

Selective Incentives and the Creation of the U.S. Federal Reserve System

by

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Abstract

There has yet to be reached a decisive consensus on the primary motivations behind the creation of the U.S. Federal Reserve. The debate typically revolves around the question of the main beneficiaries, whether it was a small elite of national bankers, or society as a whole. In other words, was the Fed created to redistribute wealth, in the form of rents, to this financial elite, or was it created to provide a public good, i.e. a stable monetary framework, the benefits of which would be enjoyed widely? By clarifying the conditions leading to the creation of the Fed, and identifying those who benefitted or were harmed by it, we can progress towards a resolution of the rent-seeking vs. public good debate. The conclusion is that a third explanation, selective incentives, will incorporate much of the two preceding explanations and most accurately account for the creation of the Federal Reserve.

Keywords: Federal Reserve; selective incentives; rent-seeking; public goods; U.S. institutions; analytic narrative

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Chapter 1. Introduction

1.1. Unthinking Acceptance and Rejection

The U.S. Federal Reserve System, like other public institutions, can become entrenched in the public mindset and generally accepted as an inextricable component of government. Milton Friedman observed that the need for government regulation of the monetary system has been uniformly accepted (1960, p. 8), although there remained debate over the appropriate nature of this regulation. Friedman goes on to express concern that such widespread support may allow the regulatory institution, in this case the Federal Reserve, to exercise power in such a way that may prove injurious to the public welfare. He states that:

This habitual and by now almost unthinking acceptance of government responsibility makes thorough understanding of the grounds for such responsibility all the more necessary, since it enhances the danger that the scope of government intervention will spread from activities that are to those that are not appropriate in a free society.

(1960, p. 8)

While Friedman's words of caution were written over 50 years ago, the "unthinking acceptance" remains an apt characterization given the increased centrality of the Fed in the U.S. economy in the intervening years. For instance, the Bloomberg National Poll, conducted in December 2010, found that 76% of Americans support the Federal Reserve existing either unchanged or with some reforms, while only 16% support its abolition (Zumbrun, 2010, p. 1). While "unthinking acceptance" may be normative, there is a small but vocal minority for whom "unthinking rejection" would represent a more likely pitfall.¹ This group includes those associated with the Austrian

¹ The term "unthinking" can have pejorative connotations, but in this context it should not be understood to mean vacuous or irrational, but rather, that not all facets of the issue have been duly considered.

school of economics, notably Congressman Ron Paul (2009) who demands the complete abolition of the Federal Reserve in the most emphatic terms: "Ending the Fed would be the single greatest step we could take to restoring American prosperity and freedom and guaranteeing that they both have a future" (p. 5). The implication being that the continuation of the Fed gravely jeopardizes this prosperity and freedom.

Whether the disposition is towards wholesale acceptance or rejection, Friedman's exhortation to thoughtfully examine the underlying basis of the Federal Reserve is well-advised. This paper aims to contribute to such a thoughtful examination by exploring the conditions leading to the creation of the Federal Reserve, assessing the theoretical explanations for the creation of the Fed associated with simple acceptance or rejection, and proposing a hybrid explanation that reconciles those opposing theories. A clearer understanding of the creation of the Federal Reserve should mitigate the danger of wholesale acceptance - the exploitation of power, as well as the danger of wholesale rejection - a lack of support for socially beneficial functions.

1.2. Competing Explanations

The Federal Reserve is generally regarded with either wholesale acceptance or wholesale rejection and each perspective is undergirded by a particular theoretical interpretation of the origins of the institution. Those supportive of the Fed will explain its creation through the theory of public goods. This theory holds that the Fed was instituted to provide a public good, i.e. a stable monetary framework, the benefits of which would be enjoyed widely. Those critical of the Fed, in contrast, refer to rent-seeking theory to explain its existence. The rent-seeking interpretation maintains that the Fed was created to redistribute wealth, in the form of rents, to certain financial elites. In other words, the debate typically revolves around the question of the main beneficiaries of the Federal Reserve, whether it was a small elite of national bankers, or society as a whole. By clarifying the conditions leading to the creation of the Fed, and identifying those who benefitted or were harmed by it, we can progress towards a resolution of the rent-seeking vs. public good debate.

The general conclusion reached is that the creation of the Fed reflects a more nuanced distribution of costs and benefits than either explanation offers in its pure form. An alternate explanation, selective incentives theory, is found to incorporate much of the two preceding explanations and most accurately account for the creation of the U.S. Federal Reserve System. The selective incentives theory contends that the public good explanation is partially correct in that the stable financial system that resulted from the creation of the Fed did provide widespread benefits to society. However, it also maintains that the rent-seeking explanation is partially correct in that certain groups, i.e. financial elites, benefitted in part at the expense of other groups, i.e. those who experienced a net decline in wealth because of increased inflation. Viewing the origin of the Federal Reserve through the lens of the selective incentives theory provides a more balanced accounting of the positive and negative effects of that institution. The oversimplification of wholesale acceptance or rejection can then be amended in favor of qualified endorsement or skepticism. The practical implication of this nuanced position is that the options of simply maintaining the status quo or abolishing the Federal Reserve become less relevant. Instead, the institution may be parsed so that its socially beneficial functions may be augmented and its socially harmful functions may be mitigated.

Chapter 2. Methodology

2.1. Research Aim

This research aims to investigate which theoretical model best explains the creation of the U.S. Federal Reserve System. In the 21st century, central banks are such an integral aspect of the modern economy that few can even imagine their absence. In the early 20th century however, central banking was a much newer phenomenon. A number of Western countries did have central banks of one sort or another but they would bear little resemblance to the power and influence of the modern central bank. So the question of why the U.S. would establish a central bank is far from a given.² In order to develop a theoretical model that applies to the creation of the Federal Reserve, there are a number of questions that need to be considered: Who influenced the creation of the *Federal Reserve Act*? What were the motivations of these influential people and groups? Was there a plurality of interest groups and, if so, how were their positions adjudicated between? Which groups were net beneficiaries of the Federal Reserve? Were any groups harmed by the Fed's creation? By addressing all of these questions, it is expected that an accurate account of the creation of the Federal Reserve can be developed and explained with reference to a particular model.

