

**Explaining State Adoption of Performance Funding in Higher Education, 1990 – 2020:**  
*A Comparative State Policy Study*

by

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## Abstract

In the past 40 years, performance funding has become a state policy reaction for the demand of transparency for public higher education institutions. State legislatures have adopted performance funding as a mechanism to hold public higher education accountable for student outcomes. States vary in the metrics they implement, the funding allocation methods, and the amount of state appropriations used for performance funding. The most common metrics used by states to measure student outcomes are retention rates, graduation rates and state aligned labor market outcomes. Recent research estimates that over 40 states have adopted performance funding for higher education.

This research analyzed the adoption of performance funding policy with a longitudinal dataset utilizing important political, education, and economic indicators for the states. Data was collected over a thirty-year period to predict the probability of adopting performance funding for state higher education institutions. The model results indicated that the primary drivers of state adoption of performance funding for higher education are partisanship strength and higher education governance structures.

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# CHAPTER 1

## INTRODUCTION

The longest, successively performance-funding program in the United States is in the State of Tennessee originating in 1979 (Hillman, Fryar and Crespin-Trujillo 2018). In 1979, Tennessee began to base a part of state funding for public higher education institutions on performance instead of enrollment with a vision of improving student outcomes (Banta, et al. 1996). In Tennessee, the state's oldest higher education institution and most distinguished is the University of Tennessee System. Originating in 1794 and known as Blount College, this university system was at the forefront of the performance funding initiatives over 185 years later. In 1794, it was \$8 a session for college tuition (History of the University of Tennessee).

“In 2021-22, the average published (sticker) tuition and fee price for full-time in-state students at public four-year institutions is \$10,740, \$170 (1.6% before adjusting for inflation) higher than it was in 2020-21” (College Board 2021). In Fiscal Year 2017, higher education revenue was approximately funded 54% by appropriations from states to higher education institutions and approximately 46% was funded from net tuition paid by students (gross tuition and fees paid by the student less financial aid from the institution and the state, tuition waivers, and discounts) (Laderman and Carlson 2018). In Fiscal Year 2018-19, state budget appropriations of \$91.5 billion were allocated to public universities and financial aid programs by the 50 states (Nietzel 2019). States provide funding to public higher education institutions through appropriations. The federal government provides funding through federal financial aid programs like Pell Grants and subsidized and unsubsidized loans, which are provided directly to



the student. In 2019, full-time equivalent (FTE) enrollment reached 11 million FTE enrolled students equating to \$8,196 in education appropriations per FTE. In 2019, higher education institutions received an average of \$15,018 per FTE in total education revenues (State Higher Education Finance 2019).

In the last decade, various incentives have been presented by government policymakers to higher education institutions for improvement of student outcomes (A. Li 2019). Performance funding (PF) has been a policy reaction for the demand of transparency for higher education institutions (Shea and White 2014). Many states across the country have adopted, un-adopted, and in some instances, re-adopted PF. Student outcomes have been the main measurement used in the formula for the policy (Burke and Minnassians 2003). Before transparency came to the forefront, public higher education institutions were funded based upon the number of enrolled students. When state governments implement PF policies, the funding changes from an enrollment-based model to an outcome-based model.

According to Hillman, Tandberg, and Fryar (2015), the re-occurrence of performance funding (PF) for higher education institutions has been one of the single most prevalent state policy movements. In the 1990s, many states adopted PF policies during the New Accountability movement. In the early 2000s, the shortage of financial and political backing caused the disappearance of the PF policies (Dougherty and Reddy 2013). In the mid-2000s, large, powerful organizations like Bill and Melinda Gates Foundation, National Governors Association, Lumina Foundation and National Conference of State Legislatures caused the need again of PF policies (Hillman, Tandberg and Fryar 2015). By getting attention back on issues related to college completion, these organizations supported policies that encouraged college completion by linking state funding to outputs of the institution (McKeown-Moak 2013). State policymakers

presented performance funding policies to align public higher education institutions with larger economic state policy objectives when concern grew that other countries were far exceeding the United States in degree completion and the production of competitive labor markets (Hillman, Tandberg and Fryar 2015).

### **Research Question**

It seems with such a large amount of funding to public higher education institutions that the funding from states would be dependent on higher education institution performance. The primary question posed for this research is: “Why do states adopt performance funding policies for public higher education institutions?” This research will also assist in answering two other similar questions: “Why do states un-adopt performance funding policies?” and “Why do states re-adopt performance funding policies?”

Research has been examined (A. Li 2017, K. Dougherty, S. Jones, et al. 2016, Hillman, Tandberg and Fryar 2015, T. Rabovsky 2012, Cornelius and Cavanaugh 2016, Hagood 2019), qualitatively and quantitatively, suggesting issues for why performance funding policies are adopted and un-adopted. General and state-specific issues have been identified for the policy changes (Burke and Associates 2002, Burke and Serban 1997, Dougherty, Natow and Vega 2012, McLendon, Hearn and Deaton 2006). The first movement towards performance funding adoptions, which started in 1979 and lasted until 2000, created the practice of *performance funding 1.0* (PF 1.0). The PF 1.0 method established performance funding as an extra incentive for funding above and beyond normal appropriations from the state for public higher education institutions (Burke and Associates 2002, McLendon, Hearn and Deaton 2006, Dougherty and Reddy 2013) . During the period of 1979 to 2000, performance funding policies were adopted in

21 states (Dougherty and Natow 2015). During this period, these performance funding policies were thought of as PF 1.0, the first movement of policy adoptions (Dougherty and Reddy 2013).

The second movement of performance funding for public higher education institutions, known as *performance funding 2.0* (PF 2.0), began in 2007. With PF 2.0, performance funding is not an extra incentive for funding for the public higher education institutions. It is included in the base budget appropriation (Dougherty and Reddy 2013). Li terms this period of 2007 forward as the “renaissance of performance funding” (747).

State adoptions with PF 1.0 attached one to five percent of state appropriations to performance outcome measurements. State adoptions with PF 2.0 attached a greater percentage of state appropriations to student outcomes. For example, Tennessee attached 85-90 percent of state appropriations to measurements of outcomes with additional base-line budget for utilities and equipment (HCM Strategists 2013). In 2013, Ohio’s state general budget allotted 80 percent to student course and degree completion for the state universities’ main campuses for fiscal year 2014. In the same year in Ohio, course completions and the number of students were used for measurements for community colleges allotting 50 percent of the state general funding in fiscal year 2014 with the rest of the 50 percent based upon enrollment (Ohio Association of Community Colleges 2014).

The PF 2.0 methods have greatly advanced public higher education institution performance because a larger part of the state funding is attached to performance measurements (Jones 2012). Because PF 1.0 generally gives extra incentive funding during times of budget cuts, it can be delayed or terminated in order to retain normal state appropriations (Dougherty, Natow and Vega 2012). Varying issues have caused performance funding 2.0 to become a policy initiative for states. One main issue is that too many students start college and never graduate (A.

