, including Senator Pat Toomey (R-PA) and Cynthia Lummis (R-WY), proposed an amendment to clarify the definition of the "broker," and the interest groups significantly expanded their lobbying capacity. However, the bill eventually passed in its original form without any amendment due to one senator's rejecting vote on the amendment (Anthony 2022).

The abrupt emergence of this provision on the infrastructure bill and the failure to pass an amendment despite fierce political opposition to the original draft is puzzling and unprecedented in virtual currency tax policymaking, which calls attention to how the policy entrepreneur and political entrepreneur led lawmakers to come to an agreement and pass a bipartisan virtual currency tax policy. Furthermore, primary issues regarding this provision changed as it moved from agenda-setting to decision-making, from whether to increase reporting requirements for virtual currency "brokers" to who exactly constitutes those "brokers." As the associated issues differ in each process, this research divides and analyzes policy-making of Section 80603 into two parts, agenda-setting, which leads to agenda change, and decisionmaking, which leads to policy change.

This research uses the Multiple Streams Framework (MSF) to investigate the social and political dynamics and the roles of key political players that drove the policy-making of Section 80603 under circumstances of ambiguity. Finally, it provides key insights for policymakers' consideration by suggesting the implications of this legislation for the taxpayers, IRS and the government, cryptocurrency exchanges, and the new types of virtual currency such as non-fungible tokens (NFTs).

⁷ "Broker" in Section 80603 is defined as "any person who (for consideration) is responsible for regularly providing any service effectuating transfers of digital assets on behalf of another person"

2. Research Scope and Method

This research aims to deliver a theoretical contribution to the application of the MSF to the field of virtual currency policy. Reflecting this research purpose, it traces the framework's causal mechanisms in the policy processes which led to the passing of Section 80603. The research mainly investigates the agenda-setting and decision-making process⁸ of Section 80603 of the IIJA using the modified MSF, which provides insights into the unlikely and complicated policymaking of Section 80603. As a framework of this research, Herweg, Huß, and Zohlnhöfer (2015)'s modified MSF is used to separately analyze two distinct issues at the heart of agenda-setting and decision-making and to emphasize and distinguish the roles of the policy entrepreneur and political entrepreneur in each process. This framework presents two windows, and consequently, two coupling processes: one for agenda setting, which leads to agenda change; and one for decision making, which leads to policy change.

The time frame of this study is limited to the Biden administration (January 2021- 2022), during which the entire policy-making process of this provision took place. This research draws on the literary analysis of books and research papers, policy reports, newspapers and articles, congressional bills, congressional hearings, and statistics from government agencies and other relevant associations to examine how the policy entrepreneur and political entrepreneur frame policy problems and couple them to the solutions at a critical moment in time to convince the majority. The data for analysis is collected from the IRS, the Treasury Department, the Joint Committee on Taxation, the Library of Congress, the U.S. Senate Banking Committee, the United States Government Accountability Office, the Treasury Inspector General for Tax Administration, the Blockchain Association, and Coinbase (Cryptocurrency Exchange).

⁸ Agenda-setting process- Many actors compete for attention for various proposals.

Decision-making process - Obtaining a majority for a specific proposal. Several authors have suggested how the MSF can be adapted to explain decision-making (see Zahariadis 1992, 2003 as classics, and Howlett, McConnell, and Perl 2015 and Herweg, Huß, and Zohlnhöfer 2015 as elaborate recent attempts).

Chapter II. Theoretical Background

1. Multiple Streams Framework

This research addresses the question of how well the MSF is suited for explaining the policymaking of Section 80603. The agenda-setting (agenda change) and decision-making (policy change) of the provision is notably interesting regarding the timing and duration of the policymaking. The MSF is especially suited for explaining the timing and duration of agenda and policy change because it underlines the significance of timing and sequence of events, departing from the idea that policy-making is a practice of rational problem-solving. Rather, it supposes that the agenda and policy change happen as a combination of problems and political changes, the availability of policy alternatives, and the activities of policy entrepreneurs and political entrepreneurs that lead to the change. Hence, this makes the framework well-equipped to explain the timing of the policy-making of Section 80603, and why policymakers supported this provision, although they preferred the status quo or opposed changes regarding virtual currency taxation during the Obama and Trump administration.

Now, the MSF has become a powerful tool with which to analyze the policy process, explaining how policies are made by governments under conditions of ambiguity. John Kingdon, who originally developed the MSF, was inspired by Cohen, March, and Olsen's (1972) Garbage Can Model⁹ of organizational choice. Like the idea of organized anarchies¹⁰ introduced by the Garbage Can Model, the MSF's basic assumptions deal with ambiguity, time constraints, problematic preferences, unclear technology, fluid participation, and stream independence.

Ambiguity

Ambiguity is "a state of having many ways of thinking about the same circumstances or phenomena" (Feldman 1989). Ambiguity differs from uncertainty in that uncertainty may be reduced by collecting more information (Wilson 1989), while ambiguity is not reduced by having more information. The MSF assumes that ambiguity leads to several different solutions to a given problem.

⁹ Garbage Can Model- "choice is conceptualized as a garbage can into which participants, who drift in and out of decisions, dump largely unrelated problems and solutions. No one person controls the process of choice, and fluctuating attendance, opportunities, and attention give the process highly dynamic and interactive qualities." (Cohen, March, and Olsen 1972)

¹⁰ Cohen, March, and Olsen (1972) define organized anarchies "as a collection of ideas than as a coherent structure."

Time constraints

Policymakers have only limited time to make a decision. While events and circumstances in political systems occur simultaneously, a policymaker's ability to give attention to or process information is limited. Due to biological and cognitive limitations, individuals can attend to only one issue at a time (March and Simon 1958, Jones 2001). Hence, time constraints limit the range and number of alternatives to which the policymakers can attend to.

Problematic Policy Preferences

The MSF assumes that the policymaker's policy preferences are not fixed or given but develop and change during political interaction. The ambiguity of choices and time constraints in making decisions lead to imperfect policy preferences. However, this assumption does not suggest that policymakers have no preferences for all policies. Policymakers do have clear preferences concerning specific matters. For example, regarding election outcomes, policymakers always have set preferences (Sabatier 2017).

Unclear Technology

Technology turns inputs into outputs. There is an unclear technology when the members of organized anarchy are aware of only their individual responsibilities but not the organizational idea of how their jobs fit into the entire organization's goal. Some examples of unclear technology from the political system are unclear jurisdictional boundaries and conflicts between different departments or agencies.

Fluid Participation

Fluid participation means that the turnover of the composition of decision-making bodies is frequent. Legislators, bureaucrats, and high-level civil servants move from public service to private practice (Sabatier 2017). Also, non-governmental actors, such as employer associations, consumer groups, and trade unions, influence decision-making. Participants that are involved in policy-making processes change frequently, and so do the time and effort they spend in the process.

Stream Independence

Kingdon identifies three streams to be relevant for explaining policy-making at the federal level of the United States: the problem stream, the political stream, and the policy stream. According to Kingdon, these streams develop and flow independently of each other (Sabatier 2017). The problem stream consists of concerns that individuals inside and outside the policy system have. It consists of solutions or alternatives, which are products generated by the policy communities. These solutions are ready and available even when they are not yet needed in the political stream. The political stream refers to the political interactions within which policy is made, which includes the national mood, interest group campaigns, and government.

While stream independence is the basic notion of the MSF, these independent streams must integrate at some point for an issue to gain attention and eventually be on the decision-making stage. The opportunity to bring these streams together arises when a "policy window" opens. As the MSF argues that the integration of the problem and the solution does not happen naturally or inevitably, the two must be coupled together by a policy entrepreneur and presented to receptive policymakers. Below are the discussions of the five structural elements of the MSF, which includes the three streams, the policy (agenda) window, and the policy entrepreneur.

1.1 The Problem Stream

According to the MSF, problems are conditions that deviate from policymakers' or citizens' ideal states and that "are seen as public in the sense that government action is needed to resolve them" (Béland and Howlett 2016). These conditions often activate the interest and attention of policymakers (Sabatier 1999). Some factors that bring attention to a new issue are indicators, focusing events, and feedback from interest groups. Indicators measure changes in social condition and reveal that there is a problem. Indicators are used to assess the existence and magnitude of a condition and the scope of change. However, all indicators only inform current conditions until an actor defines them as problems. Focusing events are sudden, relatively rare, at least potentially harmful, and are known to policymakers and the public at the same time (Birkland 1997). They draw attention to problematic conditions, and the attention is set by the media and policy entrepreneurs (Jones 1994). Lastly, feedback from interest groups or policymakers regarding existing issues helps highlight what alternatives could work and what may not (Zahariadis 1999). Feedback about existing programs could also highlight specific

conditions. If policymakers or the public realize that an existing program is not reaching its goals, that costs are surging, or that negative externalities occur, policymakers might also identify this as a problem.

A new issue can fall into the problem stream only when the issue is recognized as a "problem" through factors such as indicators, focusing events, and feedback. With regard to problem recognition, the MSF assigns the policy entrepreneurs crucial roles. In the problem stream, policy entrepreneurs have two strategies at their disposal to facilitate a specific problem recognition: First, they attempt to raise attention to a certain issue by mentioning them in press releases or speeches, which the policy entrepreneur of Section 80603 also does during the agenda-setting. Second, they attempt to alter the framing of an issue in a way that enforces a specific problem recognition of ambiguous conditions (Zahariadis 2007)

1.2 The Policy Stream

The policy stream includes various ideas that compete to pass through Congress. These ideas, also called policy alternatives, are generated in policy communities¹¹ that include specialists such as congressional staff members, bureaucrats, academics, and researchers in think tanks who advocate and discuss policy ideas. In the initial stage, various ideas float around in what Kingdon called a policy "primeval soup." These ideas are then discussed, modified, and recombined by the members of the policy community in various forums and forms, such as hearings, conversations, and papers, in a process known as "softening up" (Kingdon 2011). This process in the policy stream is mainly characterized by "arguing."

Through such arguing, some ideas are introduced as initially generated, some are combined into new proposals, and some disappear. The number of ideas floating around in the primeval soup is quite large. However, the process of "softening up" filters out many of them until only a small number of viable policy alternatives supported by the policy community are left. Ultimately, only a few of the alternatives can receive serious consideration in Congress.

Ideas are selected based on their "technical feasibility" and "value acceptability," meaning that the proposals that are or appear to be challenging to implement have a lower

¹¹ The policy community is mainly a "loose connection of civil servants, interest groups, academics, researchers and consultants (the so-called hidden participants), who engage in working out alternatives to the policy problems of a specific policy field" (Herweg, 2016).

chance of being selected. Also, proposals that do not conform to the values of policymakers are less likely to be considered for adoption (Sabatier 1999). While "technical feasibility" addresses the question of whether implementing an alternative is feasible in principle, "value acceptability" is about normative acceptance and openness among the policy-makers.

1.3 The Political Stream

The political stream consists of the national mood, interest group campaigns, and administrative or legislative turnover (Zahariadis 1999). The national mood is what a relatively large number of individuals in a country tend to commonly think and their changes in mood from time to time. It is monitored through opinion polls or interest groups by the policymakers. Changes in national mood can open a policy window for a policy change along with the legislative or administrative turnover that affects agenda change.¹² Kingdon explained that policymakers sense changes in national mood and act to advocate certain items on the agenda following the changes.

Interest group campaigns demonstrate that the more groups are opposed to an idea and the more powerful these groups are, the less likely the idea will make it on the agenda. They also influence the existing policy agenda by strongly supporting or opposing the agenda, which the policymakers view as consensus or dissent. The representatives of the interest groups are often members of the policy community, thus also proposing ideas and participating in the "softening-up" process. However, this participation takes place in the policy stream and is different from the campaigns that interest groups execute against ongoing proposals in the policical stream.

The third element of the political stream is the legislative or administrative turnover, which is the changes in the composition of decision-making bodies. For example, turnover in the administration may make a significant difference in which items enter the agenda if some members of Congress are more supportive of a policy proposal or certain ideas align more with the ideology of one party than with that of another. According to Zahariadis, "The combination of the national mood and turnover in government exerts the most powerful effect on agendas" (Zahariadis 1999).

In the policy stream, the dominant mode of interaction was arguing and persuasion. However, in the political stream, the dominant mode of interaction is bargaining and powering,

¹² An agenda is the "list of subjects or problems to which government officials and other stakeholders are paying serious attention at any given time" (Kingdon 2003).

as the majority support for proposals has to be obtained. It means that policy entrepreneurs in the policy stream only aim to gain acceptance for their policy solutions (alternatives), whereas participants in the political stream focus more on lobbying and group mobilization to gain support from the majority.

1.4 Policy (Agenda) Window

Even when all three streams are ready for coupling, agenda change does not happen automatically. Instead, a coupling of the three streams must happen first. The necessary conditions for coupling are: First, the streams should be ripe; second, a policy window should open; and third, policy entrepreneurs should actively engage in coupling the streams. Coupling eventually leads to agenda change, which becomes much more likely at a certain point in time that Kingdon calls the "policy window." A policy window is a fleeting "opportunity for advocates of proposals to push their pet solutions or to push attention to their special problems" (Kingdon 2011).

To distinguish opportunities to get an issue on the agenda (agenda change) from opportunities to get the policies adopted (policy change), Herweg, Huß, and Zohlnhöfer (2015) have suggested calling the former "agenda window"¹³ and the latter "decision window." Their suggestion is followed in the later analysis of this research, but this section defines the term "policy window" for generic use. A policy window in the political stream opens if the composition of government changes or new members interested in new ideas and open to new policy proposals enter the organization. Similarly, an agenda window opens when there is a significant change in the national mood and when problem indicators deteriorate dramatically for example, when the unemployment rate or the budget deficit increases, or when events like natural disasters or terrorist attacks occur.

According to the MSF, coupling or integration of the three streams of problems, policies, and politics significantly increase the chance that the issue will get serious consideration from the policymakers (Kingdon 2003). For an issue to become an agenda, at least two streams should be coupled at a critical point. This critical point may be predictable or unpredictable and usually

¹³ Agenda windows are rare (at least concerning a particular policy proposal) and ephemeral; they can be predictable (elections, budgets) or unpredictable (disasters). They can open in two of the three streams: the problem or the political stream.

only lasts for a short period of time, which makes the timing crucial for opening the policy window. Examples of predictable windows are elections or negotiations about a budget plan. An unpredictable policy window would be a plane crash or a new election as a consequence of a governmental crisis. As soon as a policy window opens, policy advocates must invest "time, energy, reputation, money to promote a position for anticipated future gain" (Kingdon 2003) for an issue to gain government agenda status.¹⁴

1.5 Policy Entrepreneurs

Policy entrepreneurs are advocates willing to invest their resources such as time, energy, reputation, and money to "promote a position in return for anticipated future gain in the form of material, purposive, or solidary benefits" (Kingdon 2011). They are also the key actors in the MSF. They can be individuals or corporate actors and do not have to hold formal positions in the government. Essentially, any policy-relevant actor, such as a policymaker, bureaucrat, academic, journalist, representative of an interest group, or member of Congress, can become a policy entrepreneur. Policy entrepreneurs push and adapt their proposals ("pet projects") in the policy stream to find vast support from the policy community and make their ideas viable alternatives.

During a process called "softening up" (Kingdon 1984), policy entrepreneurs advocate their ideas to gain acceptance and approval from the policy community and the policymakers. According to Kingdon (1984), the probability that their ideas move to the agenda decreases if they are not accompanied by a softening-up process.

Once their pet projects are pushed into the policy stream, they attempt to couple their proposal with the other two streams. The way a policy-entrepreneurs couple the streams differs based on the type of policy window. If a policy window opens from the problem stream, they choose to present their best alternative as a solution to the problem. If the window opens from the political stream as a consequence of the advent of a new government, they tend to take advantage of the new political atmosphere (Kingdon 1984). Either way, policy entrepreneurs should immediately seize the opportunity to initiate action when agenda window opens, and if they miss the opportunity, they must wait for the next one. Policy entrepreneurs are thus more

¹⁴ The governmental agenda is defined as "the list of subjects or problems to which governmental officials, and people outside of government closely associated with those officials, are paying some attention at any given point" (Kingdon 1984).

than mere advocates of particular solutions. They are also "manipulators of problematic preferences and unclear technology" (Mintrom 2009). Thus, policy entrepreneurs must be persistent and skilled at coupling. They should be able to couple problems to their solutions and find politicians (political entrepreneurs) who are receptive to their ideas. Policy entrepreneurs are not always successful. To become successful, they should have greater access to policymakers and integrate all three streams into a single package.

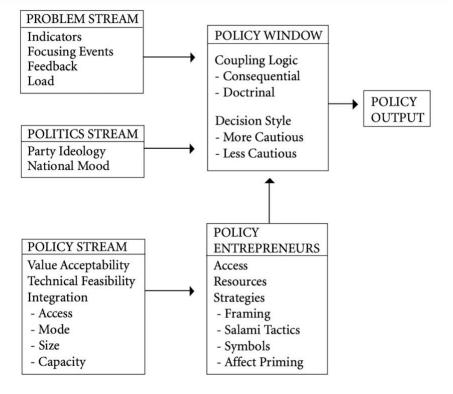
In addition to policy entrepreneurs, Herweg Huß, and Zohlnhöfer (2015) suggest another type of entrepreneur called the "political entrepreneur." In contrast to policy entrepreneurs, political entrepreneurs are neither necessarily members of the policy community nor do they have to be involved in developing the policy proposal at an early stage. Once a policy entrepreneur has convinced a political entrepreneur of his/her proposals, the political entrepreneur, such as an influential member of the legislature, furthers the idea from inside the formal governmental system and pushes for its adoption with his/her formal leadership position. S/he does this by actively supporting a proposal and working to build a majority for it (Zohlnhöfer 2016).

Summary of the MSF and its Applicability to Section 80603

Based on the six assumptions and three streams explained above, the MSF argues that the policymaking process is not rational problem-solving. For instance, a problem unexpectedly happens and is coupled with a pre-existing policy that matches it, or a political opportunity arises with the advent of a new government and policymakers adopt a specific policy linked to a problem on the agenda. Kingdon explains that policy-making consists of setting the agenda, identifying alternatives, making an official choice among suggested alternatives, and implementing the decision (Kingdon 2003).

According to Kingdon, the problem stream, political stream, and policy stream flow independently in their rules and dynamics in the beginning and then integrate at some critical point, which leads to policy changes (Kingdon 2003). In other words, policy decisions are not made in a logical order backed by rational reasons but are made when the three streams are brought together at the opening of the "policy window." Kingdon initially applied this theory to

the U.S. political system¹⁵ and developed case studies of U.S. federal policy-making. While Kingdon's original MSF is well-suited to analyze U.S. federal policy-making, it is only equipped to explain agenda-setting. As noted earlier, the policy-making of Section 80603 should be analyzed into agenda-setting and decision-making as pertaining issues are different, hence the modified MSF is more appropriate in regard to explaining the policy-making of Section 80603. Figure 1.1 is the diagram of the MSF framework adapted from the work of Zahariadis (2003).





Source: Zahariadis (2003)

MSF and Other Policy-Making Models

Kingdon's (2003) MSF started as a criticism of the limitations of existing policy-making models. Kingdon thought that the rational and comprehensive model's approach was too ideal for explaining real-world policy-making. While the incrementalism proposed by Lindblom and

¹⁵ Kingdon suggested the following such situation in the US political system: Several individuals with different perceptions and goals are involved. Some actors like the President effectively bring the issues up to the public and government agenda without providing solutions. Because policymakers have time constraints, they delegate it to civil servants who consult with interest groups, think tanks, and other specialists to consider ideas and produce policy solutions (Kingdon 2003).

Wildavsky also criticized the limits of the rational model, it had its own limitations in explaining disconnected or rapid policy changes. In order to apply the incremental model, the outcome of the existing policy needed to be satisfactory to be the cornerstone of the following policy. However, this model could not be applied when the existing policy demands an entirely new policy or when a new social issue, such as virtual currency taxation, arise and need to be solved by the government in a rapidly changing environment.

As an alternative to these existing models, Cohen, March & Olsen (1972) proposed the Garbage Can Model to analyze the irrational policy-making process in the organized anarchies. According to the Garbage Can Model, policy decisions in a complex and rapid policy environment are not made systematically and reasonably, as argued in the rational model. Instead, they are made accidentally and irrationally. Also, organized anarchy is a state in which the policy environment, policy entrepreneurs, goals, and means are all uncertain. However, policy decisions are still made because the stream of problems, solutions, participants, and the opportunity accidentally gather in one "garbage can" (Cohen, March, Olsen 1972).

While the MSF drew inspiration from the work of Cohen, March, and Olsen (1972), it has also developed its original structural features. For example, the Garbage Can Model believes that policy decisions result from the unintentional combination of the streams. In contrast, the MSF suggests that coupling of the streams is purposefully done by the policy entrepreneurs (Zahariadis 2003). In addition, the MSF is empirically oriented. Kingdon provides considerable evidence from the fields of transportation and health in the U.S. to make his case in support of his theory. These additional structural features demonstrate that the MSF is more theoretically driven and empirically validated than the Garbage Can Model.

2. Literature Review

2.1 Studies Using the MSF

Originally, Kingdon developed his framework to explain agenda-setting in health, transport, and fiscal policy at the federal level of the U.S. However, successive pieces of literature have also applied the MSF to different policy domains, further stages of the policy cycle, and different political systems. In their recent literature review, Jones et al. (2016) report that over 311 English peer-reviewed journal articles published between 2000 and 2013 have empirically applied the MSF to broad issue areas, countries, and levels of government. However, only 16 percent fully applied the framework instead of only citing it (Jones et al. 2016; Herweg 2015) And of the 16 percent, only about one-third applied all of the MSF's elements (Jones et al. 2016). The vast majority of contributions only referred to individual concepts, such as policy entrepreneurs or policy windows (Herweg 2013; Jones et al. 2016). This research adds a full MSF application to the literature, and its value added to the MSF literature is the application of a modified MSF which allows for differentiating causal mechanisms for agenda change and policy change.

Jones et al. (2016) also reported that 22 policy domains were explored using the MSF, including health (Bandelow 2017; Amri & Logan 2021; Hornung & Johanna 2022; Powell & Mannion 2022), environment (Hernandez &Lucatello 2018; Kagan 2018; Hernandez & Bolwig 2020; Derwort et al. 2021), governance (Saurugger & Terpan 2016; Sarmiento & Larson 2021), education (Shaw 2018; Quinn 2020; Lee 2021), welfare (Rawat and Morris 2016; Bindman et al. 2018), gender equality policy (Béland 2009), and foreign policy (Ceccoli 2019; Travis and Zahariadis 2002). However, there are only a limited number of literature contributing to the application of the MSF in virtual currency policy-making (Cheon & Kim 2021). Below are some of the case studies that applied the MSF.

Angervil and Gilvert (2021) have applied the MSF to the Obama administration's No Child Left Behind waiver policy. They focused on the framework's original and contemporary understandings, six concepts, their sub-components, and the sub-components' operationalization. By applying the MSF, this study explained the influence of policy networks and contexts on policy choice, Obama's issue-linking strategy, role in providing political support for the decision process, and the decision-making process.

Giese (2020) argued that the emergence of COVID-19 provided a window of opportunity for changes in telehealth policy using the MSF. According to Giese, healthcare

practices have been looking to provide care by telehealth long before COVID-19. However, regulatory barriers prevented its implementation. The outbreak of the COVID-19 virus provided a window of opportunity for federal policy change in telehealth during a national state of emergency. Once telehealth was implemented following COVID-19, it became an alternative to in-person office visits for clinicians and patients. This study found that the problem stream (COVID-19 outbreak) was coupled with the political stream (panicking national mood, political pressure to switch to online services) and led to the successful implementation of telehealth policy.

Dolan (2019) conducted a detailed case study of the climate adaptation policy-making process to propose a new interpretation of the MSF that shows how policy entrepreneurs can couple the problem, policy, and political streams through multiple partial couplings. The study found that, unlike how researchers and policymakers often assume that extreme weather opens a window to adopt policies aimed at adapting to long-term climate change, a climate crisis can redirect attention to urgent, short-term goals. The study used the MSF to analyze how these competing forces interact to influence policy-making. It also illustrated how the policy entrepreneurs' strategy of issue linking explains Australia's adoption of the 2007 Water Act, one of the world's first significant adaptation policies.

Philippe and others (2019) used the MSF to argue that the implementation of a publicly funded immunization program resulted from a complex decision-making process. By analyzing three streams of MSF, the study explained how and why governmental policies on a new immunization program were adopted. The problem stream highlights a particular vaccinepreventable disease and stakeholders' perceptions. The policy stream focuses on experts' views on the optimal use of available vaccines. And, the political stream consists of socio-political factors, including budgetary constraints. The role of policy entrepreneurs is also highlighted as they progressively shaped and pushed ideas with concrete policy-making strategies.

Although adaptations might not be needed for applying the MSF in various policy domains, some may be required when the framework is used to explain different policy stages or political systems. The MSF has mainly been applied to the policy stages of agenda-setting and decision-making, while it has been rarely applied to policy implementation and policy termination (Geva 2004). This section discusses some of the adaptations suggested in the literature for policy stages of agenda-setting and decision-making and reviews the literature on

policy entrepreneurs, case studies using the MSF, and international and comparative applications of the MSF.