² Some contest whether the Federal Reserve is a true central bank because of its decentralised reserve bank structure and the significant participation of private banks. While this is an apt consideration, the general category of "central bank" remains the most useful description.

2.2. Methodological Approach

2.2.1. Rational Choice and Historical Institutionalism

This research generally falls somewhere between the rational choice and historical approaches to institutional research. Rational choice institutionalism has two main characteristics that distinguish it from other approaches: 1) The foundational assumption of rationality, and 2) Utilization of the analytical tools of mathematics, operations research and economics to study political institutions (Shepsle, 2008, p. 35). In contrast, historical institutionalism, while not eschewing the aforementioned logic-driven individual preferences, is "more likely to define human motivation in terms of goals - which have a more public, less self-interested dimension" (Sanders, 2008, p. 42). Sanders goes on to summarize the main methodological distinction between the two in the following manner: "HI (historical institutionalism) pays more attention to the long-term viability of institutions and their broad consequences; RC (rational choice), to the parameters of particular moments in history that are the setting for individual self-interest maximization" (p. 43). Whereas rational choice institutionalism emphasizes the influence of rational actors on the creation of institutions, the historical approach looks at factors additional to rational decision-makers, including social pressures and the distinct culture, as formative influences (p. 39). This analysis on the origins of the Federal Reserve looks at the influence of both rationally self-interested actors, i.e. the national banks, as well as the social/cultural forces that promoted the institution as a public good. As such, this research blends the two approaches, though rational choice would likely be considered the dominant one. Kenneth Shepsle (2008) supports the notion that rational choice institutionalism and historical institutionalism are not mutually exclusive, and they can be effectively reconciled through the approach of analytic narrative (p. 34).

2.2.2. Analytic Narrative

Analytic narrative, though evidenced in a variety of political science scholarship, was codified as a research approach/method through the joint works of Robert Bates, Avner Greif, Margaret Levi, Jean-Laurent Rosenthal, and Barry Weingast. According to Bates et al. analytic narratives are designed to both engage in in-depth case studies and seek to contribute to, and utilize, theory (September 2000, p. 696). This method

combines the more atheoretical approach of historical case study research with the explicit theorizing associated with the social sciences. Foundational to analytic narratives are the iteration between the deductive and the inductive; the model and the data. Bates et al. describe how this iterative process operates, and their own words will provide the clearest account:

A given narrative suggests a model that when explicated ought to have implications for the structure of relationships (the institutions) within which the events occurred. Those implications force the scholar to reconsider the narrative and then to re-evaluate the extent to which key elements of the narrative lie outside the proposed theory. If one must appeal too often to forces outside the model, then the theory must be rejected. Analytic narrative is therefore an inductive approach that challenges both the evidence about the event of interest and theories that structure that evidence.

(2000, p. 687)

Analytic narratives face the challenge of accounting for all the relevant historical data while at the same time employing a theoretical model(s) to guide the data collection. The end result should be a detailed case study that is structured within a theoretical model and therefore has broader applicability.

This research on the origins of the Federal Reserve can be generally characterized as an analytic narrative. A brief overview of the research process will highlight the iterative process that occurred. The first step was a partial analysis of the various historical narratives to determine which theoretical models may be applicable to this case. Two potentially useful models became apparent following the initial inductive research: public goods theory and rent-seeking theory. Additional historical research was then filtered through these models to determine whether or not they could encompass the relevant facts. When it became clear that even though public goods theory and rent-seeking theory could account for a number of the historical facts, neither model could fully explain the creation of the Federal Reserve. An alternative model was required to encapsulate the historical narrative in a fulsome manner. It was found that selective incentives theory could explain the relevant data and thereby serve two functions: 1) It provided a framework from which the historical narrative could be analyzed, and 2) It further developed our understanding of the theory itself, as it was tested, in a sense, by the case study. Bates et al. describe the analytic narrative

approach as moving "back and forth between the model and the data, testing our ideas against reality" (September 2000, p. 700), a process that well characterizes this research.

2.3. Methodology Rationale

2.3.1. Case Selection

This research project will involve a case study on the development of the U.S. Federal Reserve System, primarily from 1907-1913. This case was not selected, randomly or otherwise, from a broader population, i.e. national public institutions in the U.S., and so the conclusions cannot be directly applied to other members of that population.³ Therefore, this case study research does not aspire to generalizability. Notwithstanding this limitation, studying the creation of the Federal Reserve through the analytic narrative approach will provide at least three significant contributions to existing scholarship:

2.3.2. Extreme Case

The first contribution stems from the fact that the Federal Reserve should be considered an extreme case. Bent Flyvbjerg defends the value of extreme cases as being "well-suited for getting a point across in an especially dramatic way" (p. 229).

³ One challenge with locating the Federal Reserve within a particular population is its complex public-private ownership structure. Private banks elect the board of directors, and act as shareholders, of the regional reserve banks, while the President appoints the Board of Governors which regulates the reserve banks. By having features of both private corporations and public institutions it is difficult to accurately characterize the Federal Reserve as either. The Federal Reserve may technically fit best in the population of Government Sponsored Enterprises (GSE's), along with Fannie Mae and Freddie Mac, although it appears to have significant qualitative differences from those other institutions. For the purposes of this analysis, the Federal Reserve will loosely be associated with the population of public institutions because of the preponderance of power held by the government-appointed Board of Governors. This loose association is justifiable because true generalizability is not an aim of this research.