Li 2017). International competition, increased tuition, accessibility to higher education, and decreased ability to pay for college are among reasons why increased accountability was needed (Li and Zumeta 2015, Zumeta, Breneman, et al. 2012). Other state and federal needs, such as K-12 education funding and healthcare, have caused legislatures to utilize performance funding (Dougherty and Natow 2015).

Kingdon's multiple streams model (MSM) in government agenda setting will assist in helping to understand why a state adopts (un-adopts and re-adopts) performance funding policies for public higher education institutions. The separate process streams identified by Kingdon are problems, politics, and policies (2003). The identification of a problematic issue is ample enough to put it in an important position on the policy agenda (Kingdon 2003). Public higher education institutions were not being scrutinized for performance until the *Reinventing Government* movement (Ingraham and Moynihan 2001). Kingdon's MSM will assist in understanding how the problems with performance in higher education in states combined with the states' politics and policies created the streams which allowed performance-funding policies to be adopted.

### **Research Contribution**

This research will contribute to the policy perspective of public administration because the Kingdon's multiple streams model (MSM) has never been applied to performance funding policies for higher education institutions. In the past, public finance professionals have stayed away from public administration and policy. Higher education literature does not normally take models in the political realm to explain their research. This research will show the replicative value in Kingdon's MSM for performance funding in relevancy and explanation in states' higher

education policies. Using Kingdon's MSM, the research evidence replicated will show validity and reliability.

There are other convincing objectives for rigorous experimental studies of the causes of state higher education performance accountability policies. The "new accountability" measures taken in state policies for higher education signify an important milestone in developing higher education-state connections for the financial support and governance of higher education and for the ways of how chosen officials and citizens measure the value of public higher education systems. The accountability measures have not been consistent through the states. Many states have improved their overall institutional supervision in unprecedented ways in the United States. Over fourteen years ago, McLendon, Hearn, and Deaton stated that "along more academic lines, the recent proliferating of performance policies affords researchers an excellent opportunity to test general theories of governmental behavior in the specific context of higher education, where such theories have rarely been tested" (2006, 3). With some states adopting these policies and other states not adopting these policies, research needs to bring to light the driving reasons why states adopt or do not adopt these policies.

### **Research Purpose**

The purpose of this research will be to establish a better understanding of what possible variables affect the adoption/un-adoption by states of performance funding (PF) for public higher education institutions. Findings of McLendon et al. (2006) revealed issues for policy adoptions in the previous origins of the policies from 1979 to 2002. The research supported that the "primary drivers of policy adoption were legislative party strength and higher-education governance arrangements, but the direction of these influences varied across the policies studied"

(McLendon, Hearn and Deaton 2006, 1). Li (2017) analyzed data from 2000 to 2013 to review the latest movement of performance funding policies. Li found that states that had bordering performance funding state neighbors lessens the likelihood of adoptions causing a “reverse policy diffusion” (746). According to Li (2017), research suggests that states wait to see what happens in neighboring states before adopting for their state. This research will further develop and expand on prior research examining the reason why states adopt PF for public higher education institutions.

Performance funding policies have evolved into an unstable and unpredictable policy with states adopting, un-adopting, revising, decreasing the size of the funding, terminating, and in some cases, re-adopting (Burke and Associates 2002). This research proposes to ascertain the development, and in some instances, the end of performance funding by states in public higher education institutions. It will explore why states adopt and un-adopt performance funding policies at specific times over the thirty-year period of this research. To assist in further understanding the lifespan undercurrents of performance funding, the research will look to Kingdon’s multiple streams model consisting of problems, politics, and policies. To understand the public higher education institution policy development, the history of policy adoption for performance funding and the collapse will need to be reviewed briefly.

Performance funding policies have had other underlying effects on public higher education institutions. Dougherty, Jones et al. state that “advocates of performance funding often describe causal consequences in which such programs will stimulate institutional changes in academic and student services policies, programs, and practices, which, in turn, will generate improvements in student outcomes” (2016, 4). In most circumstances, institutional changes that are being pursued by policymakers are not specified (K. Dougherty, R. Natow and S. M. Jones,

et al. 2014). McDonnell and Elmore indicate that “these causal sequences involve specific ‘policy instruments’ or ‘mechanisms that translate substantive policy goals into concrete actions’” (1987, 134). The primary policy instrument deemed by performance funding advocates is the stipulation of financial enticement that looks like a business profit in the private sector (K. Dougherty, R. Natow and S. M. Jones, et al. 2014, J. C. Burke 2005, Dougherty and Reddy 2013).

Utilizing a regression model, this research will seek to find evidence of why states adopt performance funding (PF) for public higher education institutions. This research will look at the states’ decision to adopt/un-adopt and in some cases re-adopt over a thirty-year period from 1990. Because this research will be examining governmental behavior among states and through time, the research will require a dataset that will accommodate both the spatial and chronological aspect of the state behavior to adopt or not to adopt, un-adopt, and re-adopt performance policies. A longitudinal dataset containing annual indicators of the variables that the research hypothesis can affect adoption of performance policies for higher education over the period of 1990 – 2020. This research will utilize a 47-state dataset that is like other studies in the field (Berry and Berry 1990, M. Mintrom 1997). Alaska, Hawaii, and Nebraska will not be used in this research. Alaska and Hawaii are excluded because of their non-contiguity to other states which causes problems in assessing diffusion. Nebraska is excluded because of the state’s nonpartisan legislature which causes problems for testing some of the political variables (McLendon, Hearn and Deaton 2006). The literature review will follow in Chapter 2 which will include questions that will guide the review through different areas of importance regarding performance funding. It will also include key definitions and the backgrounds and an overview of performance funding. Chapter 3 explains the research design directing the analysis of this dissertation. This chapter will provide

details on the variables selected, data sources and their operationalization, and explain the quantitative methods utilized to focus on the research questions. Chapter 4 will follow with the results from the testing of the variables from the test methods that are used to hypothesize the probable relationships between adoption of performance funding and the chosen variables. The final chapter will review the implications of the findings, contributions to the literature, limitations to the findings and possible areas of future research.



## CHAPTER 2

### LITERATURE REVIEW

The following questions direct the literature review: What theoretical framework will assist in understanding performance funding adoption and un-adoption? What key definitions are relevant to this research? What has been the leading political landscape reasons for states adopting performance funding policies? Why did the accountability movement happen in public higher education institutions? When did states start adopting performance funding? What variables for performance funding are reviewed in other literature? What does performance funding look like in different states? What independent variables have prevailed in the literature about performance funding? When did performance funding become important?