Herweg, Huß, and Zohlnhöfer's (2015) Modified MSF

This research suggests the use of two coupling processes, agenda-setting and decision-making, (Herweg 2013; Herweg et al. 2015) in analyzing the policy-making of Section 80603. In order to understand how the MSF needs to be adapted to apply to the decision-making process, it is necessary to elucidate the differences between agenda-setting and decision-making (Knill, Tosun 2012). During agenda-setting, many actors compete for attention on numerous proposals, whereas the actors in decision-making aim to obtain a majority for a specific proposal. Thus, the number of actors tends to be lower in decision-making. Also, the relevance of the institutional setting becomes more important as it moves from agenda-setting to decision-making (Baumgartner et al. 2009). As such, decision-making processes are more structured, orderly, and considerate of institutional setting than agenda-setting processes.

Several researchers have suggested how the MSF can be adapted to explain decisionmaking. Zahariadis argued that agenda-setting and decision-making can be considered parts of the same process "by which policymakers make an authoritative choice from a limited set of previously generated alternatives" (Zahariadis 2003). Thus, the coupling phenomena for Zahariadis encompasses both agenda-setting and decision-making, as Zahariadis collapsed these two policy stages into one process. According to Zahariadis (1992), extending the MSF to apply to decision-making keeps the theory's structure and logic intact. Kingdon (2003) also expanded the framework and applied the MSF to the agenda-setting and decision-making process by referring to the policy window to both processes in his study of the Reagan budget in 1981 and the Tax Reform Act of 1986 in the second edition of *Agendas, Alternatives, and Public Policies.* Kingdon found that the more institutions are involved in decision-making, the more likely there are multiple veto actors. Since policy change requires the consent of all veto actors, the presence of multiple veto actors increases the likelihood of failure in policy change (Baumgartner et al. 2006).

While Herweg, Huß, and Zohlnhöfer (2015) agree that applying the MSF to decisionmaking is possible, they argue that Zahariadis' theory does not allow for proper analysis of the agenda-setting and decision-making processes appropriately. For example, when applying

Zahariadis's theory, it is difficult to understand the reason for policy change failure, which could be a result of collapsed agenda-setting or a consequence of not obtaining the majority needed to adopt the proposal. Zahariadis' theory faces a similar problem even when a policy change successfully occurs. Supposing the two processes are not analytically kept distinct from each other, it is impossible to assess how much the final policy output differs from the initial proposal due to political compromises during the decision-making process. As coupling is the central concept in the MSF that describes and explains agenda changes and policy changes, this limitation in the conventional application of the MSF suggested by Zahariadis to policy-making stages should be modified. Hence, this study discusses and uses Herweg, Huß, and Zohlnhöfer's (2015) framework as it leaves the operating structure of the MSF intact and still explicates decision-making separately from agenda-setting.

Herweg, Huß, and Zohlnhöfer's (2015) main idea is to distinguish two windows and, consequently, two types of coupling (see Figure 2.1). The first coupling process encompasses agenda-setting (hereafter referred to as the 'agenda-coupling'), identical to Kingdon's original theory. The output of the agenda coupling is a drafted proposal ready for decision-making. The second coupling highlights the decision-making stage, which includes bargaining on the design of the policy proposal (hereafter referred to as the 'decision coupling'). If decision coupling is successful, it ends with the adoption of the policy. Henceforth, the opportunity for agenda coupling is referred to as the 'agenda window,' while the decision coupling opportunity is referred to as the 'decision window.'

Although the agenda window and decision window are formed by the three streams and policy entrepreneurs, they tend to open up in different streams. The agenda window usually opens due to changes in the problem or political streams, such as improvements or worsening of indicators or the election of a new government, while the decision window opens in the policy stream. The policy stream in the decision-making stage is the drafted proposal that gained agenda status following the successful agenda coupling. Once a proposal has gained agenda status, bargaining about the details of the proposal between the political actors of the political stream¹⁶ starts immediately. The process happens fast, as the political actors will not forgo the chance to influence a policy once an issue is on the agenda. Hence, the political stream is most

¹⁶Actors of the political stream: i.e., coalition partners, interest groups, MPs, party leadership and inner-party factions, actors of the subnational levels in federalist systems.

important for decision coupling, while the problem and policy streams are more important for agenda coupling.

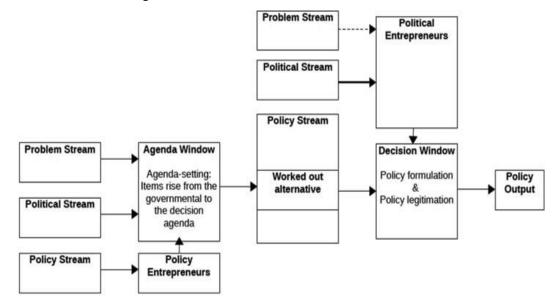


Figure 2.1 Modified Multiple Streams Framework

As the idea of agenda window and agenda coupling in Herweg, Huß, and Zohlnhöfer's framework is identical to the 'policy window' and 'coupling' in Kingdon's original MSF, this section only elaborates on decision window and decision coupling. According to Herweg, Huß, and Zohlnhöfer (2015), a decision window opens once agenda coupling succeeds, and the result of successful decision coupling is the adoption of a bill. The main objective during decision coupling is to build the necessary majority to support and adopt a proposal selected in the agenda coupling. Political entrepreneurs, who hold elected leadership positions and actively support a proposal, are the critical actors in this process. They attempt to obtain majority support for their projects and bargain over the specific details of the proposals. In short, the political stream dominates during decision coupling. Nevertheless, the problem and policy streams are still relevant at this stage but are less important than in the agenda coupling.

The distinction between the agenda and decision coupling processes makes it possible to analyze decision-making separately in the MSF. It allows the formulation of hypotheses on the likelihood of policy adoption and on the extent of policy changes from its original form during decision coupling. Moreover, this modified framework closely investigates the role of formal

Source: Herweg, Huß, and Zohlnhöfer's (2015)

political institutions, which emphasizes the effect of these institutions on policy-making by highlighting the role of political entrepreneurs.

MSF Hypotheses on Agenda-Setting

Herweg, Zahariadis, and Zohlnhofer (2017) suggest the following hypotheses on agenda setting: 1. Agenda change becomes more likely if a policy window opens, the streams are ready for coupling, and a policy entrepreneur promotes the agenda change. 2. In the problem stream, a problem broker¹⁷ is likely to be more successful in framing a condition as a problem. The more an indicator shows negative changes, the more damaging a focusing event is, and the worse a government program performs. 3. In the political stream, policy proposals have a better chance of gaining agenda status when they fit the general ideology of a government or the majority in a legislature. 4. In the policy stream, the likelihood of gaining agenda status and thus being coupled increases if a policy proposal fulfills the selection criteria. 5. As the integration of policy communities loosens, it becomes more likely that entirely new proposals can become possible viable alternatives.

According to Herweg, Zahariadis, and Zohlnhofer (2017), a policy window opens in the problem stream if there is a change of indicators, focusing events, or feedback, or alternatively when a condition puts a politician's reelection at risk. On the other hand, the policy window opens in the political stream if there is a change in legislature, the election of a new government, campaigning by interest groups, or a change in the national mood. Lastly, according to Sabatier (2018), policy entrepreneurs are more likely to couple the streams successfully during an open policy window if they have more access to core policymakers and when they are more persistent.

MSF Hypotheses on Decision-Making

Herweg, Zahariadis, and Zohlnhofer (2017) suggest the following hypotheses on decision-making: the policy adoption is more likely if the proposal is put forth by political entrepreneurs who hold an elected leadership position in the government; if the proposal is put

¹⁷ According to Knaggård (2015), problem brokers are actors who "frame conditions as public problems and work to make policymakers accept these frames. Problem brokers thus define conditions as problems." Problem brokers can also be policy entrepreneurs, but not necessarily. The key analytical difference between the two is that the problem broker only argues that something must be done about a specific condition. In contrast, the policy entrepreneur suggests solutions to the problem.

forth by a government or majority party that is not challenged by other veto actors; if various viable alternatives selected by different actors can be combined in one package; and if the problem that the policy is supposed to solve is essential among the voters. The hypotheses also suggest that the scope of change to the original proposal during decision-making varies. The policy output would differ significantly from the original proposal if actors other than the government had veto power (e.g., second chambers). Also, the more powerful the interest groups' campaigns against the original proposal, the more different the adopted policy is likely to be from the original draft.

Studies on Policy Entrepreneurs of MSF

Although the modified MSF keeps the framework's operating structure for agenda-setting and decision-making intact, the concept of policy entrepreneurs needs to be altered. According to Kingdon (1984), one or a small number of people engage in agenda-coupling, while more participants often engage in decision-coupling (Roberts and King 1991). Furthermore, while there are actors who participate in both processes, there are actors who are exclusively engaged in either agenda-setting or decision-making (Saetren 2014). Kingdon (1984) defines policy entrepreneurs as people "in or out of government, in elected or appointed positions, in interest groups or research organizations". While his definition of policy entrepreneurs is appropriate for agenda coupling, it is too broad for decision coupling. The reason is that a policy entrepreneur working from outside the formal policy-making arena lacks the means to couple the streams during the decision-making, compared to an insider who has authority from inside the government. In order to avoid confusion, Kingdon's terminology and the concept of "policy entrepreneur" is kept for agenda-setting. For decision-making, "policy entrepreneur" is replaced with "political entrepreneur" to indicate that different people engage in policy entrepreneurship. According to Roberts and King (1991), political entrepreneurs are individuals who "hold elected leadership positions in government"

Studies on policy entrepreneurs mostly emphasize their influence on the policy-making process. Joel David Vallett¹⁸ suggests factors that significantly influence the likelihood that a state government will adopt a policy. According to Vallett, previous works of literature have

¹⁸ See "The Diffusion of Erin's Law: Examining the Role of the Policy Entrepreneur." *Policy Studies Journal*, vol. 49, no. 2, 2020, pp. 381–407., https://doi.org/10.1111/psj.12396.

examined economic, societal, and political factors but have paid little attention to the significance of the policy entrepreneurs. Vallett argued that the role of a policy entrepreneur is crucial to policy innovation and policy diffusion to the states. Using the event history analysis, he investigated the factors that led thirty states from 2011 to 2017 to adopt Erin's Law¹⁹, a child abuse policy. The findings suggested that the states which Erin Merryn, the policy entrepreneur, had personally visited had a higher likelihood of adopting Erin's Law over states which she had not visited (Vallett 2020). This case study found that the influence of a policy entrepreneur is the most crucial factor for the state legislatures in adopting a law. Also, Vallett found that policymakers listen to enthusiastic policy entrepreneurs, especially when the lawmakers lack the resources to make a quick policy decision.

As such, according to Vallet, policy entrepreneurs are important for two reasons. First, the case study demonstrated that policymakers rely on policy entrepreneurs as policy experts to guide their decision-making. Policymakers also do listen to policy entrepreneurs when they lack the resources to make a swift policy decision. Second, policy entrepreneurs can exert substantial power over the policy process and in pushing forward policy agendas. For example, Merryn grabbed the attention of state policymakers and persuaded them that her policy was the solution to a significant social problem. Her claims were not empirically found to be effective in preventing child abuse; nonetheless, Merryn's passion and courage convinced many policymakers that her policy was the best option to protect children.

According to Mintrom (2019), policy entrepreneurs must demonstrate themselves as policy experts, expand networks with groups or individuals who share their vision, and show persistence and a strong passion for policy change. Each of the above increases the chances of policy adoption, but their efforts are sometimes undervalued or unrealized. However, Mintrom suggested that the policy entrepreneur's ability to influence the process as an expert, establish a support network, and push for proposals greatly influence policy adoption and diffusion (Mintrom 2019).

Academic research on policy entrepreneurs has grown over recent years and offers insights into what makes for influential policy entrepreneurs. The summary of various research

¹⁹ Erin Merryn represented herself as an expert, formed a rich network, and bravely pushed for the adoption of the law across individual states. From 2011 to 2019, Merryn traveled to 39 states on various events and successfully secured the adoption of the law in 35 states.

suggests that being a successful policy entrepreneur involves different strategies, including "problem framing, forming and expanding networks, working with advocacy coalitions, leading by example, and scaling up change processes" (Mintrom 2019). This research contributes to the study of policy entrepreneurs by emphasizing the role and the influence of the policy entrepreneur and political entrepreneur that lead to agenda change and policy change of a policy during a short opening of the policy window.

International and Comparative Applications of the MSF

As mentioned earlier, the MSF was initially devised for the political system of the U.S. However, recently, it has also been adapted to explain policy processes in international settings. For instance, the MSF has been applied to parliamentary systems, such as Australia (Beeson and Stone 2013; Tiernan and Burke 2002; Lovell 2016), Belgium (Vanhercke 2009), Canada (Blankenau 2001), Germany (Storch and Winkel 2013; Zohlnhöfer 2016), Italy (Natali 2004) and India (Liu and Jayakar 2012; Sharma 2008).

Several pieces of literature applied the MSF to policymaking processes in autocracies for example, Iran (Jafari et al. 2017) and China (Liu and Jayakar 2012; Zhou and Feng 2014; Zhu 2008). The MSF's applicability is also not limited to politics at the national level. Several pieces of literature have also applied the MSF to the sub-national level (Dudley 2013; Lieberman 2002; Liu et al. 2010; Oborn, Barrett, and Exworthy 2011; Ridde 2009; Robinson and Eller 2010) and, increasingly, to international (EU) levels (Bache 2013; Cairney 2009; Copeland and James 2014; Saurugger and Terpan 2016).

2.2 Studies on Virtual Currency Taxation

Studies on virtual currency taxation started as early as in 2013 and expanded from theoretical discussions to empirical findings, as well as domestic and international tax rules. With relevance to this research, literature that predominantly discussed the following three topics will be reviewed in this section: 1. Classification of the virtual currency in taxation: treating as property, commodity, or security 2. Frameworks for virtual currency taxation. 3. Virtual currency tax evasion and tax gap.

Classification of the Virtual Currency: Property, Commodity, or Security?

The key issue of the legality of virtual currencies is whether they are money or not. The legality varies substantially from state to state within the U.S. and from country to country. There has yet to be a consensus among U.S. regulatory agencies regarding whether a virtual currency is convertible to real money. The Treasury Department says that virtual currency does not have legal tender status in the U.S.; it is similar to real currency and operates like a real currency but does not have all the attributes of currency (Financial Crimes Enforcement Network 2013). The U.S. Commodity Futures Trading Commission (CFTC) categorizes virtual currency as commodities under the Commodity Exchange Act. It considers virtual currencies to be "digital representations of value that has the function of a medium of exchange, units of account, and or store of value" (CFTC). The IRS argues that virtual currency is treated as property for tax purposes, and if it is used as a payment, then it should be treated as currency (IRS 2014). Despite variations in the classification of virtual currencies, U.S. federal agencies such as the Financial Crimes Enforcement Network (FinCEN) and the Department of Justice thoroughly monitor virtual currency transactions.

Sánchez (2017) supported the IRS's categorization of virtual currencies by stating that they will be considered "capital assets taxed at capital gains and losses." On the other hand, Kelly Phillips Erb (2018) argued in her study that taxable events occur when "receiving or sending virtual currencies in exchange for goods, services, cash, or even other types of virtual currencies." Roman (2015) classified virtual currency for taxation based on the duration of the possession. He explained that any profits from virtual currencies can be cashed out and considered income. Of the cashed-out income, the property is considered a long-term capital

asset if the taxpayer holds it for at least one full year. At the same time, it is categorized as a short-term gain at a regular income tax rate if the taxpayer possessed it for less than a year.

Wiseman (2016)²⁰ stated that virtual currency is not only a long-term investment tool but a tool for global transactions, as it was used for 93,000 transactions worldwide in a single day in 2013 for purchases of goods and services and even real estate. He, therefore, called for Congress and the IRS to take action to regulate virtual currency according to its use. Wiseman supported the classification of virtual currency as currency rather than property. He referred to Representative Steve Stockman's Virtual Currency Reform Act²¹, which was introduced as an attempt to negate the IRS decision and officially classify virtual currencies as currency instead of property. Wiseman explained that tax reclassification is important to alleviate taxpayers' inconveniences in accounting and tax reporting. He further argued that this reclassification would encourage the use of virtual currencies for transactions because individuals would not find it restrictive when a sales tax on transactions is imposed like on regular currencies. Wiseman criticized the IRS' classification of virtual currency as property, claiming that it is challenging and ineffective, and instead suggested classifying virtual currency as currency and imposing a sales tax instead of a capital gains and losses tax, to encourage the use of virtual currencies for everyday transactions.

Lopez (2015) explored the definition of virtual currency, its financial and ethical implications, and discussed its treatment by the IRS as property versus foreign currency. Lopez argued that treating virtual currency as foreign currency instead of property would benefit business and non-business users who spend virtual currencies on a daily basis. However, it would be less beneficial to non-business users holding virtual currencies longer for investment purposes. Lopez concluded that treating virtual currencies as foreign currency for tax purposes would be the most suitable accounting treatment.

Goforth (2018)²² studied the consequences of having virtual currency regulated by the IRS (as property), FinCEN (as currency), the CFTC (as commodities), and the SEC (as

²⁰ See Wiseman, Scott A. (2016) "Property or Currency? The Tax Dilemma Behind Bitcoin," Utah Law Review: Vol. 2016: No. 2, Article 5. https://dc.law.utah.edu/ulr/vol2016/iss2/5

 ²¹ Virtual Currency Tax Reform Act - Directs the Internal Revenue Service (IRS) to treat virtual currencies as foreign currency for federal tax purposes. Introduced by Rep. Stockman, Steve [R-TX-36] (Introduced 05/07/2014)
 ²² See Goforth, Carol R., U.S. Law: Crypto is Money, Property, a Commodity, and a Security, all at the Same Time (October 25, 2018). Journal of Financial Transformation, Forthcoming, Available at SSRN: https://ssrn.com/abstract=3272975

securities) simultaneously. Virtual currencies have evolved, and now they serve other functionalities than that of cryptocurrencies. Each regulatory agency tends to regard all virtual currencies alike, producing a set of overlapping rules and requirements. Goforth suggested that regulatory agencies should avoid regulating virtual currency monolithically and should observe the genuine functionality of virtual currency.

Frameworks for Virtual Currency Taxation

Alaskan (2022) suggested an evidence-based framework for virtual currency taxation and exchange platform regulations in the U.S., and he designed a new regulation and taxation approach to virtual currency and its markets by using the U.S. as a case study. The new framework is designed based on two years of fieldwork, surveys, and extensive data analysis. Caliskan (2022) also introduced a new framework that considers virtual currency as "data money." Caliskan argued that regulators treating "data money" as commodities, securities, or properties is a significant failure in virtual currency taxation. He explains that virtual currency represents a "new form of money that is produced by monetizing the right to send data. It is not money made of data, for all digital monies are produced with data" (Caliskan 2022). Another mistake of regulators that Caliskan, cryptocurrency exchanges go beyond markets, as they stack various economization practices and businesses on their platforms. Thus, to regulate these exchanges properly, regulators should improve their regulative capacity. Caliskin proposed a "new instrument of taxation (Data Money Tax)" and a "dynamic regulative approach to cryptocurrency exchange platforms (Stack Regulation)."

Yonah and Salaimi (2022)²³ explored the tax law challenges related to virtual currency taxation and proposed a new framework for the proper tax treatment of different transactions and activities, considering the unique features of virtual currency. They examined the life cycle of cryptocurrency taxation, from earning cryptocurrency to its disposal or exchange. This study claimed that the U.S. framework for taxing virtual currency is hard to administer and negates the significant feature that distinguishes it from other assets: its volatility. Yonah and Salaimi argued

²³ See Avi-Yonah, Reuven S. and Salaimi, Mohanad, A New Framework for Taxing Cryptocurrencies (March 31, 2022). U of Michigan Public Law Research Paper No. 22-014, Available at SSRN: https://ssrn.com/abstract=4071391 or http://dx.doi.org/10.2139/ssrn.4071391

that, due to its volatility, the virtual currency should only be taxed once it is exchanged for realworld items like fiat currency or other goods and services. Moreover, when exchanged for realworld items, it should still be treated as foreign currency if taxpayers hold them for less than one year.

Virtual Currency Tax Evasion and Tax Gap

A study on tax compliance with virtual currency was done as early as 2013 by the United States Government Accountability Office (GAO). In its research "Additional IRS Guidance Could Reduce Tax Compliance Risks," GAO explained the tax reporting requirements for virtual currencies, identified the potential tax compliance risks, and assessed how the IRS has addressed them. For this research, GAO reviewed tax laws, IRS guidance and program documents, and federal program internal control guidance, and interviewed IRS officials and professional experts on the topics. GAO recommended that "the IRS find low-cost ways to provide information to taxpayers, such as on its website, on the basic tax reporting requirements for virtual currencies" (GAO 2013).

Following its study in 2013, GAO introduced another research in 2020, which reviewed the IRS's efforts to improve compliance with tax obligations for virtual currencies. GAO examined what is known about virtual currency tax compliance and what the IRS has done to address related risks. It also examined the extent to which the IRS's virtual currency guidance meets taxpayer needs and whether additional information reporting on virtual currency income would help the IRS improve tax compliance. GAO reviewed the IRS forms and guidance and interviewed officials at the IRS, FinCEN, and other federal agencies and tax and virtual currency stakeholders. GAO recommended that the IRS work on increasing information reporting and asked FinCEN and the IRS to determine how foreign asset reporting laws apply to virtual currency. The IRS agreed to follow the recommendation on information reporting.

James Alm (2021)²⁴ examined how developing technology, or, more specifically, changes led by the information transformation into digital formats, would affect tax evasion in the future. He argued that the development in technology would improve the ability of governments to reduce tax evasion by making it easier for them to obtain information. However,

²⁴ See Alm, J. Tax evasion, technology, and inequality. Econ Gov 22, 321–343 (2021). https://doi.org/10.1007/s10101-021-00247-w

he also argued that technology development would open up new ways by which some taxpayers could evade taxes. It is unclear whether the former or the latter would dominate, so the effects of technology on the total level of tax evasion are yet uncertain. Even so, he stated that the more dominant case would lean toward the ability of the government to access better information, conduct a better analysis of tax information, and design better tax systems and policies. This will improve its ability to enforce tax laws and decrease tax evasion. Alm found that more advanced technology would make tax evasion significantly difficult for most taxpayers, especially those subject to employer withholding and third-party information reporting. Hence, he concluded that tax evasion will decrease if the funding for government tax agencies such as the IRS is adequate.

Lastly, Carlisle (2017) argued that government tax agencies should improve their technology "to combat future crimes involving virtual currencies while also allowing the technology room to evolve." Carlisle stated that government responses to regulate virtual currency have not been enough. While the government tries not to overburden financial innovation with excessive regulation (which might hinder growth in technology), Carlisle argued that there is a need to ensure that newly developed technologies are not used to bypass regulations. Finally, he found that the lack of uniform regulation poses a significant risk to the virtual currency industry and encourages money laundering, fraud, tax evasion, and other illegal activities.

Overall, studies on the classification of virtual currency focused on the legality of virtual currency, engaging in discussions of whether it is money or not. Studies either supported the IRS' treatment of virtual currency as property (Sanchez 2017) or argued that it should be treated as currency (Lopez 2015; Wiseman 2016; Erb 2018). Some provided a novel insight suggesting that the duration of holding of virtual currency (Roman 2015) should determine its classification. Yet, the legality of virtual currency is uncertain in the United States, creating ambiguity for policymakers in making virtual currency tax policy. Despite ambiguities on its legality, some studies provided possible frameworks to be adopted for virtual currency taxation (Alaskan 2022; Caliskan 2022; Yonah and Salami 2022), and guidelines to improve tax compliance (GAO 2013; Carlisle 2017).

3. Methodology

3.1 Research Subject and Scope

In this research, the agenda-setting and decision-making of a virtual currency taxation policy in the U.S. will be analyzed using Herweg, Huß, and Zohlnhöfer's (2015) modified version of the MSF. More specifically, the research will investigate the social and political dynamics and key players that most influence policy-making, with the discussion of the problem stream, the policy stream, the political stream, policy windows (agenda window, decision window), and most importantly, the roles of the policy entrepreneur and political entrepreneur.

The subject of this study is Section 80603 of the IIJA, which became law on November 15, 2021. Other virtual currency tax guidance or tax requirements introduced by the U.S. Treasury Department or the IRS similar to this law or other bills introduced in the House or the Senate regarding virtual currency taxation are not subject to the analysis. However, Section 6045^{25} of the Internal Revenue Code (IRC) will be noted in the analysis as Section 80603 directly modifies this IRC to standardize information reporting by brokers of digital assets to the IRS for tax purposes. The time frame of this study is limited to the Biden administration (January 2021 - 2022), as the entire agenda-setting and decision-making process develop and end during this administration.