While some methodological approaches do not recommend selecting on the dependent variable, Flyvbjerg's point is that extreme cases should be selected because of their unique and significant nature. The Federal Reserve, as one of the preeminent public institutions in the U.S., is an ideal candidate for an extreme case. Due to its fundamental role in managing the U.S. economy through monetary policy, the Fed is known colloquially as the "fourth branch of government" alongside the executive, legislative, and judiciary branches. Moreover, the Fed was described as "the most powerful institution in Washington" by former Secretary of Labor Robert Reich (Meltzer, 2000, p. 269). The current Chairman of the Federal Reserve, Ben Bernanke, was listed by Forbes magazine as the 6th most powerful person in the world, behind only Barack Obama, Angela Merkel, Vladimir Putin, Bill Gates, and Pope Benedict XVI; and Bernanke's power is clearly derived from that of the institution he controls (The World's Most Powerful People, 2013). The extreme case, epitomized in the Federal Reserve, is a valid exception from random case selection because of its ability to yield interesting results due to its exceptional character.

2.3.3. Theory Development

The second social scientific contribution of studying a single case, the creation of the Federal Reserve, through the analytic narrative approach, is the further development of the explanatory theoretical model that is utilized. Bates et al. note that "although we may not be able to derive general laws, we nonetheless can develop, refine, and test theory-driven models and thus employ theory to gain deeper insights into the complex workings of the real world" (September 2000, p. 697). This particular case study on the origins of the Federal Reserve takes the two dominant and opposing explanations, public good and rent-seeking, and both amends and reconciles them within the theory of selection incentives. The origins of other public institutions may have the same dominant explanations, and the conclusions of this case study may highlight analogous circumstances that guide further research into these other institutions. Additionally, the application of the theory of selective incentives may provide a theoretical framework to evaluate other public institutions in a new way. In the same way that previous accounts of the origins of the Federal Reserve tended to ignore certain data in the historical narrative that did not fit the preferred theory, explanations of the origins of other public

institutions may be subject to a similar distortion. The resolution of ostensibly irreconcilable explanatory accounts may be accomplished through the theory of selective incentives in other institutions in a similar way to the Federal Reserve.

2.3.4. Intrinsic Value

Even if the origin of the Federal Reserve proves to be a unique outlier, it is such an important institution that there is intrinsic value in developing a deeper, more complete understanding of it. Flyvbjerg observes how thick description may prove more valuable than generalizability: “from both an understanding-oriented and action-oriented perspective, it is often more important to clarify the deeper causes behind a given problem and its consequences than to describe the symptoms of the problem and how frequently they occur” (p. 229). In this case, this means that understanding the complex and contradictory motivations behind the creation of the Federal Reserve may be more useful than studying the frequency of such motivations in a broader population. Moreover, John Gerring notes that “one of the primary virtues of the case study method is the depth of analysis it offers...the detail, richness, completeness, wholeness, or degree of variance that is accounted for...” (2004, p. 348). However, knowing more about less is invariably a trade-off with knowing less about more (p. 348). The Fed is such an important institution that furthering our understanding of it is worthwhile in and of itself regardless of the feasible extension of the theoretical model.

Chapter 3. The Public Good Explanation

3.1. Public Goods Defined

The creation of the Fed is typically characterized in one of two ways: 1) To provide a public good, or 2) As the result of rent-seeking by national bankers. Tyler Cowen (1985) notes that the standard definition of a public good has two components: "joint, equal, and non-rivalrous consumption and non-excludability" (p. 53). Paul Samuelson specifies that what is meant by joint and non-rivalrous consumption is that "each individual's consumption of such a good leads to no subtraction from any other individual's consumption of that good" (Samuelson, 1954, p. 387). In other words, once such a good is provided, the subsequent use of it by additional consumers involves no additional cost. The characteristic of non-excludability flows from the characteristic of non-rivalrous. Cowen observes that non-rivalrous is a "necessary but not sufficient condition for the existence of non-excludability" (1985, p. 54). Therefore, it is possible for a good to be only non-rivalrous, but if it is non-excludable it must be non-rivalrous as well. Olson provides clarity on what precisely is meant by the concept of non-excludability: "A common, collective, or public good is here defined as any good such that, if any person X_i in a group $X_1, \dots, X_i, \dots, X_n$ consumes it, it cannot feasibly be withheld from the others in that group" (1965, p. 14). In other words, a public good cannot easily be selectively distributed to certain individuals but not others. Common examples of public goods are national defense and highways, which can be enjoyed more or less equally by all citizens regardless of whether they contributed to their provision or not.

The standard definition of a public good as being non-rivalrous and non-excludable has been criticized for having a lack of specificity. For instance, Cowen posits that "all goods are characterized by non-rivalrous consumption at low enough levels of use, while at very high levels of use no good can be consumed without diminishing the consumption of others" (1985, p. 55). The example he gives is a community road, which operates as a public good when there is little traffic, but when

cars are added, the congestion appears to make it rivalrous in nature. Moreover, in terms of non-excludability, Cowen argues that "exclusion is always possible, it is just more or less costly" (p. 61). This does not directly contradict Olson's definition which only requires exclusion to be infeasible, but it does serve to make the characterization of a public good more difficult.

For the purposes of this analysis though it is not necessary for the definition of a public good to be absolutely characterized. In fact, the common, less technical, understanding of a public good as "a good produced by government, and generally available for the benefit of its citizens" (Holcombe, 1997, p. 3) would function adequately. It is sufficient that a public good is both non-rivalrous and non-excludable in some justifiable sense, even if technically this definition can be in turn too restrictive or too permissive.

3.2. Public Goods and Market Failure

Even though public goods will benefit society in general, their non-rival and non-excludable nature makes them susceptible to the problem of free-riding. Free-riding exists because each individual knows that they will enjoy the benefits of the public good if it is provided and they hope that it will be provided without having to make a contribution themselves. Samuelson writes that with public goods, the rational individual "can hope to snatch some selfish benefit in a way not possible under the self-policing competitive pricing of private goods" (1954, p. 389). When each individual in a society follows a similar decision-making process, there will be insufficient support for that public good to be provided. In other words, even though such a good may be in the public interest, it is not necessarily in each individual's interest to contribute. This impasse is characterized as a market failure, where voluntary actions in the marketplace do not supply a quantity of the good equal to the demand (Holcombe, 1997, p. 1). To rectify this market failure, the government, acting in the public interest, generally accepts the role of providing public goods. The government can circumvent the obstacle of free-riding in a way the market cannot by compelling universal participation through taxation, which will theoretically allow a more optimal quantity of the public good to be produced.