#### **Theoretical Framework Used to Understand Performance Funding Adoptions**

John Kingdon's (1984) multiple streams model (MSM) of problems, politics, and policies assists in understanding why performance funding, a top priority now in the states, was not until the mid-1990s. Prior to this period, states were funded with state appropriations derived from enrollment-based models instead of performance models (A. Li 2019). As Kingdon asks "what makes people in and around government attend, at any given time, to some subjects and not to others?" (1995, 1). The 1990s created such a climate that caused performance funding to become very important in public higher education institutions. With reductions in states' revenues due to the recession, public higher education institutions were competing with healthcare funding along with welfare, corrections and secondary public schools. During these times, it was even more

important than ever for public higher education institutions to align with states' goals regarding workforce development in a national climate where economic competition was very strong (J. C. Burke 2002a).

Kingdon's model asserts that the three streams can occur without any association at all until the problems and policies meet to place a policy on the forefront of policy priorities. Kingdon explains that public policy making may be thought of as a collection of processes which contains at a minimum "(1) the setting of the agenda, (2) the specification of alternatives from which a choice is to be made, (3) an authoritative choice among those specified alternatives, as in legislative vote or a presidential decision, and (4) the implementation of the decision" (1995, 2-3). Keeping in mind that success in a single process does not suggest success in another process. Kingdon focuses on the first two processes in his work. To understand why some matters develop into importance on the policy agenda and others do not is Kingdon's focus and why some alternatives are deliberated, and others abandoned.

Kingdon regards agenda as a list of issues, problematic or not, that governmental officials, and non-governmental individuals directly related to those officials, are giving specific and significant consideration on any occasion. When governmental officials and non-officials come together to make policy decisions, numerous issues or problems exist but only a very small few of them are given attention and the others are not. Kingdon distinguishes between governmental agenda and decision agenda. Governmental agenda includes a listing of issues or problems that are getting the attention, and the decision agenda includes a listing of issues or problems inside the governmental agenda that will get an active decision. These two agendas are influenced by rather distinctive processes (Kingdon 1995).

Other separate pieces of these processes for policies are alternatives for government action which are strongly deliberated by government officials and individuals linked with them. Kingdon offers that one scholar will contend that possibly authorities, specialists and experts will control the agenda and another scholar will contend that large, visible public problems and positions like the president and important senators control the agenda. Given that agendas and alternatives are governed by distinctively separate processes, experts may be generating the alternatives while presidents might be setting the agenda.

Kingdon suggests that two groups of elements that may influence agenda setting and the requirement of alternatives. The active participants and the processes that agenda issues and alternatives arise into importance are the two groups. Sources for agenda subjects and alternatives are government officials, elected and non-elected, and numerous non-governmental powers, such as, interest groups, political parties, media and the public. The agenda setting can include the shift of issues from a non-governmental, general agenda to a governmental, official agenda. Professional groups and policy elites may push an agenda issue by diffusion of ideas amongst themselves. Changes in party control through elections may result in an agenda or alternative moving to the forefront of issues. Kingdon points out that a critical point of advantage for agenda issues and alternatives could be elected officials and political parties. This research will include these two participants as variables, governors and legislatures, to ascertain their importance and possibly reveal if any relationship exists between adoptions of performance funding and political party affiliations.

Kingdon suggests that we can just look at the participants, but we must look at the game to gain a better understanding of agendas and alternatives. The game is the processes where agendas are set, and alternatives are identified. According to Kingdon (1995), the processes in

agenda setting and alternative specification are problems, policies, and politics. Problems arise from crisis and important events which trigger attention to problematic issues. In public higher education, problems of rising costs of tuition, retention rates, underrepresented students, and college completion have brought accountability to the forefront of the agenda.

The second process, policies, may be created through an ongoing accumulation of information and perspectives amongst the professionals surrounding a specific policy which can produce policy propositions. In public higher education, major donor foundations supported policies that pushed for institutional outcomes of performance. As stakeholders, these foundations supported new ways to measure the outcomes of public higher education institutions for efficiency and effectiveness which provided accountability for their donations (K. J. Dougherty, R. Natow, et al. 2013).

Lastly, the agenda can be influenced by political processes. Fluctuations in national attitudes, notions of public opinion, results of elections, governmental and non-governmental administrative changes, and congressional changes could possibly develop influential consequences. Prior research has shown that openings that allowed performance funding to make it to the agenda included changes in government control where usually Republicans won control over either legislative body or the governorship (K. J. Dougherty, R. Natow, et al. 2013).

As Kingdon noted, “each of the three processes—problem recognition, generation of policy proposals, and political events—can serve as an impetus or as a constraint” (1995, 18). As graduation and retention rates were decreasing in public higher education institutions (an impetus), governmental officials were forced to have accountability (items rising to the agenda) as costs were increasing dramatically with fewer students being served. As states were moving through the period of proration and constraints, these constraints could have possibly prevented

performance funding from being on the agenda. Certain items may not escalate to the agenda for the reason of budget constraints, public approval, opposition from influential interests, or maybe it is to a lesser extent not as imperative as other items in the struggle for the agenda (Kingdon 1995). A deeper dive will be taken now into the framework to advance the understanding of the literature for Kingdon's multiple streams model.

### *Participants, Inside and Outside of the Government*

Kingdon's model has been mostly utilized for policies related on the federal level, and it rarely has been used on the state or local levels. In Kingdon's work, participants are in the federal administration of the president, the staff of the Executive Office, and the political appointees in departments and bureaus (1995). With performance funding, this research will focus solely on state government. The administration of the state government would include the governor, the cabinet of the governor, and any appointed officials. Kingdon (1995) refers to the president's agenda as always taking first place while all other issues fall to second. Governors are engaged individually and directly in almost all governing strategies, policy agendas or campaign for new issues (National Governors Association 2018).

The governor has institutional resources just like the president. The president's institutional resources include the power to veto and to hire and fire non-elected government officials. The other two presidential resources are organizational and the control of public attention (Kingdon 1995). State governors have the same resources at their disposal. The governor has the power to veto legislative measures and appoint and fire to state executive branches just like the president. The governor has gubernatorial appointments for the executive branch, board and commissions appointees (in most states), and state cabinet appointees. Lastly,

the governor does have control over public attention given the position (National Governors Association 2022).

Kingdon refers to the presidential staff as an inside part of the government. In states, governors have the same type of staff, often referred to as the governor's cabinet. Governors in some states may also appoint officials to judgeships (usually is confirmed by one or both houses of the state legislature), boards and commissions. The governor's cabinet, an advisory position, are usually officials selected by the governor to oversee state departments and agencies (National Governors Association 2022). This study of adoption of performance funding will not look at the governor's staff and appointees. Kingdon's model also discusses civil servants and their role in agenda setting (1995). This study will not examine the civil servants for performance funding for public higher education institutions on the state level.