3.2 Research Framework

This research uses Herweg, Huß, and Zohlnhöfer's (2015) modified MSF, which distinguishes agenda-setting and decision-making process to specify the causal mechanism for each process. It investigates two distinct issues at the heart of each process and assess the extent of changes in policy output from the initial proposal after going through political compromises, or the decision coupling. For instance, the issue in agenda-setting is whether to increase reporting requirements for "brokers", while that in decision-making is who exactly constitutes those "brokers". Handling each issue accordingly, the policy entrepreneur and political entrepreneur firmly push the

 $^{^{25}}$ (1) The term broker means any person (other than a person who is required to report a transaction under section 6043), U.S. or foreign, that, in the ordinary course of a trade or business during the calendar year, stands ready to effect sales to be made by others. A broker includes an obligor that regularly issues and retires its own debt obligations or a corporation that regularly redeems its own stock. However, with respect to a sale (including a redemption or retirement) effected at an office outside the United States, a broker includes only a person described as a U.S. payor or U.S. middleman in section 1.6049-5(c)(5). In addition, a broker does not include an international organization described in section 1.6049-4(c)(1)(ii)(G) that redeems or retires an obligation of which it is the issuer.

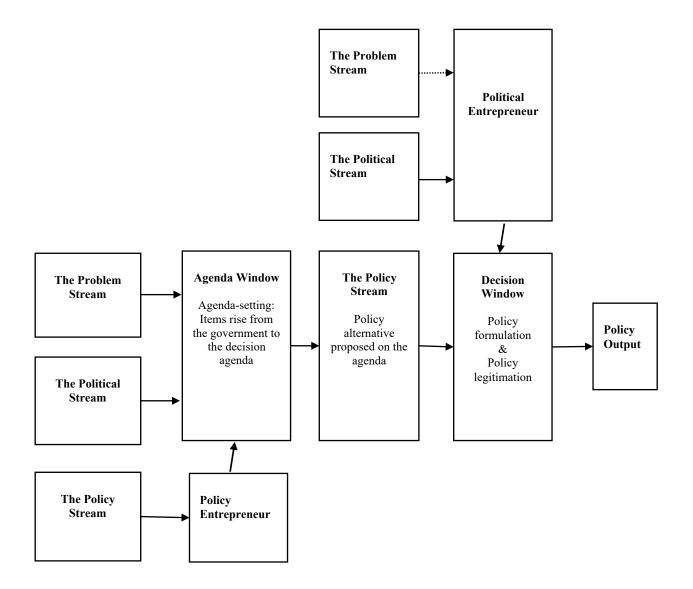
provision to the agenda and the decision floor but face an aggressive bout of lobbying to amend the provision. Despite universal consent by Senate decision-makers to amend the relevant details, the provision comes out unrevised from the initial proposal. In order to investigate the social and political dynamics and the key players that develop and resolve these issues throughout policymaking, it is essential to distinguish agenda-setting from decision-making, which extends beyond the original theory of the MSF. While the MSF could also be applied to explain policy implementation and policy termination, this research only focuses on analyzing agenda-setting and decision-making. The summarized framework of the research is illustrated in Figure 3.1.

3.3 Research Method

This study is secondary research that mainly references: research reports, policy reports, newspapers, news articles²⁶, court rulings, congressional bills, congressional hearings, senate hearings, official statements by the government, government letters, statistics from government agencies, and other relevant associations. The data for analysis is collected from the IRS, the Treasury Department, the Joint Committee on Taxation (JCT), the Library of Congress, the U.S. Senate Banking Committee, the United States Government Accountability Office (GAO), the Treasury Inspector General for Tax Administration (TIGTA), the Blockchain Association, and Coinbase (Cryptocurrency Exchange).

²⁶ The news sources is politically balanced between conservative and liberal tendencies. According to Pew research, the most frequent cable networks people count on are CNN (named by 16%) and Fox News (14%). Conservatives are oriented around Fox News, as nearly half (47%) of consistently conservative people call Fox News their primary source of government and political news. On the other hand, liberals do not predominantly lean toward a single outlet. Liberals watch CNN (15%), NPR (13%), MSNBC (12%), and the New York Times (10%) (Mitchell, Amy et al., 2022).

Figure 3.1: Research Framework (Modified MSF)



Chapter III. Virtual Currency and Its Taxation

1. Virtual Currency and Tax Gap

Concept of Virtual Currency

Virtual currency is a "digital representation of value that functions as a medium of exchange, a unit of account, and or a store of value" (IRS 2022). They are issued by private parties or groups of developers and are generally unregulated. Virtual currencies are a subset of digital currencies and include other types of digital currencies, such as cryptocurrencies and tokens issued by private organizations (Frankenfield 2022). The IRS also states that virtual currency can operate like "real" currency in some environments, such as coin and paper money in the U.S. and other countries with legal tender status, and is used as a medium of exchange. However, virtual currency does not have legal tender status in the U.S. (IRS 2022). In this research, the term "virtual currency" represents all cryptocurrencies and stable coins subject to federal and state taxation.

Cryptocurrency is a "type of virtual currency that utilizes cryptography to validate and secure transactions digitally recorded on a distributed ledger, such as a blockchain" (IRS 2022). Examples of cryptocurrencies are Bitcoin, Ethereum, Litecoin, and USDT. This "convertible virtual currency" has an equivalent value to real currency or acts as a substitute for real currency, like Bitcoin. Bitcoin can be digitally transferred between users and purchased for or exchanged into U.S. dollars, Euros, and other real currency or virtual currencies (IRS 2022). The convertible virtual currency is subject to taxation by the IRS under current law and is treated as property. Statistics indicate that the net worth of the entire cryptocurrency economy was valued at over \$3 trillion in November 2021 (Bloomberg 2021).

Advantages of Virtual Currencies

The advantages of virtual currencies mainly include faster transaction speeds and easier use and access, such as the absence of geographical boundaries. It is not only faster but also cheaper as they do not have expensive manufacturing and physical storage costs. Their decentralized nature removes the need for intermediaries during transactions and establishes a direct connection between two transacting parties, also called peer-to-peer transactions. Moreover, virtual

currencies can be programmed to complete automated transactions. For instance, smart contracts on Ethereum's blockchain can hold and release money in escrow accounts without any human intervention. Lastly, they are considered as digital repositories of value and can assign value to diverse sets of objects, from artwork to gaming tokens (Frankenfield 2022).

Disadvantages of Virtual Currencies

A major pitfall of using virtual currencies is that they can be hacked and do not provide any legal resort to investors as they are not under strict regulation. Virtual currencies are attractive targets for hackers, as several cases show hackers hacking blockchain networks to steal cryptocurrencies. And while virtual currencies do not have a manufacturing or physical storage costs, they have other associated expenses. For instance, cryptocurrency users are required to store them in digital wallets. At trading exchanges, which are referred to as "brokers" in this research, users have to pay custody costs. Virtual currencies also have a high prevalence of scams. Some initial coin offerings (ICOs), which became popular after the cryptocurrency prices dramatically increased, were found to be scams in which private developers sold worthless tokens for hypothetical networks, in which the tokens could not be converted into other forms of currencies. Also, virtual currencies or cryptocurrencies traded on exchanges are subject to highly volatile price swings. Lastly, unregulated virtual currencies that are issued by private entities and are not regulated by financial authorities do not offer legal recourses to investors in case of problems. Lack of regulation could lead to higher tax evasion and tax gap which are mainly discussed in this research.

Differences Between Digital Currencies, Virtual Currencies, and Cryptocurrencies

While all virtual currencies and cryptocurrencies are digital currencies, not all digital currencies belong to those two categories. For example, Central Bank Digital Currencies (CBDCs) are digital currencies but not virtual currencies or cryptocurrencies. The difference comes from the presence and extent of regulations for each type of currency. First, digital currencies can be regulated or unregulated. For example, CBDCs are regulated by the government and financial regulations. On the other hand, digital currencies (also categorized as virtual currencies and cryptocurrencies) such as Bitcoin and Ethereum are not regulated. For virtual currencies, most of them are unregulated, while cryptocurrencies are not regulated in any jurisdiction.

As lack of regulation led to the emergence of criminal activities such as scams and tax evasion, the U.S. states have passed several legislations to regulate virtual currencies. For example, on February 17, 2017, California legislators amended Legislative Bill No. 1326, giving the commissioner of business the oversight authority to create rules and regulations related to virtual currency, including requiring virtual currency businesses to sign up for the Digital Currency Business Enrollment Program and to provide their customers receipts of transactions (California Legislative Reform 2016). As such the U.S. government has intensified its close examination of criminal activities as well as business practices (U.S. Department of Justice 2015). While there are a few legislations written to regulate virtual currency transactions and business, no legislation has passed regarding its taxation. Hence, the discussion and analysis of Section 80603 provide new directions as to how virtual currency taxation will develop in the U.S.

Virtual Currency Taxation

Virtual currencies, particularly cryptocurrencies, have a high potential as a means of tax evasion (He et al. 2016), as the users can remain anonymous, transactions are peer-to-peer, and have no geographical boundaries. Given that tax evasion is illegal in most jurisdictions, the key challenge for the government is developing effective means of enforcement. It is inevitable that they will have tax implications as long as they perform an economic function such as a store of value or a medium of exchange. The structure and operations of virtual currencies raise complex issues related to the manner in which they should be taxed. Although some major jurisdictions have made considerable steps clarifying tax implications on virtual currencies, this is not the case in all countries.

As explained earlier, the key issue in the tax treatment of virtual currency is whether they should be treated as a form of property or currency. In the countries where the former position is adopted, the use of a virtual currency to purchase goods or services or for investment purposes results in the recognition of gains or losses. The gain or loss would be calculated into taxes depending on the length of possession and whether the property is defined to be a capitalist asset. On the other hand, in countries that treat virtual currencies as a currency, the transactions will result in the recognition of foreign exchange gains or losses. Other issues include collecting taxes on newly-created virtual currencies miners obtained through mining as opposed to acquiring

existing virtual currencies. Section 80603 also encounters a major political bout when the term "broker" is written in such a broad manner that could include the miners.

According to the IRS, virtual currency transactions are taxable by law exactly like transactions in any other property. Under the current law, taxpayers may owe taxes on the following transactions: "sale of a digital asset²⁷, exchange of digital assets for property, goods or services, exchange or trade of one digital asset for another, receipt of a digital asset as payment for goods or services, receipt of a new digital asset as a result of mining and staking activities, receipt of a digital asset as a result of an airdrop, use of digital assets to pay for goods or services, any other disposition of a financial interest in a digital asset, and receipt or transfer of a digital asset for free (without providing any consideration) that does not qualify as bona fide gift" (IRS 2021).

Currently, the reporting requirements for virtual currency earnings are somewhat challenging to comply with, partly because they are difficult to find on U.S. tax forms. Tax rules around virtual currency are unclear and constantly changing, leaving both virtual currency companies and investors alike equally confused. For such reasons, many taxpayers have either over-reported, underreported, or unreported their earnings (Jaerv 2021).

The IRS officially addressed the issue of virtual currency taxation for the first time in 2014. The initial IRS guidance was released in March 2014 via Notice 2014-21, which states that virtual currency should be taxed as property rather than money (Notice 2014-21 Section 1. Purpose, IRS). Over the next five years, the IRS did not release significant guidance on virtual currency transactions. In November 2017, a federal court granted the IRS enforcement of a John Doe Summons issued to Coinbase. It granted the IRS access to information into taxpayers with transactions totaling \$20,000 or more in one year²⁸. In 2019, the IRS issued series 6173 and 6174 letters to taxpayers who might have unreported income from virtual currency transactions. To monitor and analyze the transactions more thoroughly, the IRS added a new question to Schedule

²⁷ The sale of Convertible Virtual Currency (CVC) such as Bitcoin and Ethereum or using to pay for goods/services will be subject to gain recognition just like a sale of any other asset (i.e. if a coin was acquired for \$1,000 and used to pay for goods or services valued at \$1,500, the holder would need to recognize gain of \$500.)

²⁸ In July 2017, the IRS had required that major U.S. crypto exchange Coinbase hand over detailed information on every one of its then 500,000+ users to prevent tax evasion. However, a court order in November 2017 reduced this number to around 14,000 "high-transacting" users, which the platform later reported as 13,000 (Huillet, 2019).

1 of the 2019 Form 1040²⁹ (See Appendix 1.1 and 1.2). In October 2019, Revenue Ruling 2019-24 was issued to define the reporting requirements for income regarding the hard forks and airdrops³⁰ (Fahrer 2021). In March 2021, the IRS initiated "Operation Hidden Treasure," which trains employees to identify virtual currency tax evasion (Fahrer and Nick 2021). In the spring of 2021, two U.S. federal courts granted the IRS permission to serve John Doe summonses on cryptocurrency exchanges Kraken and Circle, as it did to Coinbase in 2017. Through these summonses, the IRS sought information regarding the exchanges' account owners and their transaction activities to guarantee that users complied with their tax obligations. Lastly, the new IRC Section 6045A(d)³¹ amended by the Section 80603 provision will be effective for tax returns required to be filed and statements required to be furnished after 12/31/2022. Besides the IRS guidance, there have been numerous bills introduced by policymakers in the House and the Senate (See Appendix 2.1).

Virtual Currency Tax Evasion and Tax Gap

The tax gap is the tax that taxpayers legally owe the U.S. government but is not collected. The difference between tax avoidance and tax evasion must be distinguished to understand the tax gap properly. Tax avoidance refers to legal options for reducing one's tax liability. Tax evasion is an illegal act of not paying tax liability owed. According to the IRS Tax Crimes Handbook, there are two types of tax evasion: evasion of assessment and evasion of payment. Evasion of assessment is more common and occurs when someone "willfully attempts to omit income from taxes, significantly underreports income, or overstates deductions." Evasion of payment occurs after an assessment has been made and a taxpayer hides funds or assets that could be used to satisfy the tax liability. Regarding tax evasion on virtual currency, the Cyber Digital Task

²⁹ The IRS asked the taxpayers, "At any time during 2019, did you receive, sell, send, exchange, or otherwise acquire any financial interest in any virtual currency?" It is now displayed as one of the first questions with names and addresses. (Form 1040, Schedule 1, IRS)

³⁰ A hard fork is when the developers of a virtual currency create a second branch of that currency using the same basic code. An airdrop is the delivery of a cryptocurrency to a certain group of investors (Reiff 2022).

³¹ IRC Section 6045A(d)- "Any broker, regarding any transfer (which is not part of a sale or exchange executed by the broker) during a calendar year of a covered security which is a digital asset from an account maintained by the broker to an account which is not maintained by, or an address not associated with, a person that the broker knows or has reason to know is also a broker, will be required to make a return for that calendar year, in the form determined by the IRS."

Force³² warned that "not reporting capital gains from the sale or other disposition of the cryptocurrency, not reporting business income received in cryptocurrency, not reporting wages paid in cryptocurrency, or using cryptocurrency to facilitate false invoice schemes designed to fraudulently reduce business income are examples of evasion of assessments" (Cyber Digital Task Force 2020).

The tax gap is not solely attributable to tax evasion, as tax evasion requires deliberate non-compliance. Non-compliance due to unintentional errors made by taxpayers is also included in the tax gap but is not considered tax evasion (Muresianu 2021). There are three sources of the tax gap: non-filing, underreporting, and underpayment. Non-filing includes tax not paid on time because taxpayers did not file returns. Underreporting includes nonpayment due to understatement of income on timely-filed returns, and underpayment is paying below the legally owed tax on correctly reported income. Adding up all three of these sources creates the "gross tax gap." The "net tax gap" is calculated by adding back to the gross tax cap, tax revenue generated by enforcement activities and other types of late payments (Johnson and Rose 2019). The U.S. income tax system is based on voluntary compliance, under which it is the taxpayers' responsibility to report all their income. If taxpayers fail to pay the amounts they owe, the IRS can assess a penalty and collect the back owed taxes.

With virtual currency, the onus remains on the taxpayers to keep all records of their transactions and to report the taxable ones to the IRS. Unlike conventional investments, third parties are not obligated to report taxes. Taxpayers are asked to voluntarily attest at the top of the 1040 form whether they received, sold, exchanged, sent, or otherwise obtained any financial interest in any virtual currency during the tax year. Due to this voluntary compliance system, a substantial amount of virtual currency gain goes either unreported or underreported. The IRS estimates that virtual currency investors are paying the IRS less than half of the taxes they owe on their trades, hence creating a large tax gap. According to Abate, a veteran analyst of money markets and Treasury Department funding, the current tax gap extrapolated from a 2017 IRS calculation would be around \$50 billion per year, which accounts for about 10% of all unpaid taxes (Davison and Laura. 2022). In addition to Abate's finding, IRS Commissioner Charles

³² The U.S Department of Justice's (DOJ) Cyber-Digital Task Force released new cryptocurrency guideline. See "Cryptocurrency: An Enforcement Framework" https://www.justice.gov/cryptoreport

Rettig believes a significant portion of the purported \$1 trillion³³ tax gap is associated with unreported or underreported virtual currency income and transactions (Senate Finance Committee Hearing 2021). Despite IRS' estimates, the exact frequency of using cryptocurrency to avoid taxes is currently uncertain, (Perkins 2020) and the IRS indicated that it did not believe the tax gap in virtual currency income was intentional. (Borek 2019) Even in cases where the failure might have been intentional, the IRS believes that money laundering was not the primary motivation. Rather, investors might have been seeking to profit from virtual currency and were not paying taxes on the gains, rather than primarily attempting to hide assets from tax authorities. Leading U.S. cryptocurrency exchanges now often submit personal data and transaction data on certain customers to the IRS. Nevertheless, the IRS experienced difficulties cracking down on individuals who seek to evade taxes through virtual currency. However, starting in the tax year 2023, all potentially taxable virtual currency transactions will be reported to the IRS directly by third parties.

Reducing the tax gap is an excellent way to generate tax revenues, but it is not without its costs. There are various estimates of how much the tax gap can feasibly be reduced, and many of the methods for reducing the tax gap contain their own costs, such as higher compliance burdens for taxpayers. Hence, policymakers should consider the compliance costs for law-abiding taxpayers and administrative costs for the IRS when evaluating measures to reduce the tax gap. One option is to invest and improve the IRS's technological infrastructure, which could reduce the tax gap while not creating new burdens for taxpayers.

Currently, the Biden administration focuses on narrowing the tax gap by increasing IRS enforcement activities. For instance, in early March 2021, the IRS announced Operation Hidden Treasure to track cryptocurrency transactions and identify taxpayers who have omitted their income from returns. Also, the IRS has announced increased efforts to investigate, and refer for prosecution, individuals engaging in criminal tax fraud using virtual currency. Moreover, to prevent money laundering, the IRS has required businesses to report any receipt of more than \$10,000 of cryptocurrency in a single transaction, similar to the requirements for cash

³³ At the Senate Finance Committee Hearing on 2021 Tax Filing Season, Rettig commented that the actual tax gap could be \$1 trillion. However, a National Taxpayers Union Foundation (NTUF) analysis challenged these large estimates. It is estimated at most \$50 billion in taxes owed but not paid on virtual currency gains (Wilford, Andrew 2021)

receipts. In such a manner, the IRS is targeting taxpayers who falsely report their virtual currency income or intentionally fail to report.

2. Section 80603 of the Infrastructure Investment and Jobs Act

Virtual Currency as both Security and Cash

Section 80603, *Information Reporting*³⁴ for Brokers and Digital Assets, was initially written into Biden's Infrastructure Investment and Jobs Act as a "pay-for" provision³⁵ to obtain the support of Republicans in the Senate and to narrow the virtual currency tax gap. It is estimated that this provision will raise \$28 billion of the \$1.2 trillion budget by collecting underreported and unreported taxes on virtual currency transfers and transactions.

The Infrastructure Investment and Jobs Act, commonly referred to as the infrastructure bill, was one of President Biden's key policies. The Senate passed the bill in August 2021 with bipartisan support. On November 5, 2021, the House passed the bipartisan Infrastructure Investment and Jobs Act, H.R. 3684 by a vote of 228-206, with the support of 13 Republicans. This bill, which was signed into law on November 14, 2021, includes support for America's roads, bridges, passenger and freight rail, transportation safety, broadband, ports and waterways, airports, transit, drinking water and wastewater, and energy.

While this bill mainly aims to repair, rebuild, and improve American infrastructure, it also covers virtual currency taxation on Section 80603, which increases brokers reporting requirements of virtual currency transactions. The provision requires all brokers responsible for transfers of digital assets, such as a sale on behalf of someone else, to issue a Form 1099-B to their customers. It is the same type of reporting required for traditional assets like stocks and bonds. The provision updates the definition of "broker" to consider virtual currency as securities and to clarify that broker-to-broker reporting applies to all transfers of covered securities,

³⁴ Information reporting is not the same as a tax return. Tax returns are reports of how much income is earned, how much tax is due, and how much has been paid. All U.S. Persons who earn income over a certain amount must file tax returns. In contrary, employers have information reporting requirements, such as the requirement to file forms W-2 that report their employees' wages and taxes withheld. Banks have information reporting requirements and should report how much interest is earned and paid to account holders. Section 80603 requires crypto exchanges to have increased information reporting requirements.

³⁵ "Pay-for"- provisions in a bill that generates revenue for the government to offset new spending in other parts of the bill.

including virtual currencies. The virtual currency will also be treated as cash, according to this provision, requiring businesses to report cash payments over \$10,000. This new reporting requirement thus treats virtual currency as both securities and cash. The purpose of the provision, which applies to required tax returns and statements after December 31, 2023, is to allow the IRS to access additional information in connection to virtual currency transactions to assess taxation requirements. Below are the three main items added to this provision:

Definition of Broker Under Internal Revenue Code Section 6045

Section 80603 modifies the definition of "broker" as outlined in Section 6045(c)(1) of the IRC of 1986 to include "any person who (for consideration) is responsible for regularly providing any service effectuating transfers of digital assets on behalf of another person" (Section 80603, H.R.3684). The term "digital asset" is defined by Code Section 6045(g)(3)(D) to mean "except as otherwise provided by the Secretary of the Treasury, any digital representation of value which is recorded on a cryptographically secured distributed ledger or any similar technology as specified by the Secretary." This new definition of broker will likely include cryptocurrency exchanges, peer-to-peer digital asset exchanges, financial institutions with platforms supporting cryptocurrency transactions, and miners and developers (Bernhard et al. 2022).

Broker Reporting Requirements of Digital Asset Transactions

From December 31, 2023, brokers (following the new definition of the section above) of virtual currency will be asked to provide the name and address of their customers, along with information regarding gross proceeds and others, as demanded. The information reported by brokers will include the adjusted basis of the digital asset, and both long-term and short-term gain or loss of the digital asset. Brokers could pay a penalty of \$280 per failure to report, and up to a maximum penalty of \$3 million if they fail to comply with the new reporting requirements.

Digital Assets Treated as Cash. Over \$10,000 Transaction Reporting Requirement

As a provision of anti-money laundry regulation for virtual currencies, Section 80603 amends Code Section 6050I(d) to treat digital assets as cash. Under the new provision, which becomes effective as of December 31, 2023, any person or business that receives payment of more than \$10,000 in digital assets must file Form 8300, whereby the identity of the sender, his/her name, address, and taxpayer identification number are reported. Failure to comply can result in "penalties of up to \$3 million per year, or higher if the failure is due to intentional disregard of the requirement" (26 U.S.C. §§ 6721, 6722, 7203) (Bernhard et al. 2022).

Chapter IV: Analysis of the Policy-Making Process of Section 80603 Using the Multiple Streams Framework

1. Increasing Reporting Requirements for Virtual Currency "Brokers" (Agenda-Setting)

The primary issue during the agenda-setting is whether to increase reporting requirements for virtual currency "brokers". The problem stream emphasizes the significant increase in the virtual currency tax gap and the IRS's challenge with tax compliance, which highlight the need for a new tax policy for virtual currency. The political stream demonstrates that the advent of a new government opened the agenda window, which enabled the policy entrepreneur to pursue activities to push his policy idea to the agenda. A few policy proposals suggested by government organizations that are supported by the policy entrepreneur are introduced in the policy stream. On top of these three streams, the policy entrepreneur is introduced to examine his role and influence on the agenda-setting that eventually led to the agenda change. The goal of the policy entrepreneur during agenda-setting is to search for vast support for his policy, it is found that he led the agenda change through two main factors: persistent appearance and voice for increasing reporting requirements on virtual currency tax, and close access to a core policymaker who is receptive to his idea.

1.1. Increase in Virtual Currency Tax Gap (The Problem Stream)

Increase in Tax Gap in the United States

According to the IRS' estimates of the federal tax gap, the total gap in the U.S. is projected to increase over time. It is important to note that the tax gap estimation is not up to date because it takes time to collect compliance data, especially data on underreporting that is revealed only after completed audits. Previous estimates covering 2011 to 2013 showed an average gross tax gap of \$441 billion annually.³⁶ This tax gap is estimated to be lower at \$381 billion after late payments and enforcement efforts are calculated. The IRS projects more growth in the tax gap in

³⁶ See the IRS report "Tax Gap Estimates for Tax Years 2014-2016" https://www.irs.gov/newsroom/the-tax-gap

the next few years, as the most recent estimate covering 2019 indicates the gross tax gap to be \$584 billion. The tax gap is extrapolated to a total of \$7 trillion for the next decade; around 3% of GDP annually. The IRS found that the voluntary compliance rate is estimated at around 84%, and the net compliance rate around 86% in 2019 (See table 2).