The question of whether the government can effectively solve the problem of free-riding is open to debate. Gordon Tullock (2005) points out that "if the market and private property do not lead to an optimal outcome because of externalities, that does not prove that governments will do better" (p. 18). Not only may governments fail to ameliorate market failures, but they may create externalities through their own actions (p. 20). Even if the government does act in the public interest, as this theory assumes, it does not follow that the government is generally able to solve market failures in the provision of public goods. For the purposes of this analysis though, it is sufficient that the government, acting in the public interest, could plausibly have provided the public good of a stable financial system. The plausibility of this theory is examined in the following section.

3.3. The Fed as a Public Good

To make the case that the Federal Reserve was created as a public good, it must be demonstrated that it provided indivisible and nonexcludable benefits to society in general. The ostensible public good provided by the Fed could be generally characterized as a stable financial system. Because the financial system affects virtually every member of a society, increased stability in that system should theoretically enhance the welfare of all.

3.3.1. Market Failure in the Financial System

The US financial system prior to the creation of the Federal Reserve could be understood as a case of market failure, in which the public good of a stable financial system was underprovided by the market. This is demonstrated by the fact that the US economy, in the years between passage of the *National Banking Acts* in 1863-5 and the inception of the Fed in 1914, was plagued by recurring banking crises. These crises were particularly devastating in 1873, 1884, 1893, and 1907 (West, 1977, p. 27). The causes of these banking crises were threefold according to historian Elmus Wicker: an inelastic currency, a lack of emergency reserves, and no mechanism for promoting efficient cooperation between banks (2005, p. 105). An inelastic currency meant that funds could not be made readily available to deal with seasonal fluctuations in demand

for credit. This inelasticity primarily hampered the agricultural industry, one of the largest in the US, where demand for credit varied significantly depending on the season. A lack of emergency reserves meant that in times of uncertainty, banks needed to protect themselves by holding more gold and currency in reserves - a tactic that caused short-term interest rates to rise as high as 100% annually, to the detriment of economic activity (Meltzer, 2003, p. 69). Finally, the lack of efficient cooperation between banks resulted in interconvertibility problems, where banks could refuse to redeem the notes of other banks resulting in financial gridlock.

The Fed was envisioned as a system to rectify these three causes of banking crises, as Allan Meltzer states: "The new institution was supposed to provide a currency with stable value, capable of expanding and contracting in response to demand; a payments system that efficiently transferred money and cleared cheques in a growing national economy; and the services of a lender of last resort" (2003, p. 3). The public good explanation of the Fed therefore contends that society in general would benefit from the financial stability provided by that institution, but that no individual or group of individuals were sufficiently incentivized to bear the cost of it themselves because of the aforementioned free-riding problem. The solution was for the government, acting in the public interest, to create an institution that would provide the public good of a more stable financial system.

3.3.2. Plurality of Influences

Moreover, the public good explanation of the Fed is bolstered by the ostensibly compromised nature of the *Federal Reserve Act*. Jeong et al. describe how diverse groups, including farmers, reform-minded Progressives, and national bankers all had significant influence on the formation of the Fed. This range of influencers ensured that the benefits of the Fed were distributed broadly and not inequitably privileging certain groups at the expense of others. They write of the *Federal Reserve Act*: "The compromise prevented any single interest group or political party from exercising dominance over Fed policy and operations" (Jeong et al., 2008, p. 491). In the same vein, Allan Meltzer (2005) highlights President Woodrow Wilson's attempts to balance the interests of the bankers with the interests of the broader public. He notes how this compromise is reflected in the original structure of the Fed, with there being "a politically

appointed Federal Reserve Board in Washington and regional banks in principal centers, run by bankers, with no clear division of authority between the two" (Meltzer 67). The fact that power was distributed between bankers and political appointees, as well as the diversity of influential voices in the creation of the legislation, suggests that the Fed was created by a government seeking to further the public interest.

The main thrust of the public good argument is that the Fed was needed to resolve the frequent banking crises that plagued the financial system, and that the equitable character of the *Federal Reserve Act* should not be impugned given the compromises reflected in the legislation.

Chapter 4. The Rent-Seeking Explanation

4.1. Rent-Seeking Defined

4.1.1. Rent

The concept of 'rent' in the economic sense differs from the common usage of the word and therefore requires precise definition. David Ricardo (1911) was the first to theorize about economic rent. Writing in an agrarian context, he understood rent to be the residual value of the land, distinct from profit, or the return to capital (p. 45). Hence, land value is equal to the value of the capital plus rent. Rent is unique in that it provides income that was not earned in the way that wages for labor or interest for capital is earned. In a modern economy, rents exist in a variety of forms including: explicit government subsidies, hidden subsidies, i.e. trade restrictions and tax code provisions, and non-competitive procurement (Stiglitz, 2012, p. 40). Because these rents are so lucrative, individuals and firms compete to obtain them. This competition is known as rent-seeking.

4.1.2. Rent-Seeking

Rent-seeking refers to the efforts of individuals and groups to seek a more favourable distribution of public resources in a society. There are two main types of costs associated with rent-seeking activity, positive costs and normative costs. Whereas positive costs describe diminished efficiency in the use of resources, normative costs describe a diminished sense of equity in society. Positive costs refer to the resources that are wasted in the attempts to obtain or prevent these redistribution transfers (Tullock, 1967, p. 47). If the likely return from a rent is its value multiplied by the probability of obtaining it, it is rational for a firm to invest resources up to this amount in attempting to procure the rent. Other firms will make similar investments while still others may invest resources in obstructing the provision of this rent (p. 44). Tullock

(1980) concludes that although a rent-seeking investment is efficient for the individual firm, "it involves a tremendous waste from the standpoint of society as a whole" (p. 31).