Outside of government are interest groups, academics, researchers, media, consultants, political parties and other individual affiliated, and citizens. One important distinction between individuals inside the government and those outside of the government is those inside the government possess formal power and influence permitted by statute and the constitution. Government officials lobby and are lobbied through interest groups. Specific types of researchers consistently develop unvarying and familiar associations with individuals in government, every so often as a paid consultant, at other times appearing as an expert before congressional committees, and many times in a more casual role. The exchange of information amongst those inside and outside of the government is direct and open, and opinions and knowledge drift around in the exchange in the complete issue association of participating individuals. Those individuals, inside and outside of government, create bonds about shared ideals, tendencies, and world opinions (Kingdon 1995).

This research will only expand in the literature review on the interest groups, political parties and other affiliated individuals, and citizens. The others that are not included outside of government participants (i.e., academics, researchers, and consultants) do not seem to have any causal effects on adoption or non-adoption of performance funding. The different types of interest groups range from “business and industry, professional, labor, public interest groups, and governmental officials as lobbyists” (Kingdon 1995, 47).

Interest groups of public higher education could be foundation donors like Bill and Melinda Gates who are extremely interested in how their donations are being used for education. Activity of interest groups differs greatly depending on the policy agenda. A selected amount of the interest group activity affects the agenda and some of the activity affects the alternatives considered by the policy makers. The interest group activity may be affirmative regarding the government action needed for the policy and some of it could be bad or undesirable with a goal of inhibiting any changes to the policy. It is noted in Kingdon’s work that one cannot give all the credit to the development of agendas completely to interest groups. Generally, agendas materialize to a position of important government deliberation from multifaceted reasons and not from just interest group activity. Even when an issue is brought to the forefront by an interest group, it usually does not dominate the debate. In the Kingdon multiple-streams model, the interest group activity can be identified as a policy stream. Kingdon mentions interest group resources like election advantages and disadvantages, statuses that can affect the economy, and interest group unity (Kingdon 1995). In public higher education, donors have a large, vested interest in the performance of the institutions which can overflow into election advantages and interest group unity.

Elections determine the government officials who submit numerous significant decisions in government which affects agendas. Policy direction may be understood as a preference with election results. Politicians additionally render several promises while campaigning, and political parties choose views and opinions in strategies and platforms. These promises might possibly shape an agenda once they are in office. Elections cause influential understood results on governmental policy agendas. Administration changes from elections can render changes in agenda, alternatives, and programs for national, state and local governments. The new administration may support some agendas, and equally as important, not support other agendas. Generally, democrats are seen “as more interventionists, more willing to spend on domestic (particularly social) programs, and more willing to use government to regulate the private sector than the Republicans” (Kingdon 1995, 64-65). In this research, we will examine the likelihood of political party affiliation of the governor and the legislative body and the adoption or non-adoption of performance funding.

The state of public opinion may affect the judgement of government officials that may affect their policy agenda. On occasions, government officials may sense the public opinion on the national level guides them to follow a different path of direction. Positive or negative effects may occur from public opinions. It can either push some issues forward to the government agenda because maybe the great number of citizens interested in the issue can cause it to be popular for politicians seeking votes during an election. The most obvious of public opinions are probably the negative constraints stopping a government action instead of the positive opinions causing some action. Most often, it is the constraints causing government not to do something that prevail instead of the public opinion pushing government to act (Kingdon 1995).



## *Problems*

Most of the time, problems are brought to the attention of government officials and decision makers normally not through political force or insightful notion but for the reason of some little or large organized sign that indicates a problem exists. Because various activities and events are normally watched by government and nongovernmental agencies, these signs of problems come to the forefront of agendas at any given time.

Governmental and nongovernmental officials follow patterns of state expenditures and budgetary effects as a monitoring tool to reveal possible problems in public administration. Governmental agencies and nongovernmental researchers often perform a study on a particular problem to reveal if additional attention is needed on the issue. Indications of problems or studies are utilized to measure the severity of the problem and to develop any needed responsiveness to possible changes in the problem. Changes in the indicators that are monitored by government and nongovernmental officials can also reveal a problem that did not exist until the indicator changed. Problems do not always come to the forefront by indicators. A crisis or disaster can happen to bring attention to the powerful problem which brings it to a more personal level for the policy maker (Kingdon 1995).

Why do problems fall off the agenda? Oftentimes, government officials feel as they have worked out the problem. Sometimes as they focus on new problems, they may lose sight of the old problems because the new problems need more attention at any given time. Even more so the case, governmental officials adopt policies to address problems and then the problem is no longer an issue whether it is really solved or not by the newly adopted policy. Lastly, other problems go without being resolved or attended to and it just disappears. When a problem is not resolved, attended to or even a success, the problem can still reach its end to be an important

agenda issue. For a problem to remain an important issue, it requires time, determination, actors being organized and the spending of political resources to ensure it has staying power for importance (Kingdon 1995).

Budgets may either act as a constraint for problems or a promoter of problems. When it is a constraint for the problem, the program if adopted may not have as many options because of the lack of funding. Alternatives, initiatives, and proposals for problems are limited due to the need to reduce expenditures for the problem within the adopted policy (Kingdon 1995). In some instances, it may seem as though funding is just thrown at problems with no real resolution. In this instance, the problem just seems to grow larger than before the policy was adopted.

### ***Policy Primeval Soup***

Communities exist where specialists like academics, congressional staffers, interest groups, individuals in budget and planning offices, and researchers where ideas drift about amongst this community. These specialists have perceptions and ideas with unclear beliefs about imminent directions, and their additional proposals. During lunches, published articles, distributed papers, hearings, testimonies, and drafting and forcing legislative proposals, these specialists exchange their ideas and notions. According to Kingdon, “generating alternatives and proposals in this community resembles a process of biological natural selection. Much as molecules floated around in what biologists call the ‘primeval soup’ before life came into being, so ideas float around in these communities” (1995, 116-117). Numerous ideas are conceivable just as numerous molecules are possible. Ideas turn out to be important and then they diminish. Kingdon notes that “there is a long process of ‘softening up’: ideas are floated, bills introduced, speeches made, proposals are drafted, then amended in response to reaction and floated again”

(1995, 117). Ideas float around in this soup like molecules and come together by numerous means. When these ideas float around in the policy primeval soup, the ideas that stand the test of time are much like the natural selection system because they happen based upon some conditions (Kingdon 1995).

Policy communities are made up of specialists from many different policy areas such as health, education, and housing just to mention some of them. These specialists may be dispersed equally inside and outside of government. The common factor that unites them all whether they are on committee staffs, just employed by government, academics or interest groups is that they have the same beliefs and value about a certain policy issue. Political events such as changes in the administration or pushes from legislative constituencies are independent from the specialists in the community. However, the specialists are influenced by and respond to the political events. Nonetheless the dynamisms that force the political stream and the policy stream are somewhat diverse. Each stream has an existence of its own, standing alone from the other.