As explained earlier, the tax gap is created by three types of taxpayers. Taxpayers who fail to file returns on time, called the "non-filing" tax gap, account for 9% of the gross tax gap. Taxpayers who underpay taxes despite reporting obligations on time, called the "underpayment" tax gap, covers around 11%. Table 2 shows that the greatest contributor to the tax gap is the underreporting gap, or taxpayers who underreport their income or overclaim credits and deductions on tax returns, which accounts for around 80% of the gap.

Tax Gap Component	Tax Gap Estimates and Projection		
	TY 2011-2013 Published	TY 2019 Projection ^[1]	TY 2019 Projection, Adjusted ^[2]
Estimated Total True Tax	\$2,683	\$3,589	\$3,635
Gross Tax Gap	\$441	\$584	\$630
Nonfiling Tax Gap	\$39	\$52	\$52
Underreporting Tax Gap	\$352	\$466	\$512
Underpayment Tax Gap	\$50	\$66	\$66
Voluntary Compliance Rate	83.6%	83.7%	82.7%
Enforced and Other Late Payments	\$60	\$76	\$76
Net Tax Gap	\$381	\$508	\$554
Net Compliance Rate	85.8%	85.8%	84.8%

Table 2. Tax Gap Estimates over Time

Source: IRS tax gap report. [1] Estimates based on using the tax gap projection technique to the tax year 2011-2019 IRTF and BRTF data. [2] Estimates based on adjusting compliance rates for Guyton et al. (2021) suggest that the published tax gap was understated by an annual average of \$33 billion (in 2012 dollars) in underreported income from offshore wealth and passthrough entities in TY 2006-2013, then applying constant compliance rates by a major component of income.

Guyton (2021) found that underreporting tends to rise as the total income of the taxpayer increases. Tax evasion becomes more commonplace for higher-income taxpayers because they have knowledgeable accountants and tax preparers who can help shield their true tax liability. Also, the consequences of tax evasion are perceived by taxpayers as insignificant, as the IRS lacks the staffing to conduct audits on instances of non-compliance. Hence, voluntary compliance rates are becoming lower.

Besides the income levels, the current information reporting regime significantly influences the distribution of the underreporting tax gap. For example, the IRS can crosscheck tax filings for some income categories because it receives information reports from third parties, such as employers. It enables the IRS to verify that taxpayers are accurately reporting their income and deductions. When taxpayers know their tax information is being reported by their employers or third parties to the IRS, they are more likely to voluntarily comply. Hence, the compliance rate is very high for ordinary wage and salary income, where employers share a Form W-2 with both employees and the IRS, with only an approximately 1% misreporting rate. Figure 4.1 shows that the compliance rate significantly drops as third-party information reporting decreases. The net misreporting percentage increases to 55% for opaque income sources like proprietorship and rental income.

The IRS and GAO identify the increasing tax gap as a burden for the American economy and acknowledge that government action is needed to resolve the issue. They believe increasing information reporting requirements is one of the most effective ways to improve tax compliance for two reasons: 1. Increasing the IRS's capacity to crack down on opaque income sources such as virtual currency transactions would improve its enforcement activities. 2. It would encourage taxpayers to voluntarily report all their income by letting them perceive that the IRS has the information necessary from third parties to pursue taxpayers should they underreport or misreport their incomes.

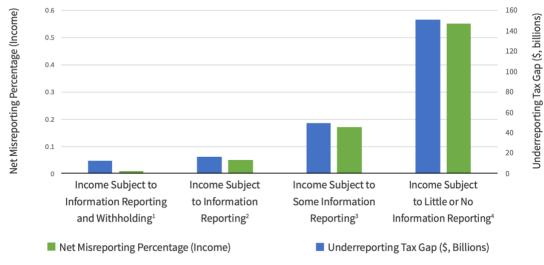


Figure 4.1 Misreporting by Income Category

¹ Includes wages and salaries

² Includes pensions and annuities, unemployment compensation, dividend income, interest income, and taxable Social Security benefits

³ Includes partnership/S corp income, capital gains, and alimony income

⁴ Includes nonfarm proprietor income, other income, rents and royalties, farm income, and Form 4797 income

Source: Treasury Department

Increase in Virtual Currency Tax Gap

The IRS officially announced that its estimates of the tax gap of virtual currencies is not fully representative due to the IRS' technical limits (IRS 2022)³⁷. Because the tax system and available data are complicated, no technical approach can estimate each component of the tax gap separately. The current approach has a high chance of yielding measurement, non-sampling, and sampling error. The IRS has indicated that its estimates do not fully represent components of the tax system such as offshore activities, virtual currency, income from flow-through entities, corporate income tax, and illegal activities due to lack of data. For non-compliance associated with virtual currency, the IRS needs time to develop the expertise to uncover associated non-compliance and for examinations that measure the extent of non-compliance. Hence, while IRS Commissioner Charles Rettig claimed that a significant portion of the total tax gap is due to virtual currency transactions, the exact data to specifically measure the virtual currency tax gap is unavailable.

³⁷ See "Estimating the tax gap; offshore, digital assets, other categories not fully represented". https://www.irs.gov/newsroom/irs-updates-tax-gap-estimates-new-data-points-the-way-toward-enhancing-taxpayer-service-compliance-efforts

IRS Challenges with Tax Compliance

A. IRS' Outdated Technology

The outdated technology utilized by the IRS is holding back the agency's ability to tax virtual currency incomes. The IRS's main tax processing system, the Individual Master File (IMF), is used to process over 150 million individual tax returns and raise \$1.2 trillion in annual tax revenue. IMF is among the oldest and highest-risk IT systems in the federal system, as it is written in programming languages that were used over 50 years ago and were first designed in 1962.³⁸ This outdated program greatly hinders the IRS's ability to administer and collect taxes, which in turn hinders compliance. The IRS is currently processing tax returns with a programming language that is no longer used in other systems and can only be handled by a small number of employees who are slated to retire in the near future. While the technology is developing fast and the need for instantaneous data access, real-time interactions, and other customer-centric services is increasing, the IRS system cannot keep up with these requirements.

Aside from the compliance issues, the IRS's outdated system hinders customer service quality. According to the National Taxpayer Advocate, the IRS faced difficulty providing adequate and reliable customer service. For example, the IRS had the resources to answer only 29% of the 100 million phone calls received in 2019. Since the COVID-19 pandemic, IRS operations have been largely shifted to remote work settings, further complicating customer service efforts.³⁹

B. <u>Budget Shortfalls Leading to a Decline in the IRS' Enforcement Activity</u> The increase in the tax gap in the U.S. is the byproduct of many factors, including long-term IRS resource constraints. Since the early 2000s, the IRS budget as a percent of GDP has been declining over time (See Figure 4.2). According to IRS data, since the fiscal year 2010, IRS funding has fallen by 20%, audit rates have fallen below 1%, audit staff has been reduced by 25%, and revenues from audits have decreased from \$23 billion to \$14 billion. But this funding shortfall is not receiving much attention because the need for enforcement resources to prevent more sophisticated evasion is rising rapidly and appears to be an imminent issue. The IRS is best suited to provide the services it ought to when it has the appropriate amount of resources

 ³⁸ GAO, 2019. "IRS Needs to Take Additional Actions to Address Significant Risks to Tax Processing," GAO-18-298.
 ³⁹ See National Taxpayer Advocate, 2019. "Annual Report to Congress 2019"; National Taxpayer Advocate, 2020. "Annual Report to Congress 2020."

required. Currently, the IRS funding shortfalls have resulted in an inability for the IRS to operate a fair and effective tax system.

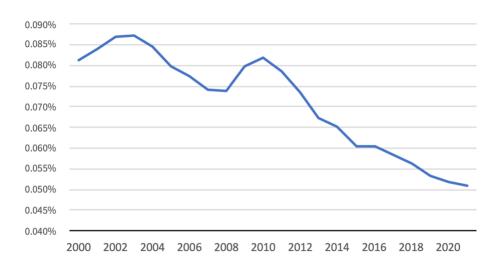


Figure 4.2 IRS Budget as Percent of GDP

Source: IRS Statistics of Income

Ironically, IRS resources have been decreasing since it started to modernize its outdated systems and to detect increasingly sophisticated tax evasion. More specifically, the IRS's overall budget declined by 18.5%, and the enforcement budget decreased by 15% between the fiscal year 2010 and 2021, leading to a 20% decline in the IRS workforce (IRS Statistics of Income 2019). The drop in the workforce was heavily directed to revenue officers who collect taxes (50% decrease) and revenue agents who audit complex returns (35% decrease). According to research, the IRS now has the fewest number of auditors since World War II (Sarin et al. 2019). Due to budget shortfalls, the IRS has been unable to replace retiring experienced employees with new revenue officers and agents, which contributes to more non-compliance and a larger tax gap.

Problem Brokers

Problem brokers are actors who "frame conditions as public problems and work to make policymakers accept these frames" (Knaggård 2015), meaning they define conditions as problems. Problem brokers can also be policy entrepreneurs, but not necessarily. Their key difference is that a problem broker only argues that something must be done about a specific condition, whereas a policy entrepreneur suggests specific solutions to the problem.

In the problem stream, several problem brokers voice their concerns regarding the increasing tax gap and IRS challenges with tax compliance. However, it is important to note that

these problem brokers do not propose specific proposals or solutions to the issue. For instance, Natasha Sarin, the Deputy Assistant Secretary for Economic Policy in the Treasury Department, highlighted the severity of the tax gap and analyzed the factors contributing to non-compliance in her report "The Case for a Robust Attack on the Tax Gap." Jon Feldhammer, a former IRS senior litigator and a partner at law firm Baker Botts, commented in a news interview, "no one has put out clear rules on virtual currency taxation, so there's a lot of non-reporting going on. Any time you create a path of non-reporting, you create a way to benefit from tax fraud in an untraceable or a much-harder-to-trace way" (Iacurci 2021). Former IRS Commissioners Rossotti and Goldberg argued that more investment in IRS enforcement and technology and better third-party reporting could raise revenue by \$1.4 trillion over ten years. These problem brokers pointed out problems but did not propose relevant solutions.

1.2. Advent of the Biden Administration (The Political Stream)

The political stream in the agenda-setting stage is not as relevant as it is in the decision-making stage because it is not yet necessary to build the political majority needed for the adoption of the policy. Nonetheless, the minimum that is needed to make the political stream ready for decision-making is for a key policymaker, such as an influential member of the legislature, to actively support the policy in question and be willing to gather a majority that supports the policy (Zohlnhöfer 2016). This section discusses the advent of a new government, a major political factor that influenced the agenda-setting, and a brief introduction to the key policymaker (a more detailed role and influence of this policymaker is later explained in the "political entrepreneur" section of the decision-making process).

The Biden Administration

Joe Biden was sworn into office on January 20, 2021, as the 46th President of the United States. As a Democrat and the oldest President in American history, Biden entered office amid the COVID-19 pandemic, an economic crisis, and increased political polarization (Farley 2021). As the U.S. grappled with converging crises, President Biden aimed to take action to control the

COVID-19 pandemic, tackle climate change, provide economic relief, advance racial equity and civil rights, and reform the immigration system.⁴⁰

Besides these priorities, President Biden also identified the tax gap as his priority issue for 2021 with the Treasury Department. His administration believed the government could regain much of the lost revenue due to tax evasion through increased IRS enforcement, information reporting, and enhanced compliance rules. The "Biden Budget" for the fiscal year 2022 stated a 10.4% increase in IRS funding over its current budget. It also included specific compliancerelated proposals such as additional reporting on financial accounts, increased broker information reporting on virtual currency, and increased electronic return filing. Aligned with the President's agenda, Congress has also targeted the tax gap to pay for the Biden agenda on infrastructure and other economic issues, which has brought more attention to virtual currency.

Key Policymaker Advocating Increased Information Reporting on Virtual Currency

Senator Rob Portman (R-OH), one of the members of the bipartisan negotiation team that drafted the IIJA, is the key policymaker that is later identified as the "political entrepreneur", who advocates for increased information reporting requirements on virtual currency. Senator Portman first publicly discussed issues relating to the reporting of virtual currency transactions at the Senate Finance Committee Hearing on April 13, 2021, with the IRS Commissioner Charles Rettig, and promised a forthcoming bipartisan bill specifically aimed at tax-reporting of virtual currency related transactions (Senate Finance Committee Hearing 2021). Senator Portman was a policymaker concerned about closing the tax gap even before considering increased information reporting on virtual currency. He first proposed enhancing the IRS enforcement to crack down on tax evasion by individuals and businesses, but his proposal went down as the Republicans opposed expanding the IRS' authority. Later, he officially introduced the virtual currency tax policy in place of his first proposal. He also worked to obtain support from other policymakers and led both Democrats and Republicans to support his provision.

⁴⁰ See the White House page "The Biden-Harris Administration Immediate Priorities". https://www.whitehouse.gov/priorities/

1.3. Policy Alternatives Proposed by Government Agencies (The Policy Stream)

Government agencies have identified the lack of third-party information reporting on virtual currency transactions as the key reason the IRS face barriers in reducing the tax gap. These agencies generally have recommended additional information reporting and data gathering on virtual currency tax compliance and its transactions as a means for tax authorities to manage the fast-developing industry more efficiently.

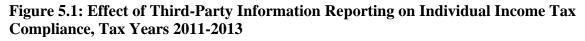
1.3.1 United States Government Accountability Office (GAO)

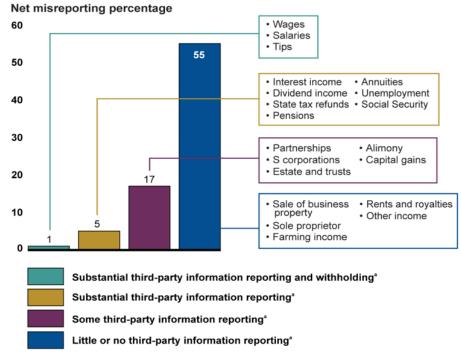
GAO is a legislative branch government agency that offers auditing, investigative, and evaluative services for the U.S. Congress and is the supreme audit institution of the federal government of the U.S.⁴¹ GAO suggested in its *Report to the Ranking Member, Committee on Ways and Means, House of Representative* that the additional information reporting and clarified guidance could reduce tax non-compliance. The first issue that GAO identified regarding virtual currency taxation is limited data on tax compliance. Current IRS tax and information returns do not specifically capture information on virtual currency income, as they do not require taxpayers to explicitly report all virtual currency-related transactions. The IRS therefore collected data from other sources to inform compliance. For instance, in December 2016, the IRS served a John Doe summons to Coinbase, a U.S. cryptocurrency exchange. Through the summons, the IRS requested identification and transactional data for all Coinbase users with a United States address, telephone number, email domain, or bank account transacting with Coinbase.

Despite the IRS' attempts at collecting third-party information reports, GAO still believed that third-party information reporting on virtual currency was very limited, which made it difficult for the IRS to address compliance risks. Unlike conventional investments wherein financial institutions and third parties involved in transactions report using forms known as information returns, the IRS does not require such returns on some potentially taxable virtual currency transactions. Therefore, some virtual currency exchanges send information returns to the IRS and their customers on their virtual currency transactions, but many other exchanges do not.

⁴¹ See "Office of the Comptroller General". United States Government Accountability Office. United States Government Accountability Office.

GAO found that, in general, the extent to which taxpayers accurately reported their income was highly correlated with the amount of income that third parties reported to the IRS. According to IRS data from 2011-2013, taxpayers misreported a significant portion of their income for types of income subject to little or no third-party information reporting (See Figure 5.1). Taxpayers reported a much higher percentage of their total income for types of income subject to at least some information reporting. Based on the data, GAO argued that information returns that include details about individual transactions could help prevent non-compliance.





Source: GAO analysis of Internal Revenue Service (IRS) information. | GAO-20-188

GAO proposed a total of three policy recommendations, two to the IRS and one to the FinCEN. First, GAO asked the Commissioner of the IRS to increase third-party reporting on all potentially taxable transactions on virtual currency and to clarify the IRS's interpretation of existing third-party reporting requirements under the IRC and Treasury Regulations. GAO also recommended the IRS clarify the application of reporting requirements under the Foreign Account Tax Compliance Act (FATCA) to virtual currency. GAO also recommended that FinCEN, in coordination with the IRS, make a statement about applying foreign account reporting requirements under the Bank Secrecy Act to virtual currency. GAO sent the draft of this recommendation to the IRS, FinCEN, Treasury, SEC, and CFTC for review and comment. The IRS agreed with GAO's proposal to take steps to increase third-party reporting on taxable transactions involving virtual currency. The IRS also stated that it was working with Treasury to develop guidance on third-party reporting under IRC 6045 for specific taxable virtual currency transactions. FinCEN also agreed to follow GAO's recommendation to make a public statement about whether virtual currency must be reported on the Foreign Bank and Financial Accounts (FBAR). As of January 2020, FinCEN's regulations did not require virtual currency held in an offshore account to be reported on the FBAR. The IRS and FinCEN stated they would work together to develop the best guidance for taxpayers regarding the FBAR requirement.

1.3.2 Treasury Inspector General for Tax Administration (TIGTA)

TIGTA is an office in the U.S. Federal government, established in January 1999 following the IRS Restructuring and Reform Act of 1998. TIGTA provides independent oversight of Department of the Treasury matters involving IRS activities, the IRS Oversight Board, and the IRS Office of Chief Counsel. TIGTA conducts audits, investigations, and inspections to promote the fair administration of the Federal tax system.⁴²

TIGTA is one of the government agencies that have identified a lack of third-party information reporting on virtual currency. In 2016, the TIGTA stated that the IRS had not developed a method to track virtual currency transactions that were possibly taxable, which would help estimate the significance and risk of non-compliance. TIGTA strongly suggested that the expansion of information reporting that requires all cryptocurrency exchanges to report all virtual currency transactions to the IRS would increase tax compliance by closing the information gap. More specifically, TIGTA proposed that the IRS revise third-party information returns to identify the amounts of taxable transactions on virtual currency. The IRS agreed to follow TIGTA's recommendation, but its funding needs mentioned in the 'problem stream' section was a higher priority than modifying information reporting forms. Hence, as of February 5, 2020, the IRS had not implemented any relevant changes to these information returns to include information about virtual currency use. However, the IRS also stated that it was working

⁴² See "What is TIGTA". Treasury Inspector General for Tax Administration. U.S. Department of the Treasury. December 11, 2014.

with the Department of the Treasury to develop guidance on third-party reporting Internal Revenue Code 6045 for certain taxable transactions involving virtual currency.

1.3.3 Coinbase

Coinbase is a publicly traded company operating the largest cryptocurrency exchange platform in the U.S. by trading volume.⁴³ In October 2021, Coinbase introduced a policy proposal detailing suggested reforms to the existing virtual currency regulations. In preparing this proposal, Coinbase went through a rigorous consultation process for many months, gathering information from regulatory experts, opinion leaders, crypto builders, and government officials. Coinbase proposed three following policy changes in its proposal to promote strong investor protection and efficient markets.

1. <u>Regulating virtual currency under a separate framework</u>

Coinbase argued that the current financial regulatory framework does not fit into the evolution of virtual currency. The current system still assumes the existence of traditional financial intermediaries such as exchanges, transfer agents, clearinghouses, custodians, and traditional brokers that are mostly absent under the decentralized blockchain ecosystem. Hence, Coinbase proposed that the government create a separate framework for regulation specifically designed for the unique features of virtual currency, which is far less dependent on traditional financial intermediaries.

2. Designating one regulator for virtual currency markets

Coinbase proposed that the government assign responsibility over the virtual currency markets to a single federal regulator. The proposal explained that the authority of the single federal regulator would include establishing a new registration process for virtual currency markets and providing comprehensive disclosures to inform investors of virtual currency. Coinbase also suggested that a self-regulatory organization (SRO) should be established to strengthen the oversight regime for virtual currency transactions and to formulate new rules regarding virtual currency "trading, transfer, custody, clearing, settlement, money payment, staking, borrowing and lending, and related incidental services."⁴⁴ Coinbase believed that developing a single

⁴³ See "Coinbase Expands Institutional Services with Tagomi Purchase". Bloomberg News. May 27, 2020.

⁴⁴ See "Digital Asset Policy Proposal" by Coinbase.

federal regulator and SRO would provide appropriate regulation and oversight to the virtual currency market.

3. <u>Protecting and empowering users of virtual currency</u>

Coinbase indicated that it valued protecting and empowering the users of virtual currency. Hence, it proposed a framework that would protect users against fraud and market manipulation by enhancing transparency with appropriate disclosure requirements. The proposal emphasized that the government needed to recognize and consider virtual currency's unique characteristics and risks in designing a new framework.

1.4. Agenda Window: Opening from the Political Stream

The agenda window for a new virtual currency tax policy opened in the political stream with the election of a new President and the subsequent process of his key policy adoption. In the political stream, it was particularly important that the incoming President and his administration are receptive to certain policy agenda.

As observed in the discussion of the three streams, the rationale and need to increase information reporting requirements for virtual currency transactions was already realized and investigated by the tax authorities and other government agencies. The policy proposals provided in the policy stream were mostly adopted by the IRS and the Treasury Department, which have the administrative authority to require reporting for virtual currency brokers through their regulations (Gleckman 2021). For example, the Department of Treasury was working on new guidance to clarify the requirements written in the *Internal Code Section 6045A*, *Information required in connection with transfers of covered securities to brokers*, to require virtual currency brokers to file Form 1099s to their customers and the IRS. Because Congress has delegated rulemaking authority to the Treasury, the IRS and the Treasury have mainly enforced virtual currency tax rules through guidance and regulations.

However, the case was different for Section 80603. This time, Congress needed to adopt and pass it into statutory law as part of the President's key policy package, so it could partially pay for the trillion-dollar budget. Also, the IRS had been receiving questions and criticism regarding its authority as a government agency to impose new rules regarding virtual currency taxation. When the legislative branch becomes involved in passing the legislation, the IRS would not be accused of going beyond what the law allowed. So, the provision was also viewed as a

way to head off future legal challenges to IRS regulations (Faler 2021). As Senator Portman's initial provision to increase IRS enforcement faced pushback from the Republicans, the bipartisan negotiating team moved to strengthen virtual currency reporting requirements. They needed to find a mutually agreeable way for both Republicans and Democrats to pay for the infrastructure package (Ward 2021). The White House and the bipartisan negotiating team, including Senator Portman, agreed to pass the infrastructure bill as long as they could claim it was funded without actually raising taxes. Also, the JCT backed the funding needs by identifying the virtual currency industry as a possible source of revenue. The Committee estimated that the new reporting requirements would raise \$28 billion over a decade. Hence, the opportunity was opened to increase reporting requirements for virtual currency.

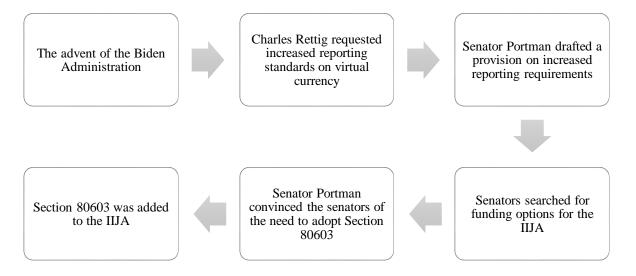
1.5. Policy Entrepreneur: IRS Commissioner, Charles Rettig

The policy entrepreneur for Section 80603 in the agenda-setting stage is Charles Rettig, the commissioner of the IRS. Since the U.S. Senate Finance Committee confirmed him to be the Commissioner in September 2018, he has raised concerns over the tax gap caused by virtual currencies, calling for increased reporting standards to be adopted by the government. Rettig has repeatedly said that tax evasion from the virtual currency is a key contributor to the growing tax gap in the U.S. and appealed that the IRS desperately needed Congress' assistance to fight against tax evasion. For example, Rettig has repeatedly asked policymakers for more authority to improve tax compliance in the virtual currency industry, where many taxpayers are unaware of their obligations or are intentionally evading payment of taxes (Mejdrich 2021). The IRS and Treasury already had the administrative power to regulate information reporting on virtual currencies as they had for other traditional financial tools. Nevertheless, Rettig explicitly asked Congress for a clear statutory authority to collect information on virtual currency transfers and transactions.

Charles Rettig made an effective policy entrepreneur to push the increased information reporting requirement to the agenda. He had the most access to core policymakers, such as Senator Portman, who had the political and legislative power to advocate for the proposal and to persuade majority in the decision-making process. According to Sabatier (2018), policy entrepreneurs are more likely to couple the streams successfully during an open policy window if they have more access to core policymakers and when they are more persistent. Also, policy

entrepreneurs can be from inside or outside the formal governmental system. However, those who work from the outside, like Charles Rettig, can only be successful if they receive support from political entrepreneurs from the inside (Roberts and King 1991). As Charles Rettig regularly attended Senate Finance Committee Hearings, he conveyed and asked for his proposals to be adopted by the policymakers. Rettig not only had frequent and close access to the policymakers but was also persistent in his actions on virtual currency tax policy. Table 2 lists Rettig's actions since 2019, from highlighting the increasing tax gap to requesting Congress for an increased information reporting requirement.