Normative costs refer to the misalignment of private incentives and social returns that results from rent-seeking. The essence of the theory of capitalism, as propounded by Adam Smith, is that the self-interested interactions of individuals and firms in a free market will produce benefits for society as a whole. In contrast, rent-seekers try to determine "how better to ensure monopoly power or how better to circumvent government regulations intended to align social returns and private rewards" (Stiglitz, 2012, p. 35). According to Anne Krueger (1973), the perceived unfairness of the economic system due to rent-seeking activity can cause social disenfranchisement (p. 302). Stiglitz (2012) links the presence of rent-seeking activity in the economy with "the erosion of our sense of identity in which fair play, equality of opportunity, and a sense of community are so important" (p. 117).

4.2. Rent-Seeking vs. Public Goods

The theory of rent-seeking and the theory of public goods are diametrically opposed on two fundamental issues: 1) The assumed motivations of government agents, and 2) The efficiency of governmental regulation. In regards to the former issue, public goods theory conceptualizes government agents who seek to determine the public interest and take action to improve the general welfare. It assumes, in Holcombe's words, "a benevolent government acting in its citizens' interests, to maximize social welfare" (1997, p. 21). In sharp contrast to the altruistic motivation in the theory of public goods, the theory of rent-seeking understands government agents as rationally self-interested. Tollison (1982) postulates that the market is a proprietary setting whereas the political setting is non-proprietary in that individual agents do not experience the full benefits and costs of their actions (p. 589). For example, an inefficient business decision will cost the owners profits while a wasteful political decision will not directly cost the individual politician or bureaucrat anything, provided it is not particularly egregious or publicized. The individual government official is then incentivized to disburse public funds, in the form of rents, if they have a chance to gain personally, through votes, campaign contributions, influence, etc. A decision in the

public interest will not benefit them personally; but a decision which serves the rent-seeker may benefit them personally, while the costs would be absorbed by the general public.

Furthermore, the two competing theories offer distinct perspectives on the efficacy of government regulation. The theory of public goods contends that government intervention in the economy is essential to rectify market failures. If the market is not providing an optimal quantity of the public good due to the problem of free-riding, it is efficient for the government to estimate the optimal quantity and provide it unilaterally. On the other hand, rent-seeking theorists observe that government regulation has the effect of reducing rather than increasing social welfare. They maintain that these regulations can result in the creation and persistence of rents by restricting freedom of entry, and thereby competition, in the regulated industry. According to Buchanan (1980), rents that emerge in the economy will naturally dissipate as firms compete to obtain these rents (p. 7). This dissipation will not occur to the same extent if competitive forces in the market are constrained. Buchanan goes on to summarize the effects of government intervention in the economy:

If government commences, as it has done on a sweeping scale, to interfere piecemeal in the market adjustment process, the tendency toward the erosion or dissipation of rents is countered and may be wholly blocked...Rent seeking activity is directly related to the scope and range of governmental activity in the economy, to the relative size of the public sector.

(p. 9)

Buchanan argues that by attempting to correct market failures for the public good, the resultant government regulations can cause greater social costs by sustaining rents. An example of these social costs is developed by Posner (1975), who notes that the rents created by government regulation result in supracompetitive pricing, i.e. higher prices than in a competitive market, because of restrictions to entry and price competition (p. 818).

4.3. The Fed as a Product of Rent-Seeking

The rent-seeking explanation of the Federal Reserve posits that the Fed conferred benefits to certain groups, namely national bankers, inflicting positive and normative costs on the general public in the process.⁴ Additionally, this explanation points to the heavily one-sided influence of these bankers on the formation of the *Federal Reserve Act*. Murray Rothbard castigates the public good explanation as an "intellectual shell game" and a "smoke screen of ideology" for deceptively claiming to promote the general welfare (Rothbard, 2002, p. 185).

4.3.1. Rents Created by the Fed

Murray Rothbard (2002) contends that the Fed was created to facilitate inflation in a coordinated manner (p. 186), and that this function conferred rents to member banks. While a comprehensive analysis of inflation theory, much less a clear resolution of contrasting perspectives, is outside the scope of this research, a brief overview of inflation and its putative effects will be undertaken to demonstrate how the Federal Reserve's facilitation of inflation could be understood as a distribution of rents.

In order to support the argument that facilitated inflation is a form of rent, it must be demonstrated that this inflation caused a redistribution of wealth in favour of member banks and to the detriment of some other sector(s) of the economy. The general effect of inflation is that it "lowers the real value of nominal assets and liabilities and thereby redistributes wealth from lenders to borrowers" (Doepke & Schneider, 2006, p. 1070). In other words, "the lower the leverage ratio, the greater is the groups exposure to inflation" (Bach & Stephenson, 1974, p. 5). Because most households and businesses are both creditors and debtors to some extent, it is their net status that will determine whether inflation increases or decreases their wealth. In terms of households, Doepke & Schneider note that generally young middle-class households have significant debt

⁴ While both positive and normative costs are associated with the rent-seeking activity of national bankers, this analysis will exclusively focus on the normative costs. The positive costs, i.e. the lobbying investments, political contributions, etc., were present but were not relatively significant as a waste of social resources. The normative costs, i.e. redistributions from the general public to member banks of the Fed, are potentially much more significant.

through mortgage loans, which makes them the greatest beneficiary when inflation reduces the real value of that mortgage (2006, p. 1095). Conversely, the older middle-class and the poor, who favor deposits, as well as rich households, who favor long-term bonds, will be negatively affected by inflation as it reduces the real value of their assets (p. 1083). In terms of businesses, Bach and Stephenson postulate that "Nonfinancial corporations in the aggregate have been consistent net debtors" (1974, p. 7). This suggests that in general businesses benefit from inflation as it reduces the real value of their debts, although this will likely vary from business to business and sector to sector. Debate remains over how this wealth increase in a business is allocated. Bach and Stephenson's research shows "a substantial shift in the distribution of current income from businesses (profits) to wages and salaries (1974, p. 12) although they acknowledge that this contradicts the conventional wisdom that business owners benefit disproportionately to labor because of the time lag as wages adjust to inflation.