The pertinent communities of specialists differ immensely from one policy area to another in the degree of fragmentation. Communities can be extremely near and closely joined or they may be different and disjointed. The fragmentation has consequences like policy fragmentation. It is like the saying that the right hand does not know what the left had is doing which can greatly affect the right hand. Another consequence is the closely jointed communities creates shared viewpoints, alignment and approaches for ideas. These communities are bolstered by their assimilation. Finally, fragmentation produces uncertainty. Kingdon refers to agenda stability as having “structural anchors to the agenda” (1995, 120).

In the policy primeval soup, a varied number of ideas can be considered at any stage of the problem or policy in many ways. These ideas are floated around in the soup, and they are

considered quickly and fade or they are considered seriously and survive. We have mentioned that there are advocates for proposals and the importance of an idea. Kingdon labels advocates as policy entrepreneurs who may not be found in one location in the policy community. They may be located inside or outside of government, as elected or non-elected officials, in an interest group or as a researcher. The distinguishing characteristic of the policy entrepreneur “is their willingness to invest their resources—time, energy, reputation, and sometimes money—in the hope of a future return” (Kingdon 1995, 122). This return to the policy entrepreneur may appear as an approved policy, participation fulfillment, or personally, as security in a job or career advancement.

Oftentimes in government, individuals do not solve problems but develop into advocates for solutions. They then wait for problems to attach “their pet solutions” (Kingdon 1995, 123). Personal interest oftentimes encourages advocacy and is viewed as an incentive for the policy entrepreneur. Another incentive to advocate is the promotion of one’s values or change the form of public policy. Lastly, policy entrepreneurs become policy groupies. These entrepreneurs partake and unite for “solidary” incentives while some merely enjoy the game (Kingdon 1995, 123).

Evolution theorists differentiate between mutation and recombination. It can be explained as evolution advances not necessarily by mutation or something totally new in structure but by recombination which appears in a different wrapping of previously recognizable components. Therefore, the difference becomes a recombination instead of a mutation.

To some extent, ideas drift easily in the policy primeval soup. Advocates do not permit the process to be entirely happenstance. Policy entrepreneurs start discussing their ideas in many forums making an effort to “soften-up” the policy communities and the greater publics gaining

acquainted to the new ideas and gaining acceptance along the way (Kingdon 1995, 128). Policy entrepreneurs are softening up the general public, a specialized public or the policy community itself.

At the time an idea becomes a proposal, it must possess “technical feasibility, value acceptability within the policy community, tolerable cost, anticipated public acquiescence, and a reasonable chance for receptivity among elected decision makers” (Kingdon 1995, 131).

Advocates’ proposals must be probed intensely in the facts and the procedures, progressively eradicating discrepancies, paying close attention to the viability of implementation, and stipulating the definite means in which an idea would be carried into a real-world public policy. Many specialists often can view the world in like approaches. At this point, they can approve or disapprove of comparable resolutions to problems.

### ***Political Stream***

“Public mood, pressure group campaigns, election results, partisan or ideological distributions in Congress and changes of administration” are examples of the political stream (Kingdon 1995, 145). Drifting independently of the problem or policy streams, the political stream can have influential impact on agendas. Public mood could be seen as national mood, the mood of the country, variations in public opinion, or wide-ranging social movements.

Government participants’ awareness of the national mood helps to endorse some issues on the policy agendas and to constrain others from elevating to importance. Detecting the national mood functions in two ways. Elected officials assess their constituents’ mood from various communications like mail, town meetings, smaller assemblies, and designations of people or even individuals approaching them during normal office hours. Second, politicians can seem to

sense what the national mood is for the nonelected officials. A shift in the national mood may cause a proposal to be viable that may not would have been with no shift in the mood.

Organized political forces such as philosophies of interest groups, political organizations and the actions of political elites form the second element of the political stream. We must consider the concept of consensus and conflict within the organized interest groups. Total consensus in the interest group can cause a powerful impetus for a proposal and the reverse is true when there is conflict in the interest group (Kingdon 1995).

Events within the government itself make up the third component of the political stream. When the administration changes, the whole agenda can shift with the change. Congressional seat changes can cause openings to force some proposals and lay to rest other proposals. Bureaucratic agencies and congressional committees fight for their portion of the policy territory, influencing the agendas in process. Two major processes by actors that influence policy agendas is turnover and jurisdiction. Because some of the major participants change, agendas are altered. Agendas are decidedly moved by the drawing of jurisdictional boundaries and by fights over the territory.

When it includes government actors, agenda change happens by one of two means. Priorities of incumbents change their position to push for a new agenda or personnel changes in position occur. The change of administration is one of the most powerful turnover effects for agenda items. Jurisdictions which are created by regulations, charters, constitutions, and statutes is the second central government process. With federal jurisdiction, administrative agencies and congressional committees retain their claims to territories. The jurisdictions influence their positions and fights over the territories influence agenda setting. Jurisdictional boundary drawings define away some problems or issues because they are ignored (Kingdon 1995). Just as

the federal jurisdiction influences agenda setting, state jurisdictions influence agenda setting for state policy.

In the policy stream, consensus is developed through the processes of influence and diffusion. The idea survives the scrutiny, and it disseminates through the policy community. Consensus building exists in the political stream. The processes that put movements in motion are completely unlike in the two streams. In comparison to the policy stream's importance on persuasion, the political stream's consensus building is directed by bargaining. In the political stream, coalitions are being constructed through the giving of allowances in return for backing of the coalition, or as real or future coalition members form bargains. Becoming a member of the coalition happens not because an individual has just been persuaded of the benefit of that option of deed, but because these individual doubts that missing this opportunity to join could cause omission of the benefits of partaking. At this point, the proposals have already been decided upon and refined in the political stream. The actors are bargaining for their interests while trading off things that are not as important with each other until they are satisfied (Kingdon 1995).

### *Policy Window*

According to Kingdon, "the policy window is an opportunity for advocates of proposals to push their pet solutions, or to push attention to their special problems" (1995, 165). Advocates can be seen waiting around government with their solutions, anticipating that problems will drift by so they can attach their solutions, expecting an event in the political stream that may be used to their advantage. From time to time, the window opens rather as expected, and in other times, it opens rather surprisingly. Policy entrepreneurs have to be ready with their pet proposal on

standby and ready, their particular problem detailed greatly, for fear that the chance goes by them.

It is important to keep in mind that the individual streams arrive together at significant times. “A problem is recognized, a solution is developed and available in the policy community, a political change makes it the right time for policy change, and potential constraints are not severe” (Kingdon 1995, 165). Policy entrepreneurs perform as a significant piece in the coupling at the open policy window, ascribing solutions to problems, surmounting the constraints by rewriting proposals, and grasping the benefit of politically favorable incidents.