Date	Event	Actions
May 16, 2019	Response to a letter from 21 members of Congress	Rettig wrote, "I share your belief that taxpayers deserve clarity on basic issues related to the taxation of virtual currency transactions and have made it a priority of the IRS to issue guidance."
May 30, 2019	Federal Bar Association Conference	Announced that a new IRS guidance on virtual currency tax is coming out in 30 days.
October 28, 2019	Interview	Reiterated the agency's intent to crack down on cryptocurrency tax evasion, stating taxpayers should not be confused on tax reporting after the IRS released guidance.
April 13, 2021	Senate Finance Committee Hearing	Said the U.S. fails to collect up to \$1 trillion in taxes owed each year, partially due to virtual currency tax evasion. He further noted that the tax gap on virtual currency is increasing with the use of nonfungible tokens and other new crypto-related products. He argued that enhanced reporting requirements for virtual currency could significantly help reduce the tax gap.
June 8, 2021	Senate Finance Committee Hearing	Requested Congress to grant the IRS statutory authority to require information reporting in the virtual currency market and asked for additional tools and resources. He also mentioned that there are more than 8,600 virtual currency exchange platforms, and thus the authority to collect information from third- party is critical.
Unknown	Interview	Claimed that the John Doe summons' approval strengthens the IRS' attempts to close the virtual currency tax gap (Ortiz 2022).
April 8, 2022	Senate Finance Committee hearing	Rettig announced that the IRS expects to hire 10,000 new employees in 2022 to address unprocessed returns and other taxpayer correspondence.

Table 2. Charles Rettig's actions on virtual currency taxation

2. Deciding Who Exactly Constitute "Brokers" (Decision-Making)

The modified MSF differentiates the causal mechanisms leading to agenda change (product of agenda-setting) from those leading to policy change (product of decision-making). Contrary to agenda-setting, only the activities of the political entrepreneur should be considered as causal mechanisms for decision-making, because the decision window opens with the worked-out proposal that gained agenda status during agenda-setting. In the decision-making process, the political stream is of prime importance, while the problem and policy streams are of minor importance. The political stream is most important because the policy proposal needs the consent of all veto actors for it to be adopted into law. In contrast to the policy entrepreneur during the agenda-setting, the political entrepreneur mainly seeks to obtain a majority for the policy proposal, in this case using the "concession" strategy.

2.1. Problematic Definition of "Broker" in Section 80603 (The Problem Stream)

The issue of the increasing tax gap in the U.S. and IRS challenges with tax compliance previously discussed in the context of the problem stream of agenda-setting also apply to the decision-making process, so these issues will not be further discussed in this section. In decision-making, the problem stream is of limited importance because a particular problem was already attached to a particular policy in the agenda coupling. However, concerns and controversies over the technical detail in the original draft of Section 80603 newly emerged in the decision-making process, which caused numerous stakeholders to engage in debate and objections. The issue was not about taxes, as Congress was not creating new taxes on virtual currency. Rather, it was about the new reporting requirements that was supposed to be applied when taxpayers sell and exchange virtual currencies.

Section 80603 amended the IRC 6045⁴⁵ to expand the definition of a broker to include "any person who (for consideration) is responsible for regularly providing any service effectuating transfers of digital assets on behalf of another person" (Section 80603, H.R. 3684). This provision unveiled by the Senate on August 1, 2021, was the latest updated version submitted by Senators Rob Portman, Mark Warner, and Krysten Sinema. This latest amendment

⁴⁵ Under the Code 6045, for purposes of 1099-B reporting, a "broker" is defined to include a "dealer, a barter exchange, and any other person who (for a consideration) regularly acts as a middleman with respect to property or services." (National Law Review, Volume XI, Number 218)

specified that only people who "effectuate" digital asset transfers would be treated as a broker, in contrast to the earlier version originally drafted by Senator Portman that included "any parties that might interact with virtual currency." While it appeared that the latest amendment has clarified the definition of a "broker," it still did not explicitly exclude miners or other parties that do not provide customer transactions. Instead, it only exempted proof-of-work miners and proof-of-stake validators from the reporting obligation.

The industry participants immediately questioned and opposed the definition of "broker" included in the provision. They argued that it could include non-custodial companies, such as decentralized exchanges, cryptocurrency validators, miners, node operators/validators, software developers, and hardware manufacturers, who cannot file broker-specific tax reporting forms because they do not send transactions to customers directly. Miners may "effectuate transfers," but it is not based on a contract between the users and the miners. Miners only validate the blockchain, and the blockchain itself is publicly available (De 2021).

2.2. Senator Portman's Policy Proposal (The Policy Stream)

The policy stream in the agenda-setting process included policy alternatives proposed by the policy community regarding the issue of the tax gap and IRS challenges with tax compliance. On the other hand, the policy stream in the decision-making process includes provisions introduced by the policymakers that moved to the agenda for decision-making.

Figure 6.1 Policy Stream in Decision-Making

'IRS enforcement' by Senator Portman (Removed from the agenda due to Republicans' opposition)

'Increase in Tax Reporting Requirements' on Virtual Currency by Senator Portman (Proceeded to decision-making as a pay-for provision to IIJA)

Senator Portman's Increasing IRS enforcement

Prior to introducing Section 80603, Senator Portman introduced a provision related to bolstering IRS enforcement, which planned to fund \$40 billion into increasing tax enforcement for the IRS to crack down on tax evasion and boost tax collection for up to \$100 billion over ten years. It was introduced before Section 80603 for the same reason: to raise revenue for the infrastructure

package. However, as tax enforcement was a controversial subject for Republicans, they strongly objected to expanding the IRS' reach. Moreover, one Senate Democrat suggested for the money from increased IRS enforcement to be used to pay for the Democrats' \$3.5 trillion package. Hence, the provision went down the agenda.

The IRS enforcement provision had a promising revenue estimate over the next decade. But based on political considerations, it was not likely that the IRS enforcement would succeed. The IRS has had a history of allegations of abuse. For instance, individuals in power had been accused of using the IRS and its investigative tools to target opposing individuals or groups.⁴⁶ Due to such allegations, policymakers of both parties often called for reform or even the abolition of the IRS. Accordingly, any politician advocating for increased or stable levels of IRS funding faced significant political opposition, as Senator Portman did with his IRS enforcement provision. More extensively, research on tax policies also demonstrated that tax enforcement is controversial to political considerations.⁴⁷ Thus, it is hardly surprising that calls for increased IRS funding often went unheeded.

Senator Portman was disappointed about the failure of the IRS enforcement provision, as he was involved and had been consistent in the IRS reform efforts for fifteen years. He believed that the IRS having adequate resources and providing better taxpayer service was essential, as it was hard for taxpayers even to reach the IRS. Portman also stated that the lack of resources led to less tax collection and more tax gaps. When taxpayers could not reach IRS for clarification on their tax information, they were more likely to end up not paying their due amount. He claimed that IRS enforcement was needed to provide better services and professionalism and ensure the tax system worked efficiently. Hence, he opposed the argument for cutting the IRS budget because he believed it did not help the taxpayers.⁴⁸

A group of 22 senators leading the infrastructure package met again on July 15, 2021, to negotiate other options to pay for the infrastructure package. Senator Portman also discussed

⁴⁶ An article of impeachment against President Richard M. Nixon in 1974 charged that he had used the IRS against political opponents. Also, abuses by individual IRS agents led to Senate hearings in 1997 and eventually to passage in 1998 of the IRS Restructuring and Reform Act of 1998, which developed the office of the Taxpayer Advocate. IRS officials admitted in 2013 that the IRS had subjected Republicans to closer scrutiny in their applications for tax-exempt status than Democrats.

⁴⁷ See Kenny and Winer (2006), Esteller-Moré (2011), Robinson and Slemrod (2012), and Durán-Cabré et al. (2015).

⁴⁸ See Portman's official website. https://www.portman.senate.gov/newsroom/portman-difference/cnbc-portmanoutlines-plan-responsibly-pay-needed-infrastructure

other pay-for provisions with Congressional Budget Office (CBO) and the JCT. One of the options that came up at this time was increasing tax reporting requirements on virtual currency transactions.

Senator Portman's Increasing Tax Reporting Requirements on Virtual Currency

A new tax-reporting requirement on virtual currency was available in the policy stream even before the policy window opened. At the Senate Committee Hearing on April 3, 2021, Senator Portman first announced that he was working on increasing reporting requirements on virtual currency, which could aid in efforts to close the tax gap. He also referred to the IRS Commissioner Charles Rettig's estimate of the current tax gap being at \$1 trillion and promised that he would be working on legislation to address the issue. Senator Portman's plan for IRS enforcement went down, but he did not forgo addressing the tax gap.

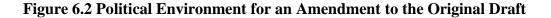
His tax-reporting provision on virtual currency gained a chance on the decision-making floor as Senator Portman and his bipartisan leaders returned to the drawing board on revenue raisers after the IRS enforcement provision was rejected. Republicans and Democrats of the negotiating team looked to the increased tax-reporting requirement on virtual currency as a new revenue source for the infrastructure package. It was less controversial than funding for IRS enforcement, as the Biden administration had pressed for several measures to get at the tax gap, and the Treasury Department's tax proposals for 2022 already included cryptocurrency-related reporting similar to what Senator Portman was drafting. As noted earlier, this provision was estimated by the JCT to raise \$28 billion of the infrastructure package's \$550 billion in new spending for roads, highways, bridges, and other infrastructure projects. The estimated \$28 billion it would generate for a decade was only about a quarter of what the IRS enforcement proposal envisaged but was still the best revenue raiser in the infrastructure bill.

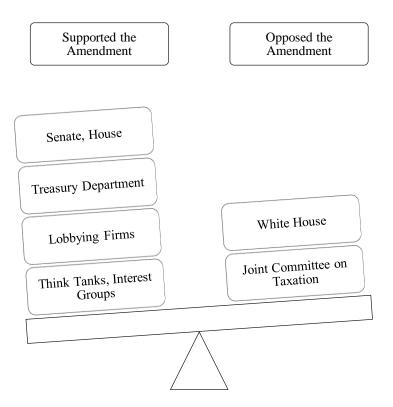
2.3. Stakeholders Supporting and Opposing an Amendment to the Original Draft of Section 80603 (The Political Stream)

Once the increased information reporting requirements on the virtual currency gained agenda status, bargaining about the details of the proposal among the actors of the political stream started immediately. Policymakers tend to be eager to influence a policy once it is on the agenda

and stakeholders raise their voices for or against it. Hence, the political stream is most important for decision coupling.

The political stream in decision-making consists of support and opposition for the original draft of the provision unveiled by the Senate. As the problematic definition of "broker" written on the proposal became an issue among the policymakers and the entire virtual currency industry, the political force requesting for an amendment grew larger. As a result, Senator Portman, the author of the original provision who first defended criticism over his draft, ended up supporting clarification of the language in the bill. Figure 6.2 illustrates the political environment for the original draft of section 80603: Congress, Treasury, Lobbying firms, Think Tanks, and other virtual currency related interest groups support an amendment, while the White House and the JCT oppose altering the definition of the term "broker." While the Senate and House encompass both the supporting and opposing power for an amendment due to political differences, they are counted to be on the support side as the voice for support was significantly more dominant than the opposition.





Stakeholders Supporting an Amendment to the Original Draft of Section 80603

1. Senate

a. Senate Finance Chair Ron Wyden

Senate Finance Chair Ron Wyden, who leads the Chamber's tax-writing panel, pushed for amendments to the Section 80603 provision. While Wyden supported increasing reporting rules for virtual currency exchanges, his concern was that the language lacked clarity, which could pose technological challenges and cause unintended consequences. Wyden also stated the possibility of proposing his own amendment as a solution (Weiss 2021). Wyden wanted the rules not apply to developers that may face difficulty in complying. He also stated via his social media page, "Americans avoiding paying taxes they owe through cryptocurrency is a real problem that deserves a real solution," and added, "The Republican provision in the bipartisan infrastructure framework is not close to being that solution. It is an attempt to apply brick and mortar rules to the internet and fails to understand how the technology works" (Wyden 2021).

Senator Wyden and Lummis eventually introduced a bill that would narrow the definition of "broker" significantly. It clarified that developers (who enable verifying and recording transactions) and crypto wallet programs would not have to report their transactions to the IRS. (S. 3249 2021). Their bill also clarified that the "broker" definition excludes miners as well as wallet providers and developers while keeping that the digital asset intermediaries that have access to customer information are required to report to the IRS as Senator Portman's original provision had stated.

b. Senator Pat Toomey (R-Pennsylvania)

Senator Toomey, who had been active in virtual currency industry, voiced against the broad definition of "broker" included in Senator Portman's provision. He said, "Congress should not rush forward with this hastily-designed tax reporting regime for cryptocurrency, especially without a full understanding of the consequences." He further claimed that the broad definition would affect non-financial intermediaries like miners, network validators, and other service providers.

c. Senator Rob Portman (R-Ohio)

Senator Portman, the author of the original draft, has initially defended the original language arguing it would not affect individuals or miners. However, he later changed his position and stated that he supported clarifying the language and asked for Senate to vote for the amendment. He stated, "I agree with Senators Wyden, Toomey, and Lummis that we can do more to clarify the intent of the cryptocurrency provision, and the Senate should vote on their amendment" (De 2021). Furthermore, on August 9, 2021, during consideration of the bipartisan infrastructure bill, Senators Portman and Warner conducted a colloquy⁴⁹ to clarify the scope and intent of a provision implementing information reporting requirements for virtual currency brokers.

2. House of Representatives

Congressional advocates for virtual currency, such as the House Financial Services Committee member Patrick McHenry and several other Republican and Democrat representatives, expressed concern over the definition of the "broker". They argued that it could negatively affect customers, miners, and hardware/software developers that do not have the information required by the IRS. For example, Representative Tom Emmer (R-MN), along with chairs of the Blockchain Caucus, Representatives Darren Soto (R-FL), Bill Foster (D-IL), and David Schweikert (R-AZ), signed an open letter to the Congress, stating that "when the infrastructure bill comes to the house, we must prioritize amending this language to exempt noncustodial blockchain intermediaries and ensure that civil liberties are protected" (Jaerv 2021). The letter also pointed out that the requirements of Section 80603 in its original form could drive blockchain software development, cryptocurrency mining, and similar opportunities out of the U.S.

Representative Patrick McHenry (R-NC) introduced the Keep Innovation in America Act (H.R. 6006) to amend Section 80603. In order to clarify the confusion that the definition of "broker" imposes on the industry, his bill expanded the definition of a broker, for purposes of tax information reporting, to include "any person who (for consideration) stands ready in the ordinary course of a trade or business to effect sales of digital assets at the direction of their

⁴⁹ See "Warner, Portman, Bipartisan Colleagues Urge Treasury Secretary to Implement Cryptocurrency Provision in Bipartisan Infrastructure Law Effectively." Mark R. Warner, 14 Dec. 2021,

https://www.warner.senate.gov/public/index.cfm/2021/12/warner-portman-bipartisan-colleagues-urge-treasury-secretary-to-implement-cryptocurrency-provision-in-bipartisan-infrastructure-law-effectively.

customers" (H.R. 6006). Furthermore, the bill also asked the Treasury Secretary to conduct a study and write a report to Congress regarding the treatment of digital assets as cash for purposes of tax reporting for cash payments of more than \$10,000. This bill was co-sponsored by Representatives Kevin Brady (R-TX), Warren Davidson (R-OH), Anthony Gonzalez (R-OH), Ted Budd (R-NC), French Hill (R-AR), Eric Swalwell (D-CA), Ro Khanna (D-CA), Tom Emmer (R-MN) and Darren Soto (D-FL).

3. Department of Treasury

Amid the growing concern about the original draft of Section 80603, the Treasury Department informally said that it would not target non-brokers, such as miners and software developers. The Secretary of the Treasury was given broad authority to determine the scope of some of the amendments and specify the language of the bill, as the Department issues regulations interpreting precisely how the provisions would work. Therefore, there was an opportunity for the stakeholders to engage with the Department to clarify and amend the definition of "broker" used in Section 80603. As the provision left room for interpretation, the IRS and the Treasury Department can adopt a narrower interpretation than prescribed in the provision (Suher 2022). The Secretary of the Treasury, Janet Yellen, later consulted with industry experts to understand the implications of the changes in the IRC and suggested a compromise rule which excluded software developers and blockchain validators.

4. Lobbying Firms and Organizations

The original draft of Section 80603 had dramatically increased political spending by lobbying firms and other organizations in the industry. The lobbying disclosures showed that the crypto startups and virtual currency industry associations spent about \$2.2 million from July through September 2021, double the amount they had spent during the third quarter of 2020. According to the lobbying disclosures, 17 filings reporting \$2.7 million in lobbying expenditures mentioned tax issues (Reilly 2022). Of the 43 companies and groups across the virtual currency sector, including exchanges, advocates, miners, wallet providers, investors, and software developers, Coinbase, the largest crypto exchange, was the biggest lobbying spender, spending \$625,000 on lobbying in just third quarter of 2021. The company spent 681 percent more than the previous quarter when it spent \$80,000. Coinbase also hired a former staffer of Senate Finance ranking

66

member Mike Crapo (R-ID) and the tax aide to former Speaker Paul Ryan. Besides Coinbase, many other virtual currency firms also hired Washington lobbyists for the first time, and turned to K-Street amid an aggressive lobbying fight over Section 80603.

The Blockchain Association,⁵⁰ one of the industry's most prominent trade groups representing cryptocurrency trading platforms, blockchain networks, and investors, also increased its lobbying effort to get the provision dropped or narrowed (Weiss 2021). The Blockchain Association and Chamber of Digital Commerce had been lobbying Senate offices to alter the definition of "broker." The Blockchain Association increased its quarterly lobbying spending to \$210,000 last quarter, up from \$160,000 the previous three months. They also hired the lobbying firm of former Sen. Blanche Lincoln (D-AR) to communicate closely in Washington. Likewise, the Chamber of Digital Commerce⁵¹ more than doubled its secondquarter lobbying spending to \$136,000 in the third quarter. The Chamber added four more board members, including three former chairs of the Commodity Futures Trading Commission, a former SEC Commissioner, and a former White House Chief of Staff, Mick Mulvaney (Weiss 2021).

5. Think Tanks

Washington-based think tank Coin Center established in 2014, brought a lawsuit against the Treasury Department and IRS regarding Section 80603. The Coin Center lawsuit focused on the Section 6050I reporting requirement, which required individuals and businesses who receive \$10,000 or more in virtual currency to report detailed information to the IRS. Neeraj Agrawal, the Director of Communications at Coin Center, criticized the new tax reporting rule for being added to the infrastructure bill at the last minute when it could massively impact the entire virtual currency industry (Janfaza 2021). Jerry Brito, Executive Director of Coin Center, stated that the center supported any bipartisan effort to address and amend the problematic tax reporting provisions (Zaslowsky 2022).

⁵⁰ The Blockchain Association, which represents cryptocurrency trading platforms, blockchain networks and investors, has been working to get the provisions dropped or narrowed. They say the language continues to be so broad that it could apply to businesses that represent only one step in the transaction process, don't have customer relationships and couldn't provide this sort of information to the IRS.

⁵¹ The Chamber of Digital Commerce includes members from a mix of crypto and traditional financial services firms.

6. Other Interest Groups

Perianne Boring, founder and president of the Chamber of Digital Commerce, stated that the Chamber proposed narrowing the definition of the broker to exclude cryptocurrency miners and the operators of decentralized finance platforms. Like Coin Center, the Chamber also argued that adding the provision at the last minute as a revenue-generator was not a proper way to design a policy. Boring also commended Senator Toomey and his co-sponsors for their efforts to clarify the language of the bill.

Dennis Kelleher, president of Better Markets, criticized that the virtual currency industry wants to have the appearance of regulation but not the reality of regulation. She further alerted the risk of Portman's provision for providing a false sense of security to people that the virtual currency industry was being adequately regulated when it was not. Jeff Bandman, a board member of Global Digital Finance, said that an amendment should be made as it would only raise revenues from appropriate actors in the virtual currency transactions. He said it should promote regulatory certainty and "allow innovators to continue to develop new financial products, without fear of unwarranted tax liabilities" (Wright 2021). Alison Mangiero, the Executive Director of Proof of Stake Alliance (POSA), argued that taxpayers needed proper guidance for their virtual currency transactions. He also conveyed POSA's support for Senator Toomey, Sinema, Warner, Lummis, and Portman's efforts to clarify that validators and miners were not included in the new rules for tax reporting purposes. Lastly, Fight for the Future⁵², a digital rights nonprofit with a major following on social media, mobilized activists and directed more than 35,000 people to their online website to call senators, urging them to amend the proposed provision. The organization stated that it was not opposed to virtual currency regulations altogether, but that it was dissatisfied with the fact that the provision was only included in the legislation at the last minute (Janfaza 2021).

Other interest groups that supported the amendment include: Action on Race and the Economy, Americans for Financial Reform, Better Markets, Blue Future, Center for Digital Democracy, Civic Shout, Institute for Local Self Reliance, Demand Progress, Media Alliance, National Community Reinvestment Coalition, Open Markets, Progress America, Public Citizen, Revolving Door Project, RootsAction.org, Social Security Works, United We Dream.

⁵² Fight for the Future has organized large scale online protests in support of net neutrality and in opposition of internet censorship and government surveillance for the past decade.

Stakeholders Opposing an Amendment to the Original Draft of Section 80603

1. White House

The Biden administration rejected the criticisms against the original draft, accusing the virtual currency industry of using scare tactics to weaken the new requirements. The administration believed any amendments to the original provision would reduce the \$28 billion budget estimate for the \$550 billion infrastructure package, and that an amendment would hinder Treasury Department's discretion when it develops regulations detailing how the new rules would be applied (Mejdrich 2021).

The White House seemed to oppose any amendment to the provision. However, when Senators Rob Portman, Mark Warner, and Kyrsten Sinema submitted their rival amendment against Senator Wyden, Toomey, and Lummis' amendment (explained in the "decision window" section), the White House formally supported Portman's amendment. The Deputy Press Secretary stated that the administration was "glad about the progress that has produced a compromise amendment supported by Senators Portman, Warner, and Sinema to clarify the provision to reduce tax evasion in the cryptocurrency market." The White House believed the provision would enforce tax compliance in the virtual currency industry and ensure that highincome taxpayers contributed what they owed under the law (Mejdrich 2021). The administration also mentioned Wyden's version of the amendment, but they stated that the alternative amendment submitted by Senators Warner, Portman, and Sinema provided adequate rules to promote tax compliance.

2. Joint Committee on Taxation

The Joint Committee on Taxation (JCT), which projected the initial \$28 billion evaluation, reportedly said the amendment could knock about \$5 billion off the actual amount of tax revenue generated. JCT also found that due to the amendment, revenue for the \$550 billion bill would be reduced by \$5.17 billion. For these reasons, JCT opposed an amendment to the original provision.

2.4. Decision Window: Decision-Making Process in Senate and House

The decision window in the decision-making process opens in the policy stream, which is the worked-out proposal that gained agenda status due to the agenda coupling. The essential question during the decision window is whether the political entrepreneur successfully obtains the majority needed for policy adoption. The MSF assumes that the policy output would differ significantly from the original proposal as the more powerful the interest groups' campaigns against the original proposal are. In this case, it is found that the policy output did not differ from the original proposal because one veto-actor voted against the amendment.

Decision-Making Process in the Senate

1. Official Introduction of the Original Draft of the Provision

The Senate originally planned to introduce the bill in July 2021, but the virtual currency tax provision held up the entire 2,702-page infrastructure bill⁵³ until August 1, 2021. Despite fierce criticism against the original draft, Senators were reluctant to provide an amendment due to changes in the provision's "scoring," which is the expected revenue. Their concern was that explicitly removing non-custodial business from the bill would reduce the total expected revenue from the provision. The evaluated amount of revenue by the JCT included non-custodial businesses such as miners and validators, based on the definition written in Senator Portman's original draft. Hence, explicitly excluding miners would change this initial evaluation, meaning the provision would no longer be expected to generate \$28 billion. This change could, in turn, affect the rest of the bill, forcing policymakers to find new ways of funding the infrastructure package (De 2021). However, as the interest groups' campaigns were powerful and some of the Senators strongly requested a change, some amendments had to be made.

2. Amendments to the Original Provision

Two competing amendments to the original draft of Section 80603 were introduced by Senator Wyden, Toomey, Lummis and Portman, Warner, and Sinema.

⁵³ Alongside Senator Rob Portman, the infrastructure bill was largely negotiated by a group, including Sens. Kyrsten Sinema (D-AZ.), Susan Collins (R-ME), Joe Manchin (D-WV), and Mitt Romney (R-UT).

Amendment by Senators Ron Wyden(D-OR), Pat Toomey (R-PA), Cynthia Lummis (R-WY)

Senator Wyden, Toomey, and Lummis aimed to narrow the scope of the language in the provision and introduced an amendment that changes the definition of "brokers" to explicitly exempt miners, node operators, developers, and other non-custodial virtual currency industry participants from the tax reporting provision (De 2021). The majority in the virtual currency industry supported the amendment from Wyden, Lummis, and Toomey while criticizing the amendment from Portman, Warner, and Sinema.