Financial institutions are both lenders and borrowers, though they will generally be net lenders given the nature of their business. Therefore, inflation will decrease the wealth of banks to the extent that inflation is underestimated in the nominal value of their loans (Bach & Stephenson, 1974, p. 2). It appears that this inflation underestimation is not necessarily unusual as Alchian & Kessel (1959) observe that "the available evidence suggests that one of the regular results of inflation is that the owners of bank shares suffer. The experience of the owners of bank shares in the United States, Germany, Austria, Chile, and France suggests that the real value of bank shares declines during inflation" (p. 535). In light of these findings, how is it that facilitated inflation could be considered a rent distributed from the Federal Reserve to member banks, if banks are generally harmed by inflation?

A case can still be made that the Fed was designed, at least in part, to facilitate an expansion of the money supply, when this expansion is examined in greater detail. Even if banks in general have their wealth reduced due to inflation, member banks of the Federal Reserve benefit from unique opportunities that can serve to increase wealth even if the real value of their loan portfolio declines.

In the Federal Reserve System, member banks are the first recipients of the newly minted, inflated dollars, which they then circulate in the economy through a variety

of functions. Richard Wagner expounds on how inflation, especially when facilitated by a central bank, confers exclusive benefits. He states that monetary expansion is not a neutral distribution because everyone does not receive the inflated dollars at the same time. Therefore, the process of inflation results in "distributional changes" in favour of the banks, and to the detriment of the general public (1986, p. 531). Jesus Huerta de Soto summarizes this process: "the first to receive the monetary units benefit from the situation at the expense of all other economic agents, who find themselves purchasing goods and services at rising prices before any of the newly-created monetary units reach their pockets" (2006, p. 533). Rothbard identifies the two mechanisms of the Fed that facilitate this inflation: 1) Lender of last resort - the Fed's responsibility to provide credit in times of crisis allows banks to hold less in reserve and extend more credit, thereby expanding the money supply; and 2) Control over fractional reserve requirements - the Fed can also expand the money supply by reducing the reserve requirements, which they in fact did - cutting the average minimum reserve before the inception of the Fed of 21.1% down to 9.8% by 1917 (Rothbard, 1984, p. 105-6). Ron Paul (2009) offers a trenchant summary of the Federal Reserve's control over monetary policy and the attendant dangers:

After all is said and done, the Fed has one power that is unique to it alone: it enables the creation of money out of thin air. Sometimes it makes vast new amounts. Sometimes it makes lesser amounts. the money takes a variety of forms and enters the system in various ways. And the Fed does this through techniques such as open-market operations, changing reserve ratios, and manipulating interest rates, operations that all result in money creation. Given that money is one half of every commercial transaction and that whole civilizations literally rise and fall based on the quality of their money, we are talking about an awesome power, one that flies under the cover of night. It is the power to weave illusions that appear real as long as they last. That is the very core of the Fed's power.

(p. 2)

It is this illusory money created out of "thin air", representing a form of rent, that member banks of the Federal Reserve are able to capitalize on.

It is an overstatement to suggest that the facilitated inflation that benefits member banks serves to harm the public generally, given the aforementioned research on the "winners" and "losers" from inflation. However, it is fair to say that some groups are

harmful by inflation, notably poor, older middle-class and rich households, as well as some businesses. Therefore when member banks increase their wealth by inflation created by the Federal Reserve, this is not the creation of new wealth, but the redistribution of wealth from those groups. The exclusive nature of the benefits, i.e. only member banks of the Fed, and the redistributive nature of the benefits strongly suggests that inflation facilitated by the Federal Reserve should be considered a form of rent.

4.3.2. The Influence of Rent-Seekers on the Fed

In addition to the rents conferred to member banks by the Fed, in the form of facilitated inflation, proponents of the rent-seeking explanation of the creation of the Fed point to the overt influence of national bankers on the legislation. This influence is most clearly illuminated in one key milestone leading up to the passage of the *Federal Reserve Act* - the Jekyll Island conclave. The conclave was arranged by Senator Nelson Aldrich, the chair of the bipartisan National Monetary Commission, and incidentally, the father-in-law of John D. Rockefeller Jr. Aldrich was in fact characterized by Rothbard as "Rockefeller's man in the U.S. Senate" (Rothbard, 2002, p. 244). The consultants that Aldrich invited to Jekyll Island were portrayed by Elmus Wicker as a "secret cabal of New York bankers" (2005, p. 4). Rothbard described how the major financial elites were well-represented in a group comprising "two Rockefeller men (Aldrich and Vanderlip), two Morgans (Davison and Norton), one Kuhn, Loeb person (Warburg), and one economist friendly to both camps (Andrew)" (2002, p. 253). This group produced the *Aldrich Plan* for banking reform. The *Aldrich Plan* changed, nominally, to the *Glass Bill* when the Democrats came to power in 1912, which became the basis for the *Federal Reserve Act*. Because the main tenets of the *Aldrich Plan*, drafted by the bankers at Jekyll Island, were essentially preserved, Wicker concludes that "The New York bankers got all they wanted, with the single exception of banker control" (2005, p. 94). The influence of financial elites, most blatant at Jekyll Island, seems to undermine the compromised nature of the *Federal Reserve Act* which is postulated by proponents of the public good explanation.

Thomas Hardwick, a Democrat House member, criticized the Federal Reserve legislation proposed by his own party because he feared that it would create a

formidable power that could be used to supply rents to the financial industry to an unprecedented degree by:

Giving as a substitute for the alleged private monopoly of Wall Street a gigantic monopoly that binds together all of the banks in the country, issues to them unlimited paper money from the Treasury in Washington on their assets, creates 12 great central banks, and puts a government board in charge of the whole combination. In other words, fleeing from the evils of Wall Street and a private monopoly, we rush headlong and pell-mell into the arms of a great public monopoly - a system that we create today, but may not be able to destroy tomorrow; that we control now, but that may control us before the end is reached.