The policy windows, the openings for action on given initiatives, show themselves and linger open for very brief periods of time. If the participant does not or cannot take benefit of these opportunities, they must wait until the next opportunity appears. Participants ditch their notions of problems, their proposed solutions, and political powers into the selected chance, and the results are contingent on the combination of components existing and how the various components are coupled. Policy windows open only occasionally, and the amount of time they are opened is not long. In spite of their infrequency, the most important changes in public policy develop during these opportunities (Kingdon 1995).

When thinking about the distinction between agenda and alternatives, and then thinking somewhat moderately about the three process streams, the agenda is influenced more by the problems and political streams, and the alternatives are influenced more by the policy streams. Fundamentally, a window opens given there is a change in the political stream like a change of administration (governorship), national mood or political party or it opens when a new problem emerges to the forefront catching the attention of government officials.



The policy window may close for various reasons. A decision or enactment may cause the participants to feel as though the problem has been resolved. Participants may be unsuccessful in addressing problems and be reluctant to invest more resources on the problem. The circumstances that caused the window to open may go away from the landscape. Windows that open because of personnel changes may close when that personnel leaves. Lastly, when there is no longer an existing alternative, the window may close. As noted by Anthony Downs, the issue-attention cycle demands for rapid action once the opportunity appears (1972). He contends that a strong desire to act bequeaths to an understanding of the financial and social costs of action (Kingdon 1995).

In the policy stream, proposals, alternatives, and solutions drift around, being deliberated, modified and deliberated again. In comparison to the problem-solving model, where individuals or groups of people become knowledgeable of a problem and deliberate an alternative solution, solutions drift around government, probing for problems that they can grasp onto or a political incident that intensifies their probability of being adopted. Keeping in mind these proposals in always in the political stream, they become important on the government agenda due to now it is a solution to a major problem or since a politician discovers their funding advantageous. As a result, solutions appear to be coupled with problems, proposals connected to political demands, and alternatives presented when the agenda changes.

An agenda change usually occurs due to a reaction of events in the problems and political streams, not in the policy stream. The two types of windows—problem and political windows—demand for distinguishing borrowings from the policy stream. When decision makers are satisfied a problem is relentless, they look in the policy stream for an alternative that can somewhat be viewed as a solution. If politicians assume a given idea for their direction or begin

lobbying for proposals that will assist with their reelection, they look in the policy stream for proposals.

Policy entrepreneurs are found in government and outside of government. It is more important to examine their activities and successes to understand them better. The entrepreneur can be heard because of their expertise, their capability to speak for others, or powerful decision-making position. The entrepreneur has many political connections and/or negotiating expertise. Lastly, the entrepreneur is successful because of their persistence. The entrepreneur with their persistence has the ability to soften up the system. They also can patiently lie in wait for the window to open and then coupling the streams at the window opening (Kingdon 1995).

### ***Bringing It All Together***

In this theoretical framework, governmental agendas are explained by problems, politics, and visible participants. Problems arise from conditions that are unacceptable, indicators, focusing events and feedback. In politics, participants observe fluctuations in national mood, elections cause new administrations to be put into power and new political parties to Congress, or interest groups of several accounts force (or not force) their requests on government. Lastly, the visible participants must be distinguished between the visible and hidden participants. The visible participants are the president, the appointees of the president, important members of Congress, media, and other political-party affiliates. The hidden participants include academic specialists, career bureaucrats, and congressional staffers. The visible participants influence the agenda while the hidden participants influence the alternatives.

Alternatives are created and reduced in the policy stream by the hidden participants in specific policy areas. The alternative creation is best viewed as a selection process. In the policy primeval soup, many ideas drift about, hitting each other, meeting new ideas, and creating combinations and recombinations. The selection is not happenstance, but they are selected from survival while others are eliminated.

The individual streams of problems, policies, and politics are all independent of one another surviving on their own. An open policy window is a chance for advocates to force their pet solutions or to force attention to their specific problems. Advocates inside and outside of government retain their proposals and their problems hanging on to them until these opportunities happen. Windows open based upon events in the problem or political streams (Kingdon 1995).

Policy entrepreneurs give their resources in hopes of return for future policies they support. Kingdon states that “entrepreneurs are motivated by combinations of several things: their straightforward concern about certain problems, their pursuit of such self-serving benefits as protecting or expanding their bureaucracy’s budget or claiming credit for accomplishment, their promotion of their policy values, and their simple pleasure in participating” (1995, 204). Kingdon’s work met them at three stages: forcing their concerns about significant problems at elevated levels on the agenda, forcing their pet proposals while softening up the system, and crafting the couplings referred to earlier. Policy entrepreneurs can be elected officials, career civil servants, lobbyists, journalists or academic researchers.

For problems, entrepreneurs attempt to focus on the indicators that significantly exaggerate their problems. They push for a singular type of problem definition instead of a different one. They are aware that focusing events are able to shift subjects to a higher level on

the agenda, so they try to make such items as personal presentations of problems by policy makers and the dissemination of an image that catches their problems all in one.

For proposals, entrepreneurs are amid the softening up arena. They compose papers, provide testimony, conduct hearings, attempt to obtain press coverage, and gather with significant and not-so-significant individuals. They sail their test balloons, get feedback, modify their proposals based upon the feedback and sail them once more. They aspire to soften up the greater public, a particular public, and the policy community situation. This process for the policy entrepreneur goes on and on for many years with a great amount of effort (Kingdon 1995).

For coupling, policy entrepreneurs are seen again when the window opens. Holding their pet proposals or their apprehensions about problems prepared already and force them at the most favorable times. While pursuing their individual goals, they complete the purpose for the system of “coupling solutions to problems, problems to political forces and political forces to proposals” (Kingdon 1995, 205). Basically, the connection of the distinct streams depends on the right entrepreneur at the exact right moment.

### **Kingdon’s Model - Its Prior History and Performance Funding**

John Kingdon’s (1984) *Agendas, Alternatives and Public Policies* altered the original garbage can model (Cohen, March and Olsen 1972) to create his description of the multiple-streams model. Models existing before Kingdon’s model were the original garbage can model (Cohen, March and Olsen 1972) and Lindblom’s (1968) incrementalism. A few models like the punctuated equilibrium theory (Baumgartner and Jones, *Agendas and Instability in American*

Politics 1993) came later but Kingdon's model has withstood the test of time regardless of critiques and efforts to modify (Rawat and Morris 2016).