Amendment by Senators Rob Portman (R-OH), Mark Warner (D-VA), Kyrsten Sinema (D-AZ)

Three Senators introduced a different amendment against the former one. Unlike the former amendment, this amendment only slightly changed the "broker" definition (Washington Post 2021). However, the changes were not to the extent deemed necessary by the interest groups. The amendment was discussed on August 10, 2021, on the Senate floor, when Senators Mark Warner and Rob Portman conducted a colloquy⁵⁴ to clarify the scope and intent of Section 80603. Portman and Warner defined the broker as "any person who (for consideration) is responsible for regularly providing any service effectuating transfers of digital assets on behalf of another person." They also discussed how the Treasury Department, JCT, and others believed that the original definition was clear that the reporting requirements only required brokers and would exclude people that validate distributed ledger transactions via proof of work, proof of stake, and other validation methods, and people engaged in selling hardware or software that allows people to access their private keys. Portman and Warner's amendment reportedly did not protect PoS software developers⁵⁵, operators, validators, or liquidity providers from the newly proposed reporting requirements.

⁵⁴ See Senator Rob Portman's YouTube Channel. https://www.warner.senate.gov/public/index.cfm/2021/8/on-senate-floor-warner-portman-conduct-colloquy-clarifying-cryptocurrency-provision-in-infrastructure-investment-jobs-act

⁵⁵ Cryptocurrencies like bitcoin operate on a PoW model, where miners must compete to solve complex puzzles in order to validate transactions. However, other cryptocurrencies use or are pursuing use of different models, like the proof of stake (PoS) model, where a person can mine or validate transactions according to how many coins they hold. Supporters of the PoS model say it is more efficient and uses less energy (Locke 2021).

The Final Consensus: A Compromise Amendment amongst Six Senators

As the lobbying strength of the virtual currency industry dramatically grew, Sens. Wyden, Toomey, Warner, Lummis, Sinema, and Portman all together reached a compromise on an amendment that mitigated the concerns of the virtual currency industry. In a press conference⁵⁶, Senator Pat Toomey announced a bipartisan agreement on an amendment backed by all six senators. It clarified that the definition of "broker" applied only to persons who "regularly effectuate transfers of digital assets on exchanges where people buy, sell and trade cryptocurrency, exempting software developers, transaction validators and node operators" (Locke 2021). Persons who only validate distributed ledger transactions would not been considered "brokers," whether they use proof-of-stake, proof-of-work, or other new consensus mechanisms. Also, the definition would not have included people only engaged in selling hardware or software with the only function of permitting users to control private keys used to access digital assets. They concurred that the provision would only apply to the intermediaries of transactions. While the White House supported Portman, Warner, and Sinema's amendment, the compromise amendment was sent to the floor for voting.

3. Cloture and Voting in the Senate

Cloture in the Senate⁵⁷ is the procedure by which a vote can end a debate without rejecting the bill, amendment, motion, conference report, or other matters on the debate. Under Senate Rule XXII, the process begins when the Majority Leader files a cloture petition, including the signatures of 16 Senators who want to close the debate on a matter. The petition remains in the Senate for 48 hours and an hour after the Senate convenes. Cloture then can be invoked with the vote of 60 Senators. Senators who want to make amendments or revisions to a bill on which cloture has been invoked should submit the amendments in writing before the cloture vote occurs.⁵⁸ First-degree amendments, which propose to change the text of a bill should be handed in writing when the Senate is in session no later than 1 p.m. on the day after the cloture motion is filed.

⁵⁶ See "Press Conference on Agreement to Fix Digital Asset Reporting Requirements in the Infrastructure Bill" https://twitter.com/i/broadcasts/1zqJVXqgmRWKB

⁵⁷ See "About Filibuster & Cloture" in United States Senate Page. https://www.senate.gov/about/powers-procedures/filibusters-cloture.htm

⁵⁸ See "Invoking Cloture in the Senate" by Christopher M. Davis (Analyst on Congress and the Legislative Process). https://sgp.fas.org/crs/misc/98-425.pdf

The Senate voted to invoke cloture on the IIJA on August 8, 2021, by a vote of 68-29 (3 Senators did not vote), but Senators Portman, Toomey, Warner, Lummis, Sinema, and Wyden reached a compromise on their revised amendment only on the next day the cloture was invoked. When amendments are submitted after cloture is invoked, it requires the unanimous consent of all 100 members of the Senate, as in the case of the compromise amendment. On August 9, Senator Toomey requested unanimous consent for the compromise amendment to be adopted, and it did appear certain that all 100 senators would vote in favor of the compromise amendment (Rutenberg 2021).

However, during the voting, Alabama Senator Richard Shelby objected to the compromise amendment when he failed to attach his own unrelated amendment to the bill. Senator Shelby had an amendment to increase military defense infrastructure spending by \$50 billion⁵⁹ and asked Senator Toomey if he would agree to add this amendment, and Toomey agreed. However, Senator Bernie Sanders (I-VT), Budget Committee Chair, objected to Shelby's amendment. Sen. Tom Carper (D-DE) introduced the compromise amendment again, but Shelby blocked it again after Carper objected to attaching Shelby's amendment. As the last effort, Senator Ted Cruz (R-TX) asked for unanimous consent on his own amendment, which would have entirely removed the virtual currency language from the bill. However, Shelby objected again for the same reasons. As a result, the convoluted attempts to pass a compromise amendment failed on a procedural objection by Senator Shelby. The bill could only pass with the original language despite the compromise amendment winning broad bipartisan support of all Senators (Faler 2021). Though the senate vote had to be ratified in the House and could be modified by the Representatives, any amendments made in the House would have been different compromises from those of the Senate (Cardinale 2021).

Decision-Making Process in the House

As Senator Portman's original provision headed to the House without any amendment, some representatives promised to make amendments to the provisions. Representative Anna Eshoo (D-CA)⁶⁰, the chair of the Committee on Energy and Commerce, sent a letter to Speaker Nancy

⁵⁹ Richard Shelby proposed \$50 billion in defense funding to tackle overdue repairs and upgrade efforts at shipyards, depots, test ranges and defense laboratories (O'Brien, 2021).

⁶⁰ Eshoo is "Pelosi's closest friend in Congress" (Politico, 2014). Eshoo joins a group of bipartisan lawmakers pushing back against the tax reporting provision.

Pelosi (D-CA) requesting that the Speaker amend the bill to alter the problematic broker definition in Section 80603. However, it was risky for the Speaker to allow any changes to the bill because they should have sent it back to the Senate, where policymakers had battled over the proposal for weeks. Following Representative Eshoo's letter, the bipartisan leadership of the House Congressional Blockchain Caucus⁶¹ sent a letter to all members of the House conveying concerns about the Senate version of the provision as it seemed the House leadership intended to pass the infrastructure package without amendments (Faler 2021). Representative Darren Soto (D-FL), Co-Chair of the Blockchain Caucus, introduced two bills echoing the proposed amendments in the Senate and planned to pass the bills through the reconciliation process. In response to the representatives' requests to allow an amendment, Speaker Nancy Pelosi stated she would only tackle the Senate infrastructure bill if the House passed a \$3.5 trillion budget through a reconciliation process. However, nine representatives sent the Speaker a letter saying they would not vote for the budget reconciliation bill unless she advanced with the Senate infrastructure bill first. Speaker Pelosi eventually objected to this request.

Following the Speaker's position, the House Rules Committee, which drafts the terms of debate for bills directed to the floor, agreed to a process prohibiting any amendments from being considered for the infrastructure bill. The full House voted 220-212 to confirm the procedure through an approved resolution. Consequently, the House closed the door to infrastructure bill changes despite requests from Democrats and Republicans to amend the Senate version of the provision and the continued lobbying efforts from virtual currency advocates to change the bill in the House (Mejdrich 2021). The House of Representatives finally passed the bipartisan infrastructure bill on November 5, 2021, ratifying the Senate amendment without a change⁶².

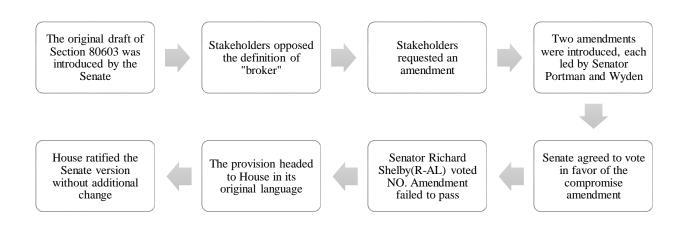
⁶¹ Compared with the Senate, the House has the robust Blockchain Caucus that is established in the chamber and has about 30 members. The caucus was founded during the 114th United States Congress to be a platform for industry and government to study and understand blockchain technology (Feiner, 2021).
⁶² See Section 80603 of H.R. 3684 (pages 2419-2423). "Text - H.R.3684 - 117th Congress (2021-2022):

Infrastructure Investment and Jobs Act." Congress.gov, Library of Congress, 15 November 2021, https://www.congress.gov/bill/117th-congress/house-bill/3684/text.

Figure 6.3 Timeline of the Policy-Making Process of Section 80603 and IIJA



Figure 6.4 Summary of Decision-Making Process of Section 80603



2.5 Political Entrepreneur

The political entrepreneur, also called the insider policy entrepreneur, is the key actor in the decision-making process that holds an elected leadership position and actively supports a proposal. He attempts to obtain majority support and bargain over the specific details of the proposal. In contrast to policy entrepreneurs, political entrepreneurs are neither necessarily members of the policy community nor do they have to be involved in developing the alternatives at an early stage. Once a policy entrepreneur has convinced a political entrepreneur of the proposal, the political entrepreneur, because of his formal leadership position, can further the idea from inside the formal governmental system and work for its adoption. The hypothesis on decision-making suggests that policy adoption is more likely if the proposal is put forth by political entrepreneurs who hold an elected leadership position in government. This section investigates what influence the political entrepreneur exerts on decision-making and determines if the policy adoption was more likely due to the influence of the political entrepreneur. Senator Portman, explained earlier as the key policymaker advocating increased information reporting on virtual currency in the agenda-setting, is the political entrepreneur in the decision-making process.

Senator Robert Johnson Portman (R-Ohio)

Senator Portman is the political entrepreneur who received policy ideas from government agencies and the IRS commissioner Charles Rettig and drafted the provision for its adoption in Congress. He has been the Ohio Republican Senator since 2011, President George W. Bush's former budget director, and an ear to Senate Republican Leader Mitch McConnell (Everett 2021). As the lead Republican infrastructure negotiator with much insider savvy, he was mainly responsible for writing and passing the bill along with nine fellow negotiators⁶³. He was expected to retire from Congress in the fall of 2022, so he was relatively free from the political burden compared to other negotiators.

As a political entrepreneur, Senator Portman integrated the virtual currency tax issues with the solution proposed by the IRS to draft a proposal to present to his colleagues in Senate.

⁶³ Leaders of the Infrastructure negotiations include five Republicans and five Democrats: Senators Rob Portman (R-OH), Susan Collins (R-ME) Kyrsten Sinema (D-AZ), Joe Manchin (D-WV), Mitt Romney (R-UT), Mark Warner (D-VA), Lisa Murkowski (R-AK), Jeanne Shaheen (D-NH), Bill Cassidy (R-LA), and Jon Tester (D-MT).

He drafted the proposal because he had been concerned about the increasing tax gap and challenges of the IRS with virtual currency tax compliance, which made him more receptive to Charles Rettig's appeal. Following Charles Rettig's formal request for the IRS' statutory authority to collect information on virtual currency transfers and transactions, Senator Portman announced his plan to introduce legislation regarding tax reporting of virtual currency transactions.

Soon after, he became one of the lead negotiators of Biden's infrastructure package, in which he faced a challenge to find ways to fund the bill without raising taxes. It was Senator Portman's priority to fund the infrastructure bill without raising taxes since the beginning of the negotiations, and the President commented that he would not sign the bipartisan agreement unless a larger budget package were available. Thus, Senator Portman used these conditions to bring his tax reporting provision into the agenda and convinced Senators from both parties that his provision would make a good pay-for for the infrastructure bill (Robertson 2021).

Portman Supporting for Increased Reporting Requirements on Virtual Currency

After the Senate Finance Committee Hearing in April 2021, Senator Portman officially announced and promised to work on the upcoming provision to define a virtual currency for tax purposes and increase information reporting requirements. Senator Portman discussed with Charles Rettig the challenges the IRS faces in adapting to the growing use of virtual currencies. He also asked whether the IRS had enough authority to issue appropriate regulations concerning virtual currency information reporting or whether the IRS needed congressional authority. Charles Rettig said the IRS needed statutory authority to collect information on virtual currency tax, and Senator Portman was receptive to the idea. The transcripts of the conversation between Senator Portman and Charles Rettig at the Senate Finance Committee Hearings demonstrate that Portman was supportive of increased reporting requirements on virtual currency (See Tables 3 and 4).

Table 3. Conversation between Senator Portman and Charles Rettig at the Senate FinanceCommittee Hearing on April 13, 202164

Senator Portman: "You (Charles Rettig) also mentioned information reporting to help close it. We're working on a cryptocurrency bill which would define cryptocurrency for tax purposes and try to provide appropriate reporting rules. Can you give us any specific suggestions on what reporting would be helpful on the cryptocurrency side, and would that help in closing the tax gap?"

Charles Rettig, IRS Commissioner: "Absolutely, reporting with respect to cryptocurrencies would be important. I think it's noteworthy, if you go back and you look at the 2019 Form 1040, I was instrumental in adding a provision together with Diane Grant adding a provision in there, asking a question: "Did you have transactions in cryptocurrency?" That, because of timing, got on a schedule further in. But the 2020 Form 1040, right under the address portion, is a cryptocurrency question similar to the FBAR question. It's a yes-no question. "So, visibility, and we could give you a lot of guidance from what we see with respect to areas in the crypto world. It's replicating itself constantly. And so now we have these non-fungible tokens, which are essentially collectibles in the crypto world. These are not visible items by design. The crypto world is not visible. I will say in the criminal context, the IRS Criminal Investigation Cyber Crimes Unit has been spectacular operating in the dark web, engaging with cryptocurrency-related transactions."

Senator Portman: "Great. We'd like your input on it, get some technical advice. We are working on the bill, it's meant to be bipartisan, it's something where we can help to close the tax gap in that area.

⁶⁴ See "Portman Discusses Concerns Regarding IRS' Processing Backlog of Tax Filings, Modernization" https://www.youtube.com/watch?v=dDYPjGqcgiE

Table 4. Conversation between Senator Portman and Charles Rettig at the Senate FinanceCommittee Hearing on June 8, 202165

Senator Portman: "We talked about digital assets and cryptocurrency back in April when you were before us and you talked about the low visibility of these taxpayers and the importance of their compliance in closing the tax gap. I talked about how we were working on potential legislation to address that. I want to ask you a couple questions about it, I noticed in the budget that you have \$41 million to expand cybercrimes efforts and \$32 million for crypto-related enforcement operations. You've also proposed additional information reporting for businesses that receive crypto assets with a fair market value of more than \$10,000. In addressing the issues related for information reporting for cryptocurrency, do you feel that the IRS has the necessary authority to issue appropriate regulations?"

Charles Rettig, IRS Commissioner: "I think we need Congressional authority. We get challenged, as you are aware, we get challenged frequently and to have a clear dictate from Congress on the authority for us to collect that information is critical and the most recent market cap in that world, in the crypto world, exceeded \$2 trillion in more than 8,600 exchanges worldwide. And by design, most crypto virtual currencies are designed to stay off the radar screens, so we will be challenged. Right now, what we do is we issue John Doe summonses and I think it was highly public, we recently did that. We're very active in both the civil and the criminal enforcement world. We do need additional tools and we absolutely need additional resources."

Senator Portman: "Well I appreciate that answer and as you know, we want to work with you. We've circulated some ideas, including to some of the stakeholders, and we want to be sure that we get your input on that as it relates to cryptocurrencies and digital assets."

⁶⁵ See "At Hearing on IRS' Proposed Budget, Portman Questions IRS Commissioner on Cryptocurrency & Hiring" for the full transcript of the hearing. https://www.youtube.com/watch?v=P5e18yu0M2c

Portman Obtaining Majority and Bargaining Over the Specific Details of Section 80603: Employing "Concession" Strategy

Senator Portman did not have the majority support for his provision at the beginning of the decision-making process. Republicans dismissed their support as they assumed the increased reporting requirement expands the authority of the IRS to collect unpaid taxes. However, Portman still had to ensure that Republicans sign on the provision. He led the policy discussions with Republicans spending hours on the phone, on Zoom, and in rooms across the Capitol (Cochrane 2021). He intensely persuaded Republican colleagues as the provision initially required 60 votes to be added to the legislation. After weeks of effort, he obtained majority support for the provision, officially adding it to the infrastructure package.

However, objections to the definition of "broker" emerged from inside and outside Congress. As it did not seem possible to pass the provision through the Senate without an amendment, Portman offered "concessions" as a strategy to pass his provision. According to Herweg, Huß, and Zohlnhöfer (2015), political entrepreneurs can offer concessions on the original proposal to other veto actors to get their policy proposals adopted. For instance, a political entrepreneur may have to present concessions to obtain support from policymakers who are against the proposal or possess veto power (Zohlnhöfer 2009). When the proposal does not match the common ideology of the majority, the political entrepreneur might have to suggest concessions on his original proposal to make it compatible with the majority's ideology.

Senator Portman also offered a concession on his original draft amidst powerful opposition, which was the compromise amendment that proceeded to the Senate voting (Everett 2021). In order to offer a concession, Senator Portman and Warner conducted a colloquy to clarify the scope and intent of Section 80603. They decided how under the provision, a broker is defined as "any person who (for consideration) is responsible for regularly providing any service effectuating transfers of digital assets on behalf of another person." Table 5 includes part of the colloquy extracted from the full transcript to highlight how Senator Portman employed "concession" strategy.

80

Table 5. Colloquy between Senator Rob Portman (R-OH) and Mark Warner (D-VA) onAugust 9, 202166

Senator Portman: "The concern has been expressed that some in the cryptocurrency industry who are not brokers would be caught up in this definition. The Treasury Department, the nonpartisan Congressional JCT, and others believe that the current language is clear enough that the reporting requirements only cover brokers. The purpose of this discussion is to further clarify that is the actual intent of the underlying bill. I think that's important."

"The purpose of this provision is not to impose new reporting requirements on people who do not meet the definition of brokers. For example, if you are someone who is solely involved with validating distributed ledger transactions through proof of work – commonly known as miners – if you are solely mining, you will not be considered a broker. The same would be true for proof of stake validation, and other validation methods, now or in the future, associated with other consensus mechanisms that are developed and might come into the market as the technology evolves. If you're solely staking your digital assets for the purpose of validating distributed ledger transactions, you will not be considered a broker. We want to be sure that miners and stakers and others who play a key role in validating transactions now or in the future, or hardware and software sellers for digital wallets will not be subject to the rules for those activities. Again, you will need to provide the information reporting only if you are functioning as a broker. It is my understanding that that is true. And I ask my fellow Finance Committee member and colleague from the bipartisan working group, Senator Warner, if this is his understanding as well."

Senator Warner: "I thank the Senator, who is correct in his understanding. I would also like to add some additional clarifications. The bill ensures that digital asset market players who provide a platform to facilitate digital asset trades by taxpayers will be considered brokers required to report information to the IRS and taxpayers about those transactions. Reporting entities may be digital asset exchanges or hosted wallet providers, often called custodians, or other agents involved in effectuating digital asset transactions."

(Colloquy continues)

⁶⁶ See "Senators Portman and Warner Conduct Colloquy Clarifying Cryptocurrency Provision in Infrastructure" for the full transcript of the colloquy <u>https://www.youtube.com/watch?v=2MTaNaAsFwQ</u>

Senator Portman: "I thank my friend and colleague from Virginia for those comments. Our provisions are designed to bring more clarity and legitimacy to the cryptocurrency industry by more closely aligning the reporting requirements with those of more traditional financial services. And we believe it does just that, and in doing so will help provide more certainty for people looking to invest in digital assets.

3. Policy Output

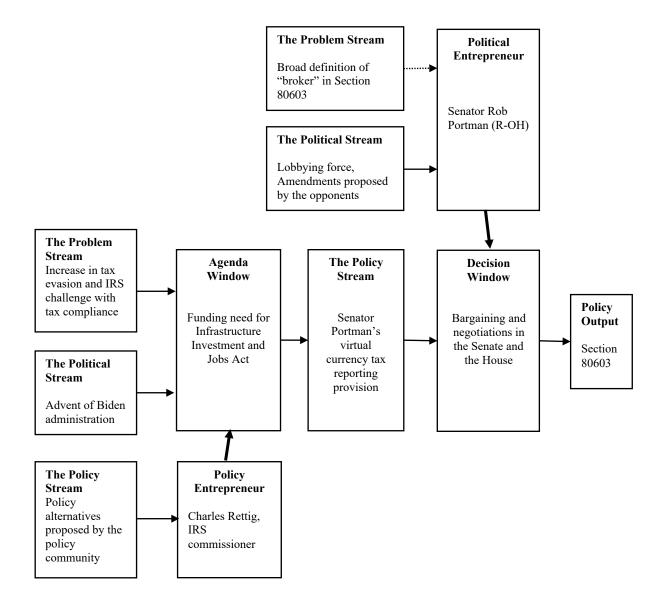
On November 15, 2021, President Biden signed the Infrastructure Investment and Jobs Act, including Section 80603, into law. Section 80603 was the first-ever crackdown on virtual currency tax passed by Congress and the White House. As the policymakers failed to pass an amendment in the Senate and the House, the original version that required miners and block validators to report tax information to the IRS was signed by the President. The policymakers and the virtual currency industry lost their fight to change the misleading definition of the "broker". However, this provision will likely be subject to changes in future legislation, as it does not take effect until tax returns are filed in 2024, covering 2023. (Macheel 2021).

3.1 Revisiting the MSF Framework

The MSF framework introduced in the methodology section (page 29) is reintroduced here to illustrate the result of the research findings. It is important to note that the policy entrepreneur (Charles Rettig) appealed his policy idea to the political entrepreneur during the agenda coupling, while the political entrepreneur (Senator Portman) obtained the majority and negotiated over the details of the provision during the decision coupling. This framework demonstrates how policy entrepreneur's influence on the agenda coupling and political entrepreneur's influence on the decision couple were critical in leading the policy-making of Section 80603.

82

Figure 7.1 Result of the Analysis using the MSF



3.2 Application of MSF Hypotheses to the Policy-Making of Section 80603

Hypothesis on Policy Entrepreneur in Agenda-Setting: Policy entrepreneurs are more likely to couple the streams successfully during an open policy window if (a) they have more access to core policymakers and (b) they are more persistent.

The IRS Commissioner Charles Rettig demonstrated persistent efforts and had constant access to the political entrepreneur Senator Portman. Rettig was able to highlight the seriousness of the issues (increasing tax gap and lack of IRS resources) and push for his policy idea (IRS' statutory authority to collect information on virtual currency transactions) through hearings and meetings with Senator Portman and other policymakers. Consequently, Senator Portman recognized and accepted Charles Rettig's request at a Senate Finance Committee Hearing and drafted the provision regarding the information reporting requirement. Hence, the case of Charles Rettig supports this hypothesis.

Hypothesis on the Political Entrepreneur in Decision-Making: Policy adoption is more likely if the proposal is put forward by political entrepreneurs who hold an elected leadership position in government.

This research found a significant influence of the political entrepreneur Senator Portman in adopting Section 80603. As explained in the "Political Entrepreneur" section, it is evident that Senator Portman was able to add his provision to the infrastructure package only because he convinced the Republicans and other policymakers from inside the Senate. Policy entrepreneurs from outside, such as Charles Rettig, did not have legislative authority to push his provision as a pay-for provision for the infrastructure package nor directly discuss it with Senators.

Hypothesis on the Size of Change to the Original Proposal During Decision-Making: The more powerful the interest groups' campaign against the original proposal, the more different the adopted policy is likely to be.

This hypothesis is not valid for the case of Section 80603, because it had an unexpected decision-maker with veto power, Senator Richard Shelby. As explained earlier, Section 80603 faced strong interest group campaigns and lobbying forces against the original draft written by Senator Portman. However, the final version of the provision signed by the President is not

different from the original draft because the compromise amendment failed to pass the Senate and the House. The failure was solely caused by an unexpected action of one of the decisionmakers during the Senate vote, Senator Richard Shelby, who voted "No" to the compromise amendment when he failed to attach his own unrelated amendment to the infrastructure bill. His vote was decisive because the compromise amendment required the unanimous consent of all 100 Senators. Thus, the authority that Senator Shelby exerted over the voting overrode the consent of the interest groups and 99 Senators.