(West, p. 118)

Hardwick's apprehension about the Fed conferring substantial benefits on the financial industry accords well with the rent-seeking explanation.

Chapter 5. The Selective Incentives Explanation

It is difficult to adjudicate between the public good explanation and the rent-seeking explanation of the creation of the Federal Reserve. Both explanations offer cogent arguments and draw on supportive data to justify their positions. Therefore, it appears that the most accurate account of the creation of the Fed lies somewhere in between the two theories. A third perspective, the Selective Incentives explanation, will be less clean and more nuanced than either the public good explanation or the rent-seeking explanation in their pure form. However, it will provide a theory that incorporates the most persuasive components of the previous explanations into a coherent whole.

5.1. Selective Incentives Defined

The concept of "selective incentives" comes from Mancur Olson's book The Logic of Collective Choice (1965). Olson started from the axiom of rationally self-interested individuals and went on to deduce implications for the participation or non-participation of these individuals in groups. His conclusion, in a nutshell, is that "rational, self-interested individuals will not act to achieve their common or group interests" (1965, p. 2). Of particular interest here is Olson's findings on the behaviour of large groups, or latent groups, in his nomenclature. Latent groups are characterized by being so large that no single member makes a noticeable contribution to the furtherance of that group's aims. Therefore, Olson concludes that even though an individual member in a latent group would benefit from the good sought by the group, they will not be sufficiently incentivized to contribute to it (p. 50). They will rationally surmise that because they do not make a significant contribution individually, their withdrawal will not cause others to withdraw from the group and the good will be provided without their participation (p. 12). When each individual in the group follows a similar decision-making process, there will be insufficient support for that public good to be provided.

In a latent group then, individuals will only contribute if they have additional incentives other than the public good. Olson refers to these additional incentives as "selective incentives." While the public good may be unavoidably collective, selective incentives can be exclusive. In Olson's words,

Only a separate and selective incentive will stimulate a rational individual in a latent group to act in a group-oriented way. In such circumstances group action can be obtained only through an incentive that operates, not indiscriminately, like the collective good, upon the group as a whole, but rather selectively toward the individuals in the group. The incentive must be 'selective' so that those who do not join the organization working for the group's interest, or in other ways contribute to the attainment of the group's interest, can be treated differently from those who do.

(p. 51)

Once selective incentives are in place, the group becomes a "mobilized latent group" (p. 51) which has now incentivized sufficient participation from self-interested individual members to procure the desired good. It is not necessary for all, or even many, group members to receive selective benefits, as long as a subset of members are willing to fund the entire cost of the public good themselves.

Olson has been criticized for over-generalizing his conclusions about group behaviour. Pamela Oliver (1980) notes that "sometimes rational individuals will participate in collective action, and sometimes they will not. The problem of collective action may increase, decrease, or remain constant as group size increases" (p. 1358). In other words, it is an overstatement for Olson to claim that it is generally rational for individuals to eschew collective action. For example, Andreas Kyriacou observes that intrinsic motivation may be an alternative to the motivation derived from selective incentives. Depending on the nature of the selective incentives, they may have counterproductive effects by "crowding out" group participation that would otherwise have been intrinsically motivated (2010, p. 831). Notwithstanding this line of criticism, it is sufficient for the purposes of this research that selective incentives can often be employed to motivate the procurement of a collective good, even if there exist other instances where this is not the case.

There are two necessary clarifications about how the concept of selective incentives is used in this analysis. Selective incentives may take the form of either

positive inducements to participate or negative consequences for non-participation (Olson, 1965, p. 51). In this case study on the Federal Reserve, the relevant selective incentives would be of the positive type. Furthermore, this positive selective incentive must be distinguished from a mere positive incentive. The former is selective in the sense that they can be provided to some parties but not others, whereas the latter are distributed to the group as a whole. As the following section will illustrate, the positive inducement for the creation of the Federal Reserve was selective to one group - national banks.

5.2. The Fed as a Product of Selective Incentives

The selective incentives explanation of the creation of the Federal Reserve conceptualizes the Fed as a public good that endows widely distributed benefits. However, it does not rely on politicians acting in the public interest, as the public good explanation does, rather, it is based on the same assumption of rationally self-interested actors as the rent-seeking explanation. The public, in this case, represents a latent group in which there were insufficient individual incentives to obtain the provision of the good. Therefore, in addition to the public good of a stable financial system, selective incentives would need to be added before the public could become a mobilized latent group. The selective incentives, positive inducements in this case, were special benefits provided to national financial elites to secure their political and financial support for the desired central bank.

5.3. Joint Products - Selective Incentives

J. Lawrence Broz (1999) established a useful starting point for applying the theory of selective incentives to the creation of the Fed. However, one crucial aspect, facilitated inflation, was omitted from his analysis, yielding an overly parsimonious conclusion. This analysis will build upon Broz's foundation by including the omitted component and thereby explaining more accurately the creation of the Fed with the theory of selective incentives.

Broz employed a particular version of selective incentives to explain the origins of the Federal Reserve System. He labels his usage of selective incentives as "joint products" which describes how these particular selective incentives were not only necessary to secure the provision of the public good but they were also inextricable from the public good. In the case of the Federal Reserve, Broz states that the public good was a stable financial system and the selective incentive was an international currency (p. 40). He concludes that "society at large benefitted from the bankers' lobbying effort because the private good (internationalizing the dollar) could not practicably be disassociated from the production of the public good (domestic financial stability)" (p. 40). Broz notes that not all banks necessarily benefit from an international currency, but mainly a small elite of large, specialized banks located in the national money center, in this case, New York (p. 55). These money center banks were incentivized by the expansion of business that an international currency would facilitate. "As the international use of currency expands, loans, investments, and purchases of goods and services will increasingly be executed through the financial institutions of the issuing country" (p. 55). However, before U.S. currency could gain international credibility the overall financial system needed to be stabilized. The main component of this stability, according to Broz, was "increasing the liquidity of the financial system through a system of rediscounting reserve banks" (p. 61). Once the selective benefits anticipated by the New York financial elite are understood, it is more clear why they would bear the costs of lobbying for and creating a public good, the Fed.