Kingdon's model has been utilized in numerous studies national and internationally since its inception in 1984. As Rawat and Morris state in their thirty-year review of the model, Kingdon's work is still important even today as its "prevalence...is indicative of its importance to, and impact in, the arena of policy scholarship" (2016, 610). A search on Google Scholar indicated that over twenty-eight thousand (28,000) citations exist for Kingdon's *Agendas, Alternatives, and Public Policies* (1984). Kingdon's multiple streams model has been utilized to explain public policy from formulation to implementation geographically from North and South America, Asia, Europe, Africa and Australia (Rawat and Morris 2016).

Kingdon's model used cases from health and transportation in his work. In the review of Rawat and Morris (2016), more than a quarter of the journal studies related to the field of health policy while the smallest field of study was transportation. They further explain that Kingdon's model has been used to examine the next biggest field, education. Other fields recognized were environmental and natural resources, welfare policies, urban issues and law enforcement (Rawat and Morris 2016).

The policy phases that have been studied with Kingdon's model vary between policy design to policy implementation and sometimes to foresee policy changes (Rawat and Morris 2016). Terms referenced from Kingdon from the policy stage of research include policy design (Sabatier 1991), policy formulation (Rabin 2003), agenda setting (Baumgartner 2016), policy adoption (Fowler 2020), and policy changes (Peter 2003). Other studies have reviewed issue framing and the coupling of streams while a policy window is opened.

This research for performance funding will examine the multiple streams model of Kingdon's to understand what problems existed, what policies were suggested, and what politics were in place when participants and processes came together to go through the window of opportunity for have the policy adopted. The problems in the early 1990s were college retention rates, low graduation rates, and rising tuition costs. The policy that had been on the forefront for government administration (elected and non-elected) was performance funding, performance budgeting and performance reporting. This research specifically only reviews performance funding. The quantitative methods will reveal what politics were in play during this thirty-year period of research in the governor's office and the legislative branches. A small amount of research has used Kingdon's multiple streams model with quantitative methods (Rawat and Morris 2016).

### **Key Definitions**

This section provides definitions for key terms that will be utilized in this study to ensure reliability and consistency of the interpretation of these terms throughout the research. Some terms that will be defined are only for distinguishing the difference between accounting policies for states.

We will start with *accountability* because this term lies at the root of performance funding. Burke (2005, 1) states that "accountability is the most advocated and least analyzed word in higher education." In the past, this word signified matters within centralized state government regulation and administration, the economy and limited resource contributions. As time has passed, its meaning has changed to state priorities and governmental institution

outcomes (J. C. Burke 2005, McLendon, Hearn and Deaton 2006). Regarding public higher education institutions, accountability ensures the institution's responsiveness to state needs while requiring reported results of the achieved outcomes with state funds. States implement accountability through enacting laws that create accountability systems.

This research will focus on accountability systems, a term used by Gorbunov (2013). According to Gorbunov, accountability systems are “designed to ensure higher education responsiveness to state needs and answerability for the results achieved with public funds” (2013, 15). Wellman notes that “accountability systems are state-level indicators of institutional performance, designed to reach public audiences, using quantitative and qualitative measures that allow comparisons among institutions. These systems [...] are geared to legislative and gubernatorial audiences rather than individual governing boards” (2001, 48).

For the purposes of this research, we will use the definition provided by Gorbunov (2013). Gorbunov defines “a state *accountability system* as an arrangement of funding and publicity incentives intended to alter institutional behavior in ways that are consistent with public needs and state priorities” (2013, 16). Incentives in the accountability system are received from additional appropriations or allotments based upon performance metrics by the institutions. The objective of the accountability system ties the funding to the performance.

The three primary performance accountability state policies are performance reporting, performance budgeting and performance funding (Burke and Minnassians 2003, McLendon, Hearn and Deaton 2006). *Performance reporting* includes evaluating and measuring state goals and interpreting in a report the outcomes based upon already determined metrics (Burke and Minnassians 2003, Wellman 2001). This policy is dependent upon reliable information and openness to the public to improve institutional performance.

When states tie budget allocations to public higher education institutions, it may be performance funding or performance budgeting. *Performance funding* connects budget allocations to the level the institution achieves the metrics in place for outcomes. Simply said, performance funding is funded based upon the level of institutional outcomes achieved. Performance funding programs are systematic and straightforward. Budget allocations based upon performance achieved are the emphasis of this policy (J. C. Burke 2001, J. C. Burke 2003, Burke and Modarresi 2000, Zumeta 2001). The performance is measured by metrics such as college graduation, retention rates, and job placement.

*Performance budgeting* does not tie budget funds to outcome achievements. The connection for this policy between funding and performance are unattached, secondary, and optional. Performance budgeting examines the actual budget planning and arrangements and not allocations (J. C. Burke 2001, J. C. Burke 2003). Schick noted that the "...all-important thing in budgeting is the work and service to be accomplished and what that work or service will cost" (1971, 2). In 1949, this Hoover Commission statement positioned the beginning tendency for performance budgeting. In reaction to the criticism and supposed shortcomings in incrementalism budgeting, performance budgeting was the solution. Distinguished from incrementalism budgeting, performance budgeting emphasized an efficient review of the intentions and objectives of a government program policy (Lauth 1985). The ultimate purpose for performance budgeting was to help administrators in determining which programs to eliminate or keep and allow for streamlined standardization of the management and implementation of the budget (U.S. General Accounting Office 1997).



## **Background and Overview of Performance Funding**

Within the last thirty years, public higher education institutions have been under increased burden with demands for more accountability regarding performance and outcomes. Greater awareness has risen from the general public and external agencies with issues of effectiveness and efficiencies with performance from public higher education, better educational results for students, and a larger presence of government oversight (Alexander 2000, Bogue 1997, Zumeta 2001). This awareness has resulted in an unnecessary equilibrium in the middle of external accountability and institutional independence which has caused a change in the direction of showing the value for funding and vindicating public support (Gorbunov 2013). Some of the most principal policy analysts agree that this shift to performance accountability is a permanent change (J. C. Burke 2005, Burke and Modarresi 2000). Burke and Modarresi (2000) point out, “accountability is a challenge, not a choice, for state colleges and universities. The real question with accountability for public higher education is not whether, but for what and how” (433).

Several explanations have been presented as to why states have adopted performance funding (Alexander 2000, J. C. Burke 2002a, McLendon, Hearn and Deaton 2006, Rhoades and Sporn 2002, Ruppert 1995). In the 1990s, state governments were confronted with decreasing revenues and increasing costs because of the slower economy and ever-increasing rising costs of higher education and other government programs (K. J. Dougherty, R. Natow, et al. 2013). The economic recession triggered state government revenues to decrease greatly, and, in some instances, state revenue plunged (Alexander 2000, J. C. Burke 2002a, Rhoades and Sporn 2002, Ruppert 1995). In the same time period, state governments were encountering immediate increases in higher education costs. At the same time, higher education enrollment was rapidly increasing due to the baby boom reverberation and an ever-growing idea “that individual and

collective economic futures required higher levels of college-going” (K. J. Dougherty, R. Natow, et al. 2013, 4). Additionally, the higher education per capita costs of operations were multiplying more rapidly than the rate of inflation (Alexander 2000, Rhoades and Sporn 2002, Ruppert 1995, Zumeta 2001). Meanwhile in states, governments were confronted with increasing costs for K-12 education, health care and prisons (Alexander 2000, J. C. Burke 2002a, Zumeta 2001).