Chapter V. Conclusion

1. Summary of Findings

This research demonstrated how an important virtual currency tax policy, which historically has been politically and technologically ambiguous and stagnant, passed during the Biden administration. The modified MSF provided a lens for understanding the context of the social and political dynamics and key players that drove the agenda change and policy change of Section 80603. The analysis found that the central issues of this provision have changed as it moved from agenda-setting to decision-making, from whether to increase reporting requirements for virtual currency "brokers" to who exactly constitutes those "brokers." Each issue was handled accordingly by the policy entrepreneur Charles Rettig and the political entrepreneur Senator Rob Portman. Charles Rettig successfully convinced the policymakers of the need to increase reporting requirements and brought agenda change through persistent activities and close access to the core policymaker. On the other hand, Senator Portman succeeded in obtaining majority for his original provision but failed in passing the amendment that sought to clarify the definition of the "brokers", therefore leaving the IRS and the Treasury the job of defining who exactly constitute the "brokers".

Regardless of the form of its output, Section 80603 was swiftly passed into law as a payfor provision because Senators were urgently looking for ways to fund the infrastructure bill within weeks of their ongoing negotiations. The urgency, in turn, rendered a notably short opening of the policy window, which called for greater attention to the influence of the policy entrepreneur and political entrepreneur. Charles Rettig demonstrated persistent efforts and a focused and practical approach to push his policy idea. He repetitively emphasized the tax gap issues and directly requested a policy change from Senator Portman. Being the IRS commissioner, Rettig gained credibility from the policymakers, including Portman, who believed the tax gap was unbelievably serious when Rettig claimed the estimated purported tax was over "\$1 trillion." He efficiently emphasized the problem at hand and pushed for action in Congress. However, Rettig did not have the legislative authority to take his policy idea further into the decision-making floor. Instead, Senator Portman, the lead Republican negotiator of the infrastructure package, worked from the inside to convince his colleagues that his provision was necessary to pay for the bill and reduce the growing tax gap. Portman leveraged his formal

86

leadership position into bringing the provision to the agenda, adding it to the infrastructure bill, and passing it in the Senate. While Portman failed to pass the compromise amendment due to Senator Richard Shelby's unexpected objection, his role in decision-making process was indisputable.

Overall, this research revealed the following findings: 1. The influence of the policy entrepreneur and political entrepreneur is especially greater in the case of a short-duration of policy window. 2. Increasing reporting requirements for virtual currency "brokers" gained agenda status because Charles Rettig's demonstrated skillful acting as a policy entrepreneur. 3. Senator Portman succeeded in obtaining majority support for his original provision using the "concession" strategy, offering an amendment to fix the problematic definition of "brokers". 4. The amendment did not pass due to a veto from one senator, which was unexpected and beyond the control of both the policy entrepreneur and political entrepreneur.

2. Policy Implications

2.1 Implications for Taxpayers

As Section 80603 requires information reporting to third parties, "brokers," it does not directly call for changes in taxpayers' actions. Taxpayers already owe taxes when they sell or exchange virtual currencies, similar to a stock or bond. They also owe income tax when they are paid in virtual currencies. The crackdown on tax evasion of virtual currency is also not news for taxpayers, as the IRS had already started tracking underreporting by adding questions to the individual tax return Form 1040 and training employees to identify virtual currency tax evasion (Davison 2022). As such, this provision does not seem to affect taxpayers directly, but it will affect their privacy. The trading platforms, such as cryptocurrency exchanges, would have to disclose users' personal information such as name, address, and Social Security number. It raises privacy concerns because the trading platforms would have to store sensitive information to disclose to the IRS (Jimenez 2021). Lastly, taxpayers should ensure their virtual currency transactions are correctly reported, as underreporting could lead to costly penalties (Moore, 2021).

87

2.2 Implications for the IRS and the Government

Section 80603 gave the IRS and the Treasury Department the responsibility to write rules interpreting and implementing the definitions of a "digital asset" and a "broker," and the information reporting rules on virtual currency transactions. Now that the law has passed, the IRS has to write the law into the tax code. It is at the IRS' and Treasury Department's discretion to interpret what Congress means and issue regulations accordingly. The provision passed by Congress establishes its intent, not the specific rules that would affect taxpayers (Locke 2021). The language in this provision was extremely controversial, so it is more crucial how the IRS and Treasury interpret it. The IRS has not yet determined how virtual currency transactions should be reported, whether on the current version of Form 1099-B or a new form. The IRS and the Treasury Department are expected to issue new guidance in 2022 regarding Section 80603. The provision left a complicated task for the IRS and the Treasury, but it yielded potential funding options for the policymakers. JCT's \$28 billion revenue-raising estimate gave the idea that there is much more money to be found in the virtual currency industry for future funding. And Democrats are eager to find the cash to pay for their upcoming \$3.5 trillion package.

2.3 Implications for the Cryptocurrency Exchanges⁶⁷

Section 80603 primarily impacts cryptocurrency exchanges as they will be subject to information reporting requirements like traditional brokers of other assets. They will need to undergo technical improvements and changes to comply with the new reporting regime from 2023 and issue their first reporting forms to the IRS and taxpayers in January 2024. They will also need to obtain Forms W-9 and request taxpayer-identification numbers or Social Security numbers from the new U.S. customers. However, because most exchanges do not yet collect Forms W-9 when opening accounts, it is challenging for them to obtain tax forms for existing users. Even if obtained, it could produce wrong Form 1099s because many exchanges currently do not have enough information on customers.

⁶⁷ Crypto exchanges function similarly to online brokerage platforms, providing the tools investors need to buy and sell virtual currencies like Bitcoin, Ethereum, and Dogecoin. Top 10 Cryptocurrency Exchanges based on traffic, liquidity, trading volumes, and confidence in the legitimacy of trading volumes reported are: 1. Binance 2. Coinbase Exchange 3. Kraken 4. Binance.US 5. KuCoin 6. Bitfinex 7. Coincheck 8.Gemini 9. OKX 10. Bitstamp. See CoinMarketCap ranks for more full ranking https://coinmarketcap.com/rankings/exchanges/

2.4 Implications for New Types of Virtual Currencies (Non-Fungible Tokens)⁶⁸

The term "digital asset" used in Section 80603 means "except as otherwise provided by the Secretary of the Treasury, any digital representation of value which is recorded on a cryptographically secured distributed ledger or any similar technology as specified by the Secretary" (Section 80603). This definition applies to convertible cryptocurrencies⁶⁹, such as Bitcoin and Ethereum. However, the broad definition could be extended to include non-convertible cryptocurrencies⁷⁰, such as non-fungible tokens (NFTs). NFTs also match the definition of "digital asset," given that it is a "digital representation of value" and "recorded on a blockchain or similar ledger." However, whether NFTs constitute a "digital asset," is not yet determined by Congress or the tax authorities. If NFTs are considered "digital assets," then the new information reporting rule will also apply to transactions of NFTs. However, it is challenging to file information returns on NFTs as there has been no legislative guidance regarding the taxation of NFTs, even from the IRS (Mowbray 2022). Also, the exchanges that handle NFTs would find setting the value of an NFT more complicated than setting the value of a fungible asset, like Bitcoin, leading to more difficulties in reporting taxes (Erskine 2022).

3. Limitations

This research investigated the policy-making process of Section 80603, which only belongs as a part of the big bipartisan infrastructure package. As it is not individual legislation dedicated to only addressing virtual currency taxation, Section 80603 poses an inherent challenge. That is, the social and political dynamics that affected the policy-making of this provision could have also affected other provisions included in the bill and vice versa. While the research sought to strictly separate the policy-making of Section 80603 from that of other provisions, there are some

⁶⁸ A non-fungible token (NFT) is a unique digital identifier that cannot be copied, substituted, or subdivided, that is recorded in a blockchain, and that is used to certify authenticity and ownership. ("NFT." Merriam-Webster.com Dictionary, Merriam-Webster, <u>https://www.merriam-webster.com/dictionary/NFT</u>)

⁶⁹ The IRS defines a convertible virtual currency as a virtual currency that has a value in real currency. That means for the IRS, Bitcoin, Ether, and the likes are convertible virtual currencies. They can be traded for fiat currencies on exchanges, or which are used directly for legitimate forms of commerce and payments. (Internal Revenue Service. "Virtual Currencies")

⁷⁰ A nonconvertible virtual currency is used as payment only within certain virtual communities, such as within the world of an online video game. This cannot be directly exchanged for other currencies, virtual or fiat. (Majaski, 2021 https://www.investopedia.com/terms/c/closed-virtual-currency.asp)

external factors common ground to the IIJA that inevitably affected the decision-making of Section 80603: the political pressure and time constraint.

Senator Portman was not under pressure to pass Section 80603 per se, but the entire bipartisan infrastructure package. He was under political pressure to clinch an agreement from both parties amid criticism from Republicans and Democrats. Senate Democrats questioned whether Portman could take risks required to reach a deal with nearly \$600 billion in new spending that could displease Republicans, who also criticized Portman's legislative courage. Moreover, Senator Portman and the other nine negotiators of the bill had to make a deal under a strict time constraint as the infrastructure bill was moving quickly. The Senate held a procedural test vote within a day of the bill being announced, as the Senate Majority Leader Chuck Schumer set a deadline to push it forward rapidly. However, Senator Portman and other negotiators were working to find ways to fund the bill until the last minute (Ward 2021). The political pressure and time constraints affected the policy-making of the infrastructure package as a whole, hence could have had a confounding effect on Section 80603. For instance, if the infrastructure bill went down, Section 80603 could not have been passed.

Also, this research demonstrated that an irrelevant decision-maker with veto power, who is not a policy entrepreneur or a political entrepreneur, could still be the decisive factor in policymaking due to procedural steps in Congress. However, the impact of such a decision-maker cannot be theoretically explained through the latest discussions on the MSF. Future research should extend to modify and differentiate the current framework to increase the explanatory potential of the MSF.

Appendix

1.1 Form 1040 Question "At any time during 2021, did you receive, sell, exchange, or otherwise dispose of any financial interest in any virtual currency?"

1040	Department of the Treasury-Internal Revenue Se		21 OMB NO	o. 1545-0074 IRS Use Only	-Do not write or staple in this space.	
Filing Status Check only one box.	Single Married filing jointly If you checked the MFS box, enter the person is a child but not your depende	name of your spouse. If yo		ead of household (HOH) HOH or QW box, enter th		
Your first name and middle initial		Last name			Your social security number	
If joint return, spouse's first name and middle initial		Last name			Spouse's social security numb	
Home address (I	number and street). If you have a P.O. box, se	ee instructions.		Apt. no.	Presidential Election Campaig Check here if you, or your	
City, town, or po	st office. If you have a foreign address, also o	complete spaces below.	State	ZIP code	spouse if filing jointly, want \$3 to go to this fund. Checking a box below will not change	
Foreign country name		Foreign province/sta	Foreign province/state/county For		your tax or refund.	

1.2 Form 14457 updated to include voluntary disclosure for crypto related matters

Form 14457 (February 2022)	Department of the Treasury-Internal Revenue Service Voluntary Disclosure Practice Preclearance Request and Application			OMB Number 1545-2241
Practice. Only submit Part I	n to make a preclearance request of this form for preclearance. If y bmitting the information requester inglish.	ou receive preclearance, p	roceed with submitting Pa	art II to request
2970 Ma 1-D04-1	oluntary Disclosure Coordinator arket Street	Fax Number: 844-	253-5613	
Part I - Preclearance Re	equest (Mail or FAX Part I Only			05
			ng disclosure (check box th	
		Individual(s)	Partnership	Corporation
		Trust	Executor	
Disclosure special feature	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
Domestic Issues	Estate	& Gift Issues	Virtual Currency	Issues
Offshore Issues		& Gift Issues ment Tax Issues	Virtual Currency	(Issues
			Virtual Currency	Issues
Offshore Issues	Cribe)		Virtual Currency	Issues
Offshore Issues Offer Issues (briefly dec Tontative disclosure pari	scribe)		Virtual Currency	Issues
Offshore Issues Offer Issues (briefly des Contenting displaying particular under Schedule of virtual currer List <u>ALL</u> domestic and	scribe)	ment Tax Issues		
Offshore Issues Offshore Issues Other Issues (briefly des Controlling disclorum particular Schedule of virtual curre List <u>ALL</u> domestic and directly or indirectly.	Employ ency d foreign noncompliant virtual	ment Tax Issues	controlled or were the b	
Offshore Issues Offer Issues (briefly des Contention disclosure parties) Schedule of virtual currer List <u>ALL</u> domestic and directly or indirectly. The listings must c	scribe) Employ	ment Tax Issues currency you owned or o od as outlined in the insl	controlled or were the b	
Offshore Issues Offshore Issues Offshore Issues Tontetive directory des Schedule of virtual currer List ALL domestic and directly or indirectly. The listings must c This includes asset This includes asset This includes asset	Employ scribe) ency d foreign noncompliant virtual over the entire disclosure peri	ment Tax Issues currency you owned or o od as outlined in the inst ing the disclosure period med or controlled or wei	controlled or were the b fructions below.	peneficial owner of, either
Offshore Issues Offshore Issues Offshore Issues Offshore Issues Transition directly des Schedule of virtual curre List ALL domestic ann directly or indirectly. The listings must o This includes asset This includes asset Note: The entities	Employ scribe) ency d foreign noncompliant virtual over the entire disclosure peri- ts acquired or disposed of dur ts held through entities you ow	currency you owned or o od as outlined in the inst ing the disclosure period yned or controlled or wer t II of this application.	controlled or were the b fructions below.	peneficial owner of, either
Offshore Issues Offshore Issues Offshore Issues Tontetion directory des Tontetion directory or indirectly. The listings must c This includes asset Note: The entities v Click "Add Virtual Curr	Employ scribe) ency d foreign noncompliant virtual over the entire disclosure peri ts acquired or disposed of dur ts held through entities you ow will be further identified in Part	currency you owned or o od as outlined in the inst ing the disclosure period yned or controlled or wer t II of this application.	controlled or were the b fructions below.	peneficial owner of, either
Offshore Issues Offshore Issues Offshore Issues Offshore Issues Tastetive directory des Schedule of virtual curre List <u>ALL</u> domestic and directly or indirectly. The listings must o This includes asset This includes asset Note: The entities	Employ scribe) ency d foreign noncompliant virtual over the entire disclosure peri ts acquired or disposed of dur ts held through entities you ow will be further identified in Part	currency you owned or o od as outlined in the inst ing the disclosure period yned or controlled or wer t II of this application.	controlled or were the b fructions below.	peneficial owner of, either

Account holders

2.1 List of Virtual Currency Policy Alternatives introduced by the IRS and the Congress

Notice 2014-21, 2014-16 I.R.B. 938 by the IRS

In 2014, the IRS issued Notice 2014-21, explaining that virtual currency is treated as property and not as money for Federal income tax purposes.

H.R. 4602- Virtual Currency Tax Reform Act

introduced by Representative Stockman in May 2014. This legislation directed the IRS to treat virtual currencies as a foreign currency for federal tax purposes. This bill was only introduced but did not pass the House.

H.R.3708 - To amend the Internal Revenue Code of 1986 to exclude from gross income de minimis gains from certain sales or exchanges of virtual currency, and for other purposes

Introduced in September 2017 by representative Schwikert, David. This bill amended the IRC to exclude from gross income up to \$600 (adjusted for inflation after 2018) in gain from the sale or exchange of virtual currency for other than cash or cash equivalents. This bill was only introduced but did not pass the House.

H.R. 2144- Token Taxonomy Act

Introduced on April 9, 2019, this bill provided cryptocurrency holders with several tax benefits. Cryptocurrencies would be eligible for tax-free like-kind exchange treatment, could be held in IRAs, and related gains of \$600 or less would not be taxable. The bill would have also provided that ICO (Initial Coin Offering) tokens are not treated as securities and preempt state blue-sky laws.

H.R.3273 - Safe Harbor for Taxpayers with Forked Assets Act of 2021

This bill excluded from gross income, for income tax purposes, any amount received as forked convertible virtual currency. It also established a safe harbor period during which certain penalties and other taxes applicable to a taxpayer who gets a forked convertible virtual currency are suspended until the IRS issues regulations or guidance, or legislation is enacted, that addresses specified issues related to the tax treatment of such currency. The legislation focused on the support and development of virtual currency technology, as well as the establishment of a safe harbor for <u>taxpayers</u> with "forked" digital assets.

H.R.5045 - Blockchain Regulatory Certainty Act

This bill exempted from certain financial reporting and licensing requirements blockchain developers and providers of virtual currency services that do not take control of consumer funds.

H.R. 4741- Digital Asset Market Structure and Investor Protection Act

Introduced on June 6, 2021, this bill attempted to provide several agencies with explicit regulatory authority over virtual currency. Treasury would be given the power to regulate and veto the creation of stablecoins (*i.e.*, cryptocurrencies intended to maintain a value approximating a fiat currency, generally the U.S. dollar). The SEC would have regulatory authority over cryptocurrencies treated as securities (including those providing the holder with rights to the equity or debt of the issuer, interest, profits, or voting rights, dividends, or liquidation rights), and the remaining cryptocurrencies would be treated as commodities under the CFTC regulation. FinCEN would be given regulatory powers over services used for anonymizing cryptocurrency ownership. Digital service providers that service U.S. residents would be required to report with the SEC and CFTC.

H.R. 6006- Keep Innovation in America Act

Introduced in November, 2021 by Rep. McHenry and Patrick T. This bill "expanded the definition of broker, for purposes of tax information reporting, to include any person who (for consideration) stands ready in the ordinary course of a trade or business to effect sales of digital assets at the direction of their customers". It also provided for reporting requirements for virtual currency and required a study and a report on the treatment of digital assets as cash for purposes of reporting requirements for cash payments of more than \$10,000. This bill was introduced but did not pass the House.

H.R.6582 - Virtual Currency Tax Fairness Act of 2022

Introduced in February 2022 by Rep. DelBene, Suzan K, it is a follow-up for the same bill introduced in 2017 and 2020, which excluded from gross income, for income tax purposes, up to \$200 of gain from the disposition of virtual currency in a personal transaction. The Virtual Currency Tax Fairness Act of 2020 also proposed a \$200 exemption, but that bill did not come up for a vote. This bill was only introduced but did not pass the House.

S.4608 - Virtual Currency Tax Fairness Act

Introduced in July, 2022 by Senator Toomey, Patrick J. This bill is a modification of H.R.6582, which wrote exclusion did not apply if the total value of the sale or exchange exceeds \$50, or the total gain exceeds \$50 (both amounts adjusted annually for inflation). This bill is introduced but did not yet pass the Senate.

Responsible Financial Innovation Act

On June 7, 2022, Senators Cynthia Lummis (R-WY) and Kirsten Gillibrand (D-NY) introduced the highly anticipated bill, which sets out to create the first complete regulatory and bipartisan framework for digital assets. The bill intended to establish some legal clarity for regulators and the industry and to protect consumers by providing a range of disclosures and clarifying settlement conditions and rights over digital ownership. The bill would also treat all digital assets that are not treated as commodities or securities regulated by the CFTC.

3.1 Existing regulatory authorities over classes of crypto a	assets
--	--------

V	Crypto security	Crypto commodity	Nonfungible token	Stablecoin		
U.S. Securities and Exchange Commission	Registration, disclosure, and anti-fraud authority	N/A	N/A	Regulatory authority if assets invested in securities, including government debt, and not issued by a bank		
Internal Revenue Service		Authority to require individuals and businesses that receive income from crypto transactions to pay tax and require crypto brokers to report tax-related information				
Financial Stability Oversight Council	Authority to designa important issuers a infrastructure		N/A	Authority to designate systemically important issuers and market infrastructure		
Financial Crimes Enforcement Network	Authority to prevent use of the financial system for money laundering, financing terrorism, and other illicit purposes					
Federal Trade Commission	Authority over unfai involving banks	r or deceptive marketir	ng acts or practices in s	pot transactions not		
Consumer Financial Protection Bureau	N/A	N/A	N/A	Regulatory authority if assets are a consumer financial product or are used as payment		
Commodity Futures Trading Commission	N/A	Anti-fraud and anti-manipulation authority	N/A	Anti-fraud and anti- manipulation authority if assets not invested and not issued by a bank		
Bank regulators	N/A	Regulatory authority if assets issued by a bank	Regulatory authority if assets issued by a bank	Regulatory authority if assets issued by a bank; possible coverage by Federal Deposit Insurance Corporation		

Source: Securities Act of 1933, Public Law 22, 73rd Cong., 1st sess. (May 27, 1933), available at https://sec.report/Form/Securities-Act-of-1933.pdf; Securities Exchange Act of 1934, Public Law 73–291, 73rd Cong., 2nd sess. (June 6, 1934), available at https://www.nyse.com/publicdocs/nyse/regulation/nyse/sea34.pdf; Commodity Exchange Act of 1936, Public Law 675, 74th Cong., 2nd sess. (June 15, 1936), available at https://www.nyse.com/publicdocs/nyse/regulation/nyse/sea34.pdf; Commodity Exchange Act of 1936, Public Law 675, 74th Cong., 2nd sess. (June 15, 1936), available at https://www.nyse.com/publicdocs/nyse/regulation/nyse/sea34.pdf; Commodity Exchange Act of 1936, Public Law 675, 74th Cong., 2nd sess. (June 15, 1936), available at https://www.nyse.com/publicdocs/nyse/regulation/nyse/sea34.pdf; Commodity Exchange Act of 1936, Public Law 675, 74th Cong., 2nd sess. (June 15, 1936), available at https://www.nyse.com/publicdocs/nyse/regulation/nyse/sea34.pdf; Commodity Exchange Act of 1936, Public Law 675, 74th Cong., 2nd sess. (June 15, 1936), available at https://www.nyse.com/publicdocs/nyse/regulation/nyse/sea34.pdf; Commodity Exchange Act of 1936, Public Law 675, 74th Cong., 2nd sess. (June 15, 1936), available at https://www.nyse.com/publicdocs/nyse/regulation/nyse/sea34.pdf; Code Chapter 2 - National Banks," available at https://www.nyse.com/publicdocs/nyse/regul

3.2 The existing roles of federal agencies, by type of crypto market infrastructure

	Crypto brokers/dealers	Crypto exchange	Custodian/wallet company	Decentralized finance (DeFi)
U.S. Securities and Exchange Commission	Regulation of brokers/dealers that transact in crypto securities	Regulation of exchanges that facilitate crypto securities transactions	Regulation of companies that hold crypto securities in custody	Regulation of DeFi applications that use or otherwise interact with crypto securities
Commodity Futures Trading Commission	Anti-fraud authority over brokers/dealers that transact in crypto commodities; regulation of brokers/dealers that engage in crypto commodity derivatives	Anti-fraud authority over exchanges that facilitate crypto commodity transactions; regulation of swap execution facilities that facilitate crypto commodity derivative transactions	Anti-fraud authority over companies that hold crypto commodities in custody	Anti-fraud authority over DeFi applications that utilize or otherwise interact with crypto commodities; regulation of DeFi applications that engage in swaps of crypto commodities
Bank regulators	Regulation over brokers/dealers that are bank subsidiaries	N/A	Regulation of custody services if they are provided by a bank or bank subsidiary	N/A
Federal Trade Commission	Authority over unfair or deceptive marketing acts or practices in spot transactions not involving banks			
Consumer Financial Protection Bureau	Regulation of brokers/dealers that are part of a payments system	N/A	Regulation of crypto wallets that are used for consumer financial products or services; regulation of wallets that are part of a payments system	Regulation of DeFi applications that are consumer financial products or services
Financial Stability Oversight Council	Designation of systemically important brokers/dealers	Designation of systemically important exchanges	Designation of systemically important wallets	Designation of systemically important DeFi applications
Financial Crimes Enforcement Network	Designation of institutions, trades, or businesses subject to "Know Your Customer" compliance, records maintenance, and suspicious transaction reporting			
Internal Revenue Service	Third-party reporti transactions	ng of tax-related	information about cu	stomer

Source: Securities Act of 1933, Public Law 22, 73rd Cong., 1st sess. (May 27, 1933), available at <u>https://sec.report/Form/Securities-Act-of-1933.pdf</u>; Securities Exchange Act of 1934, Public Law 73–291, 73rd Cong., 2nd sess. (June 6, 1934), available

at <u>https://www.nyse.com/publicdocs/nyse/regulation/nyse/sea34.pdf</u>; Commodity Exchange Act of 1936, Public Law 675, 74th Cong., 2nd sess. (June 15, 1936), available at <u>https://uscode.house.gov/view.xhtml?path=/prelim@title7/chapter1&edition=prelim;</u> Legal Information Institute, "12 U.S. Code Chapter 2 - National Banks," available at <u>https://www.law.cornell.edu/uscode/text/12/chapter-2</u> (last accessed February 2022); Federal Reserve Act of 1913, H.R. 7837, 63rd Cong., 2nd sess. (December 23, 1913), available at <u>https://www.federalreserve.gov/aboutthefed/fract.htm</u>; Legal Information Institute, "12 U.S. Code Chapter 16 - Federal Deposit Insurance Corporation," available at <u>https://www.law.cornell.edu/uscode/text/12/chapter-16</u> (last accessed February 2022); Federal Trade Commission Act of 1914, 15 U.S. Code § 41, Chapter 2, Subchapter 1 (1914), available

at <u>https://www.ftc.gov/sites/default/files/documents/statutes/federal-trade-commission-act/ftc_act_incorporatingus_safe_web_act.pdf;</u> Consumer Financial Protection Act of 2010, H.R. 4173, 111th Cong., 2nd sess. (July 21, 2010), available at <u>https://uscode.house.gov/statutes/pl/111/203.pdf;</u> Financial Stability Act of 2010, H.R. 4173, 111th Cong., 2nd sess. (July 21, 2010), available at <u>https://uscode.house.gov/statutes/pl/111/203.pdf;</u> USA PATRIOT Act of 2001, Public Law 56, Sec. 359, 107th Cong., 1st sess. (October 26, 2001), available at <u>https://www.govinfo.gov/content/pkg/PLAW-107publ56/pdf/PLAW-107publ56.pdf;</u> Legal Information Institute, "U.S. Code: Title 26," available at <u>https://www.law.cornell.edu/uscode/text/26</u> (last accessed February 2022). Table: Center for American Progress

References

- Ainsworth, Richard Thompson and Hu, Xiuyuan (Tony), A Proposal for Taxing Cryptocurrency In the Midst of the COVID-19 Pandemic (May 25, 2020). "A Proposal for Taxing Cryptocurrency in the Midst of the COVID-19 Pandemic," Tax Notes International, May 25, 2020, pp. cover and 921-929, Available at SSRN: <u>https://ssrn.com/abstract=3700300</u>
- Alm, J. Tax evasion, technology, and inequality. Econ Gov 22, 321–343 (2021). https://doi.org/10.1007/s10101-021-00247-w
- Alma Lucía García Hernández & Simone Lucatello (2022) Climate policy integration: taking advantage of policy windows? An analysis of the energy and environment sectors in Mexico (1997–2018), Journal of Environmental Policy & Planning, 24:1, 56-67, DOI: 10.1080/1523908X.2021.1940893
- Alma Lucia Garcia Hernandez & Simon Bolwig (2021) Understanding climate policy integration in the global South through the multiple streams framework, Climate and Development, 13:1, 68-80, DOI: 10.1080/17565529.2020.1723471
- Angervil Gilvert. "A Comprehensve Application of Kingdon's Multiple Streams Framework: An Analysis of the Obama Administration's No Child Left Behind Waiver Policy" POLITICS AND POLICY : 980-1020.
- Anthony, Nicholas., 2021. Infrastructure Bill Hangs in the Balance, and So Does Crypto, Cato Institute. United States of America. Retrieved from https://policycommons.net/artifacts/1898036/infrastructure-bill-hangs-in-the-balance-andso-does-crypto/2649144/ on 03 Nov 2022. CID: 20.500.12592/6qtb92.
- Anthony, Nicholas. "Why Is the Infrastructure Bill Deciding the Fate of Crypto?" *Cato.org*, https://www.cato.org/commentary/why-infrastructure-bill-deciding-fate-crypto.
- Avi-Yonah, Reuven S. and Salaimi, Mohanad, A New Framework for Taxing Cryptocurrencies (March 31, 2022). U of Michigan Public Law Research Paper No. 22-014, Available at SSRN: https://ssrn.com/abstract=4071391 or http://dx.doi.org/10.2139/ssrn.4071391
- Barry W. Johnson and Peter J. Rose, "Federal Tax Compliance Research: Tax Gap Estimates for Tax Years 2011-2013," Internal Revenue Service, Publication 1415, September 2019, https://www.irs.gov/pub/irs-pdf/p1415.pdf.
- Baumgartner, Frank R., Christoffer Green-Pedersen, and Bryan D. Jones. 2006. Comparative Studies of Policy Agendas. Journal of European Public Policy 13(7):959–974.
- Bernhard, Alvine, and Brian Korn. "Crypto Reporting Rules in the Biden Infrastructure Deal." *JD Supra*, <u>https://www.jdsupra.com/legalnews/crypto-reporting-rules-in-the-biden-1784927/</u>.