Broz's joint products model accounts for many aspects of the creation of the Federal Reserve. It explains the features of the Fed that appear to be genuine public goods, i.e. resolving the market failures of an inelastic currency, a lack of emergency reserves, and no mechanism for promoting efficient cooperation between banks. It also explains how a plurality of groups including national bankers, farmers, and Progressive reformers had significant input on the *Federal Reserve Act*. Additionally, the joint products model accounts for certain aspects of the rent-seeking explanation. It explains the prominent role of the New York financial elite, most demonstrably at the Jekyll Island

meeting, as motivated by the rationally self-interested pursuit of rent, an international currency in this case.⁵

5.4. Joint Products Revised

Overall, Broz establishes a useful theoretical starting point by explaining the creation of the Fed with the joint products variation of selective incentives. However, his analysis omits one crucial selective incentive anticipated by financial elites - facilitated inflation. This incentive is not neutral to the general public, like an international currency, but imposes costs. Rothbard, Wagner, and de Soto, as cited earlier, explain how the Federal Reserve uniquely privileged its associated banks. Member banks of the Fed were the first recipients of newly minted, inflated dollars and therefore were able to make investments and buy assets at pre-inflation prices. This inflation, while benefitting some groups in society, such as young middle-class households, also had detrimental effects on other groups, notably poor, older middle-class, and rich households. These negatively affected households experienced a decline in the real value of their most common asset types: deposits and bonds. The net effect of the Fed's expansion of the money supply is a redistribution of income in favor of the member banks, and some other benefitting groups, at the expense of other groups in society.

Broz's joint products model essentially assigns those affected by the creation of the Fed into one of two groups: beneficiaries and greater beneficiaries. Individuals in the general public are beneficiaries as they will enjoy the public good of a stable financial system. They will benefit from more secure savings, a greater supply of credit, and

⁵ The international currency could be considered as "rent" in the sense of it being unearned income, but not in the sense of it being detrimental to the general public. The international currency rent is redistributive in the sense that it reduces the market share of other international currencies, but it is not redistributive in the domestic economy which is our frame of reference in this analysis.

lower interest rates. The New York financial elite is a greater beneficiary. They enjoy the value of a stable financial system and, in addition, the expanded business opportunities that an international currency provides. Some may bemoan the greater benefits obtained by the financial elite, but according to Broz, this was necessary for the public good to be provided. However, when the benefit of facilitated inflation is added to the ledger, at least one more group must be added: those harmed by the creation of the Federal Reserve. This group represents those who, while they enjoy certain benefits from a more stable financial system, experience a net negative effect when their decline in purchasing power is accounted for.

The addition of the "harmed" group to the typology of effects undermines the parsimonious explanation of the creation of the Fed offered by Broz. His halcyon account of the origin of the Federal Reserve, characterized as a public good that also created some non-pernicious rents (international currency) is incomplete. The pernicious rent of facilitated inflation was also a motivating factor behind the creation of the Fed. Only when all these factors are accounted for can the public good explanation be accurately reconciled with the rent-seeking explanation. Both explanations are in fact part of the truth but not the whole truth. The Federal Reserve was created both as a public good and as a result of rent-seeking. The selective incentives theory provides a framework for both explanations to coexist.

Chapter 6. Conclusion

The selective incentives explanation resolves much of the impasse between the public good explanation and the rent-seeking explanation of the creation of the Federal Reserve. The Fed does not benefit all society more or less equally, as implied by the public good explanation, nor does it only benefit the national financial elite, as suggested by the rent-seeking explanation. Rather, it resulted in three classes of effects: 1) The greater beneficiaries - the New York member banks who obtained a stable financial system, a profitable international currency, and the redistributive benefits of facilitated inflation; 2) The beneficiaries, including: a) The segment of the general public who benefitted more from the stable financial system than they were harmed by the decrease in purchasing power caused by the increased inflation, i.e. agriculture and other industries that received access to a greater supply of credit at lower interest rates; b) Those groups who were impacted positively by increased inflation, i.e. young middle-class households with mortgage loans; and 3) The harmed - a segment of the general public who benefitted less from the stable financial system than they were harmed by the increased inflation, i.e. poor, older middle-class, and rich households, who commonly hold their wealth in deposits and bonds which tend to decline in real value.

Determining more precisely how each of the three groups (greater beneficiaries, beneficiaries, harmed) is populated would be considerably more difficult than creating the general typology. To accomplish this there would need to be accurate measurement of the relative benefits of a stable financial system and the net costs or benefits of increased inflation, both of which appear difficult to quantify with precision. For instance, in his Nobel Prize speech, Robert Lucas (1995) stated that, while progress has been made in understanding the effects of inflation in the economy, "this question has not been given anything like a fully satisfactory answer" (246). Therefore, a propitious vein for future research would be studying the relative effects of a stable financial system and increased inflation on the various demographics. This research could result in a re-categorization of some of the aforementioned groups. For example, it might be found

that rich households, though adversely affected by increased inflation, may be net beneficiaries because their socio-economic position allows them to benefit from a more stable financial system in various ways.

There remains much work to be done in clarifying how different household and business types were affected by the creation of the Federal Reserve. This research, by evaluating both the public good of a stable financial system and the rent of facilitated inflation through the theory of selective incentives, establishes a useful starting point for further investigation. The general conclusion was that the creation of the Federal Reserve had various positive and negative effects that resulted in groups being allocated to one of three categories: greatest beneficiaries, beneficiaries, and harmed, depending on their relative gains or losses. The proportion of these groups, and the degree to which they benefitted or were harmed must be assessed before a final verdict on whether the Fed represents a net gain or net loss to society can be issued. It can be concluded that the selective incentives explanation portrays the creation of the Federal Reserve as neither entirely pure nor entirely tainted, but somewhere in between. The inception of the Fed should therefore not be viewed with wholesale acceptance or wholesale rejection due to its longevity or putative role, but rather with critical analysis of all available information.

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