- Caliskan, Koray. 2022. The Elephant in the Dark: A New Framework for Cryptocurrency Taxation and Exchange Platform Regulation in the US. Journal of Risk andFinancialManagement15: 118. https://doi.org/10.3390/ jrfm15030118
- Cardinale, Thomas. "The Battle in Congress for Cryptocurrency Tax Reporting Rules Who Will Win?" *EisnerAmper*, https://www.eisneramper.com/cryptocurrency-reporting-rules-tax-0821.
- Carlisle D. (2017). Virtual currencies and financial crimes: Challenges and opportunities. Royal United Service Institute for Defense and Security Studies. London, England: Stephen Austin. Retrieved September 30, 2018, from <u>https://rusi.org/sites/default/files/rusi_op_virtual_currencies_and_financial_crime.pdf</u>
- Christian Borek and Allen Sullivan Jr., "IRS Warns Over 10,000 Virtual Currency Traders to Comply with U.S. Tax Obligations," JD Supra, August 5, 2019, at https://www.jdsupra.com/legalnews/irs-warns-over-10-000-virtual- currency-74247/.
- Davison, Laura. "Crypto Investors Likely Paying IRS Less than Half the Taxes They Owe." *Bloomberg.com*, Bloomberg, 11 May 2022, <u>https://www.bloomberg.com/news/articles/2022-05-11/crypto-investors-likely-paying-less-than-half-the-taxes-they-owe</u>.
- De, Nikhilesh. "Sen. Portman Announces Support for Narrowed Crypto Tax Rule." CoinDesk Latest Headlines RSS, CoinDesk, 5 Aug. 2021, https://www.coindesk.com/markets/2021/08/05/sen-portman-announces-support-for-narrowed-crypto-tax-rule/.
- De Wals P, Espinoza-Moya ME, Béland D. Kingdon's Multiple Streams Framework and the Analysis of Decision-Making Processes Regarding Publicly-Funded Immunization Programs. Expert Rev Vaccines. 2019 Jun;18(6):575-585. doi: 10.1080/14760584.2019.1627208. Epub 2019 Jun 19. PMID: 31216187.
- Dolan Dana A . "Multiple Partial Couplings in the Multiple Streams Framework: The Case of Extreme Weather and Climate Change Adaptation" Policy Studies Journal : 164-189.
- Erskine, Matthew. "Reporting Requirements for Cryptocurrencies and NFTS Begin in 2023." *Forbes*, Forbes Magazine, 7 Jan. 2022, <u>https://www.forbes.com/sites/matthewerskine/2022/01/06/reporting-requirements-for-cryptocurrencies-and-nfts-begin-in-2023/?sh=387bb6f5e7b4</u>.
- Everett, Burgees. "Portman under Pressure to Deliver on Big Bipartisan Deal." *POLITICO*, https://www.politico.com/news/2021/07/28/rob-portman-bipartisan-deal-500971.
- Fahrer, Nik. "Infrastructure Bill Imposes New Cryptocurrency Reporting Requirements." Infrastructure Bill Imposes New Cryptocurrency Reporting Requirements,

18 Nov. 2021, https://www.forvis.com/alert-article/2021/11/infrastructure-bill-imposes-new-cryptocurrency-reporting-requirements.

- Faler, Brian. "Last-Ditch Effort to Salvage Cryptocurrency Tax Fails in Senate." *POLITICO*, https://www.politico.com/news/2021/08/09/cryptocurrency-tax-deal-senate-502833.
- Farley, Robert; Gore, D'Angelo; Jackson, Brooks (January 20, 2021). "Fact Check: What President Biden Inherits". NBC Bay Area. Retrieved Oct 30, 2022.
- Giese KK. Coronavirus Disease 2019's Shake-up of Telehealth Policy: Application of Kingdon's Multiple Streams Framework. J Nurse Pract. 2020 Nov-Dec;16(10):768-770. doi: 10.1016/j.nurpra.2020.08.015. Epub 2020 Aug 17. PMID: 32837405; PMCID: PMC7430271.
- Gleckman, Howard. "Was the Senate's Heated Crypto Tax Reporting Debate Much Ado about Nothing?" *Tax Policy Center*, 10 Sept. 2021, https://www.taxpolicycenter.org/taxvox/was-senates-heated-crypto-tax-reporting-debate-much-ado-about-nothing.
- Goforth, Carol R., U.S. Law: Crypto is Money, Property, a Commodity, and a Security, all at the Same Time (October 25, 2018). Journal of Financial Transformation, Forthcoming, Available at SSRN: https://ssrn.com/abstract=3272975
- Guyton, John, et al. "Tax Evasion at the Top of the Income Distribution: Theory and Evidence." 2021, https://doi.org/10.3386/w28542.
- Herweg, Nicole, Nikolaos Zahariadis, and Reimut Zohlnhöfer. 2017. "The Multiple Streams Framework: Foundations, Refinements, and Empirical Applications." In Theories of the Policy Process, 4th ed., edited by Christopher M. Weible and Paul A. Sabatier, 17–53. Boulder, CO: Westview Press.
- Herweg, Nicole, and Nikolaos Zahariadis. 2017. "Multiple Streams." In The Routledge Handbook of European Public Policy, edited by Nikolaos Zahariadis and Laurie A. Buonanno. New York: Routledge.
- Herweg, Nicole. 2016a. "Clarifying the Concept of Policy-Communities in the Multiple-Streams Framework." In Decision-Making under Ambiguity and Time Constraints: Assessing the Multiple-Streams Framework, edited by Reimut Zohlnhöfer and Friedbert W. Rüb, 125– 145. Colchester, UK: ECPR Press.
- H.R.3684 117th Congress (2021-2022): Infrastructure Investment and Jobs Act. (2021, November 15). http://www.congress.gov/
- "H.R.3708 115th Congress (2017-2018): To amend the Internal Revenue Code of 1986 to exclude from gross income de minimis gains from certain sales or exchanges of virtual currency, and for other purposes." *Congress.gov*, Library of Congress, 7 September 2017, <u>http://www.congress.gov/</u>.

"H.R.6006 - 117th Congress (2021-2022): Keep Innovation in America Act." *Congress.gov*, Library of Congress, 17 November 2021, http://www.congress.gov/.

"H.R.6582 - 117th Congress (2021-2022): Virtual Currency Tax Fairness Act of 2022." *Congress.gov*, Library of Congress, 3 February 2022, <u>http://www.congress.gov/</u>.

- Huillet, Marie. "IRS Sending 10,000 Tax Compliance Letters to Crypto Investors." *Cointelegraph*, Cointelegraph, 26 July 2019, <u>https://cointelegraph.com/news/irs-sending-fishing-letters-to-crypto-users-so-they-pay-taxes</u>.
- Iacurci, Greg. "Cryptocurrency Poses a Significant Risk of Tax Evasion." CNBC, CNBC, 31 May 2021, https://www.cnbc.com/2021/05/31/cryptocurrency-poses-a-significant-risk-oftax-evasion.html.
- IRS Statistics of Income, 2019. "Table 31: Collection Costs, Personnel, and US Population," Databook.
- Jaerv, Gunnar. "FDT Explorer: Digital Assets and Section 80603 of the Infrastructure, Investment and Jobs Act." *First Digital*, https://1stdigital.com/news-andinsights/regulatory-developments/fdt-explorer-digital-assets-and-section-80603-of-theinfrastructure-investment-and-jobs-act/.
- Janfaza, Rachel. "'This Is No Way to Make Policy': Cryptocurrency Advocates Express Frustration with Bipartisan Infrastructure Language | CNN Politics." *CNN*, Cable News Network, 8 Aug. 2021, <u>https://edition.cnn.com/2021/08/07/politics/cryptocurrency-infrastructure-bill/index.html</u>.
- Jimenez, Julio. "Crypto and Digital Asset Reporting in Proposed Legislation." *ALERT: Crypto and Digital Asset Reporting in Proposed Legislation - Marks Paneth*, https://www.markspaneth.com/insights/category/alerts/alert-crypto-and-digital-assetreporting-in-proposed-legislation.

Kethineni, S., Cao, Y. & Dodge, C. Use of Bitcoin in Darknet Markets: Examining Facilitative Factors on Bitcoin-Related Crimes. Am J Crim Just 43, 141–157 (2018). https://doi.org/10.1007/s12103-017-9394-6

Kethineni, S., & Cao, Y. (2020). The Rise in Popularity of Cryptocurrency and Associated Criminal Activity. International Criminal Justice Review, 30(3), 325–344. https://doi.org/10.1177/1057567719827051

Kingdon, John. 1984. Agendas, Alternatives, and Public Policies. 2nd ed. Boston: Little, Brown.

—. 2003. Agendas, Alternatives, and Public Policies. 2nd ed. New York: Longman.

———. 2010. Agendas, Alternatives, and Public Policies. Updated 2nd ed. Longman/White Plains: Pearson Longman.

——. 2011. Agendas, Alternatives, and Public Policy. New York: Longman.

Knaggård, Åsa. 2015. "The Multiple Streams Framework and the Problem Broker." European Journal of Political Research 54:450–465.

- Locke, Taylor. "'This Will Probably Be the First Step': What Crypto Investors Should Know about the Senate Infrastructure Bill Proposal." *CNBC*, CNBC, 3 Aug. 2021, https://www.cnbc.com/2021/08/03/what-crypto-investors-should-know-about-the-senate-infrastructure-bill.html.
- Lopez, Katherine J. "Virtual Currency-Property or Foreign Currency? an Exploration of the Tax and Ethical Implications: Semantic Scholar." *Undefined*, 1 2015, https://www.semanticscholar.org/paper/Virtual-Currency-Property-or-Foreign-Currency-an-of-Lopez/bf857364a134484d82993e7d9f0df20c512107d.
- Macheel, Tanaya. "Lawmakers Fought over Crypto's Place in the Infrastructure Bill. Here's What's next for the Industry." *CNBC*, CNBC, 11 Aug. 2021, https://www.cnbc.com/2021/08/11/crypto-lawmakers-fought-over-the-infrastructure-bill-heres-whats-next.html.
- Martin Powell; Russell Mannion. "Modelling the Health Policy Process: One Size Fits All or Horses for Courses?". International Journal of Health Policy and Management, , , 2022, -. doi: 10.34172/ijhpm.2022.7580
- Mejdrich, Kellie. "Cryptocurrency Industry Fears Big Tax Hit in Infrastructure Bill." *POLITICO*, https://www.politico.com/news/2021/07/30/cryptocurrency-fears-taxhit-infrastructure-501885.
- Mejdrich, Kellie. "Cryptocurrency Tax Changes Spark Clash between White House, Key Democratic Senator." *POLITICO*, https://www.politico.com/news/2021/08/04/cryptocurrency-tax-provisions-502435.
- Mintrom, Michael. "So You Want to Be a Policy Entrepreneur?" *Policy Design and Practice*, vol. 2, no. 4, 2019, pp. 307–323., https://doi.org/10.1080/25741292.2019.1675989.
- Mitchell, Amy, et al. "Section 1: Media Sources: Distinct Favorites Emerge on the Left and Right." *Pew Research Center's Journalism Project*, Pew Research Center, 28 Aug. 2020, <u>https://www.pewresearch.org/journalism/2014/10/21/section-1-media-sources-distinct-favorites-emerge-on-the-left-and-right/</u>.
- Moore, Guinevere. "Crypto Exchanges Face New Reporting Requirements and Stiff Penalties under Senate Infrastructure Bill." Forbes, Forbes Magazine, 15 Sept. 2021,

https://www.forbes.com/sites/irswatch/2021/08/02/crypto-exchanges-face-new-reporting-requirements-and-stiff-penalties-under-senate-infrastructure-bill/?sh=56cb6b8f6470.

- Mowbray. *Introduction to Non-Fungible Tokens*. <u>https://www.bakerlaw.com/files/blockchain/4-</u> Taxation%20of%20Non-Fungible%20Tokens_p02.pdf.
- Mucciaroni, Gary. 1992. The Garbage Can Model & the Study of Policy Making: A Critique. Polity 24(3): 459–482.
- Muresianu, Alex. *Simplifying the Tax Code and Reducing the Tax Gap: What Can Be Achieved*?https://files.taxfoundation.org/20210726172652/Simplifying-the-Tax-Code-and-Reducing-the-Tax-Gap-What-Can-Be-Achieved.pdf.
- Notice 2014-21 Section 1. Purpose IRS Tax Forms. <u>https://www.irs.gov/pub/irs-drop/n-14-21.pdf</u>.
- Novotný Vilém,Satoh Keiichi,Nagel Melanie. "Refining the Multiple Streams Framework's Integration Concept: Renewable Energy Policy and Ecological Modernization in Germany and Japan in Comparative Perspective" JOURNAL OF COMPARATIVE POLICY ANALYSIS : 291-309.
- Oprysko, Caitlin. "Crypto Lobbying Soared in Q3 amid Fight over Tax Provisions." *POLITICO*, 27 Oct. 2021, https://www.politico.com/newsletters/politico-influence/2021/10/26/crypto-lobbying-soared-in-q3-amid-fight-over-tax-provisions-798474.
- Ortiz, Carlos F. "The Tax Man Isn't Leaving: The IRS Continues to Issue John Doe Summonses Relating to Virtual Currency Transactions." *BakerHostetler*, <u>https://www.bakerlaw.com/alerts/irs-issue-john-doe-summonses-relating-virtual-currency-transactions</u>.
- Peter Van Valkenburgh, "An Unworkable and Arguably Unconstitutional Tax Change Tucked Away in the Infrastructure Bill," Coin Center, September 17, 2021.
- Quinn, B. Reformation or Transformation? Policy Reform in Ireland's Higher Education System. High Educ Policy 33, 159–177 (2020). https://doi.org/10.1057/s41307-018-0108-6
- Reeves, L. (2021). Taxpayers need a clear tax framework for crypto-assets. International Tax Review.
- Reilly, Caitlin. "Crypto Sector Lobbying Expenditures up a Third in Second Quarter." Roll Call, 9 Aug. 2022, <u>https://rollcall.com/2022/08/09/crypto-sector-lobbying-expenditures-up-a-third-in-second-quarter/</u>.
- Robertson, Lori. "Senators Claim Infrastructure Bill Is 'Paid for'; Experts Disagree." *FactCheck.org*, 5 Aug. 2021, https://www.factcheck.org/2021/08/senatorsclaim-infrastructure-bill-is-paid-for-experts-disagree/.

- Rutenberg, Stephen. "So Close... the Cryptocurrency Industry Shows Its Strength Even While Failing to Secure an Amendment." *The National Law Review*, https://www.natlawreview.com/article/so-close-cryptocurrency-industry-shows-itsstrength-even-while-failing-to-secure.
- Sabatier, P.A. (1999). The need for better theories. In P.A. Sabatier (Ed.), *Theories of the policy process* (pp. 3-18). Boulder, CO: Westview Press.
- Saurugger, S., Terpan, F. Do crises lead to policy change? The multiple streams framework and the European Union's economic governance instruments. Policy Sci 49, 35–53 (2016). https://doi.org/10.1007/s11077-015-9239-4
- "S.4608 117th Congress (2021-2022): Virtual Currency Tax Fairness Act." *Congress.gov*, Library of Congress, 28 July 2022, <u>http://www.congress.gov/</u>.
- "Senate Finance Committee Hearing on 2021 Tax Filing Season." *C-Span*, <u>https://www.c-span.org/video/?510750-1%2Fsenate-finance-committee-hearing-2021-tax-filing-season</u>.
- Stein, Jeff. "GOP Senators Feud over Cryptocurrency Plan as Lawmakers Seek Funding for Infrastructure Deal." *The Washington Post*, WP Company, 3 Aug. 2021, https://www.washingtonpost.com/us-policy/2021/08/03/crypto-bitcoin-infrastructureportman/.
- Suher, Gregory. "New Taxation Provisions on Digital Assets Hidden in the Infrastructure Bill." *Leech Tishman: Legal Services*, 6 Apr. 2022, https://www.leechtishman.com/insights/blog/new-taxation-provisions-on-digital-assetshidden-in-the-infrastructure-bill/.
- Thiemann, Andreas. "Cryptocurrencies: An Empirical View from a Tax Perspective." EconPapers, 19 Aug. 2021, https://econpapers.repec.org/RePEc:ipt:taxref:202112.
- Tomwfranck. "U.S. Treasury Calls for Stricter Cryptocurrency Compliance with IRS, Says They Pose Tax Evasion Risk." *CNBC*, CNBC, 20 May 2021, https://www.cnbc.com/2021/05/20/us-treasury-calls-for-stricter-cryptocurrency-compliance-with-irs.html.
- Travis, Rick, and Nikolaos Zahariadis. 2002. "A Multiple Streams Model of US Foreign Aid Policy." Policy Studies Journal 30:495–514.
- Vallett, Joel David. "The Diffusion of Erin's Law: Examining the Role of the Policy Entrepreneur." *Policy Studies Journal*, vol. 49, no. 2, 2020, pp. 381–407., https://doi.org/10.1111/psj.12396.
- Vazquez, Maegan, et al. "5 Significant Bills and 5 Executive Orders Biden Signed in His First Year -- and His 5 Biggest Priorities for 2022." *CNN*, Cable News Network, 20 Jan. 2022,

https://edition.cnn.com/2022/01/20/politics/biden-laws-passed-priorities-to-get-done-executive-orders/index.html.

- "Virtual Currencies." *Internal Revenue Service*, <u>https://www.irs.gov/businesses/small-businesses-self-employed/virtual-currencies</u>.
- Ward, Myah. "Rob Portman Says IRS Enforcement off the Table for Funding \$1.2T Infrastructure Package." *POLITICO*, <u>https://www.politico.com/news/2021/07/18/portman-</u> irs-enforcement-infrastructure-package-499988.
- Weible, Christopher M. 2014. Advancing Policy Process Research. In Sabatier and Weible 2014: 391–407.
- Weir, Margaret. 1992. Politics and Jobs: The Boundaries of Employment Policy in the United States. Princeton, NJ: Princeton University Press.
- Weiss, Laura. "Wyden Wants Tweaks to Infrastructure Bill's Cryptocurrency Rules." *Roll Call*, 2 Aug. 2021, https://rollcall.com/2021/08/02/wyden-wants-tweaks-to-infrastructure-billscryptocurrency-rules/.
- Wilford, Andrew. "The Tax Gap: No Trillion Dollar Silver Bullet." *National Taxpayers Union*, https://www.ntu.org/foundation/detail/the-tax-gap-no-trillion-dollar-silver-bullet.
- Wiseman, Scott A. (2016) "Property or Currency? The Tax Dilemma Behind Bitcoin," Utah Law Review: Vol. 2016: No. 2, Article 5. <u>https://dc.law.utah.edu/ulr/vol2016/iss2/5</u>
- Wright, Turner. "Lead Republican behind Infrastructure Bill Negotiations Supports Crypto Amendment." *Cointelegraph*, Cointelegraph, 5 Aug. 2021, https://cointelegraph.com/news/lead-republican-behind-infrastructure-bill-negotiationssupports-crypto-amendment.
- Zahariadis, N. (1999). Ambiguity, time, and multiple streams. In P.A. Sabatier (Ed.), *Theories of the policy process* (pp. 73-96). Boulder, CO: Westview Press.
- ———. 2007. The Multiple Streams Framework: Structure, Limitations, Prospects. In Sabatier 2007b: 65–92.

——. 2014. Ambiguity and Multiple Streams. In Sabatier and Weible 2014, 25–58.

Zaslowsky, David. "Think Tank Sues U.S. IRS over Cryptocurrency Reporting Requirements." *Blockchain*, 17 June 2022, https://blockchain.bakermckenzie.com/2022/06/17/think-tank-sues-u-s-irs-overcryptocurrency-reporting-requirements/.

국문 초록

바이든 행정부는 최근 증가하는 가상화폐 탈세를 단속하기 위해 가상화폐 '브로커'에 미국 국세청 (IRS)대한 세금 보고 규칙을 강화하는 Section 80603 (Information Reporting for Brokers and Digital Assets) 조항을 바이든 대통령의 인프라 법안 (Infrastructure Investment and Jobs Act)의 일부로 통과시켰다.

지난 몇년간 미국에서는 가상화폐 투자와 거래가 급증하면서 가상화폐 탈세와 택스 갭 문제가 불거졌다. 하지만 가상화폐의 탈세를 막으려는 세무 당국의 노력에도 불구하고, 정치적, 기술적 한계로 인해 오바마와 트럼프 행정부에서는 어떠한 가상화폐 세금 정책 법안도 통과되지 못했다. 몇년간 정체기였던 가상화폐 세금 정책 개발 과정에서, Section 80603 이 예상치 못한 순간에 바이든 행정부에서 법으로 통과 될 수 있었던 이유는 무엇인가?

본 연구는 다중흐름모형 (Multiple Streams Framework)을 적용하여 모호성과 복잡한 환경속에서 Section 80603 의 정책 결정을 주도한 사회적, 정치적 배경 및 주요 정치 주체의 역할을 분석하였다. 특히 수정된 다중흐름모형을 사용하여 의제설정 및 의사결정 과정의 핵심에 있는 두가지 문제를 별도로 분석하고 각 과정에서 정책 선도가와 정치 선도가의 역할을 구분하여 분석하였다. 마지막으로, 본 연구는 납세자, 미국 국세청 및 정부, 암호화폐 거래소 및 NFT(Non-Fungable Token)에 대한 해당 법안의 정책 시사점을 제공한다.

주요어: 의제 설정, 의사 결정, 다중흐름모형, 가상화폐, 택스 갭 학번: 2020-25349

9