Governments started to use performance funding as a policy tool to tie together public higher education institutional budgets with performance (Gorbunov 2013). Governments began to use performance funding policies to motivate public higher education institutions to achieve certain outcomes (Bogue and Hall 2003). Several states allotted a fraction of appropriations to higher education institutions based upon performance metrics. Performance funding for higher education institutions has been unstable for state policy because the majority of states that have adopted it have seen constant change to the policy whether it was just revised, decreased, un-adopted, defunded, and even re-adopted (J. C. Burke 2002a).

This research proposes to identify the most important variables behind the states’ adoptions, un-adoptions, and in some cases, re-adoptions of performance funding policy for public higher education at times. To explain this ever-changing state policy, the research will examine the policy through the lens of one policy framework. This objective establishes the method of reviewing prior research and current literature.

### **Political Landscape Reasons for Adopting Performance Funding**

In the 1970s, state appropriations subsidized about 80% of public higher education institutions’ budgets. By the end of the decade, state appropriations had decreased to only about

65% (Cekie 2008). Between 1985 and 2010, state appropriation funding as revenue per student decreased from 77% to 60% (Curry, Laws and Strauss 2013). According to the National Association of College and Business Officers (NACUBO) 2017 Planning and Budgeting Forum, states are spending \$7,267 on average per college student which equates to 18% less prior to the 2008 recession (Hundriser 2017).

State elected officials had strong demands from the citizens and businesses for greater proficiency and decreasing costs of higher education. This combination of ever-increasing tuition for higher education and the rapid decrease in state revenues was creating an enormous amount of hardship for parents and students (Zumeta 2001). Business alliances were pressing for improvement in the quality of college graduates while keeping taxes low (J. C. Burke 2002a, Zumeta 2001). These combined burdens transformed into demands for performance funding initiatives for higher education institutions. During the 1990s, McLendon, Hearn and Deaton (2006) noted Republicans' legislative seats increased greatly which was found to be a strong indicator of whether states enacted performance funding, as Republican legislators looked to market-based solutions to government administration.

The standard operating practices of higher education were causing mistrust during this time. Higher education was being seen as inefficient by policymakers, the general public and opinion leaders. Higher education was being portrayed as having lazy faculty, ever-increasing expenses, and large administrative bodies. Higher education was seen as utilizing weak admission policies and poor academic requirements. Lastly, higher education was seen as preferring research over teaching the students (Alexander 2000, Ruppert 1995, Zumeta 2001). The long-established methods of accreditation, peer review and student choice for accountability in higher education seemed to be failing the system (Alexander 2000). At this time, performance

funding was seen as a means to an end because data could be obtained on higher education institution performance and attach state funding to performance. As information technology innovation was developing, the ability of states to obtain and analyze data had increased greatly (Zumeta 2001).

### **Beginnings and Types of Performance Funding**

Student enrollment, instructional costs and the size of the operations of the higher education institution were the primary indicators for state funding amounts. Performance funding allows for funding to be based upon measurements of performance for higher education institutions. These measurements for performance funding are tied to institutional outcomes such as graduation rates, job placement, and student retention (J. C. Burke 2002a, Dougherty and Reddy 2013). To really understand what social, economic, and political factors caused states to adopt performance funding, we must distinguish between the origins of the first adoptions (1979 to 2000) and the second adoptions (2007 to present).

#### ***First Adoptions***

This research will review primarily three earlier studies to understand the first adoptions: Dougherty et al. (2013); McLendon, Hearn, and Deaton (2006); and Gorbunov (2013). Dougherty et al. (2013) examined the origins performance funding adoptions in Florida, Illinois, Missouri, South Carolina, Tennessee, and Washington between 1979 and 1997. Data for this study came from more than interviews with many political actors in six of the states which included state and local higher education institutions officials, governors and gubernatorial

staffers, legislators and legislative staffers, leaders from the business communities, scholars from higher education and consultants. McLendon, Hearn, and Deaton (2006) created an event history analysis of the indicators of performance funding adoptions in the United States reviewing the period of 1979 to 2002. Gorbunov (2013) created another event history analysis that reviewed the indicators of performance funding adoptions from 1979 to 2009.

Advocacy coalition framework (Sabatier and Weible 2007), policy entrepreneurship theory (Kingdon 1995), and policy diffusion theory (Berry and Berry 2007) directed the analysis done by Dougherty et al. (2013). The advocacy coalition framework draws upon the fact that policy change is steered by coalitions which includes actors from both inside and outside of the government who come together because of their “core values” about significant social values, the appropriate function of government, and the importance of various social groups, along with “policy core beliefs” relating to the gravity of a specific social problem, its sources, and its most suitable solutions (Sabatier and Weible 2007).

The first adoptions studied by Dougherty et al. (2013) discovered two leading coalitions pushing the adoption of performance funding: state higher education coordinating boards and public higher education institutions. The primary objective of this coalition was to obtain new state funds for higher education in a period of opposition to increased taxes and disparagement of efficiency and effectiveness in higher education institutions. This finding was in accord with Gorbunov’s (2013) study that the existence of a coordinating board is a positive indicator of performance funding adoption. McLendon, Hearn, and Deaton (2006) found in their study that the lack of an association governing board was an important indicator of the adoption of performance funding for higher education institutions. The second advocacy coalition for the first adoptions was state business leaders, governors, and legislatures. The main actors of this

coalition were predominately Republican legislatures who viewed governors as inefficient (K. J. Dougherty, R. Natow, et al. 2013, J. C. Burke 2002a). McLendon, Hearn, and Deaton (2006) and Gorbunov (2013) also revealed in their work that the greater the percentage of Republican state legislatures the more likely adoptions of performance funding occurred.

Specific events delivered political openings, known as “policy windows” by the policy entrepreneurship approach (Kingdon 1995, Mintrom and Norman 2009) and “shocks” by the advocacy coalition framework (Sabatier and Weible 2007) which allowed performance funding to be placed on the policy agenda for state governments. Openings that allowed performance funding to make it to the agenda included changes in government control where usually Republicans won control over either legislative body or the governorship (K. J. Dougherty, R. Natow, et al. 2013).

### *Second Adoptions*

This research will review case studies about the second adoptions of performance funding done by Dougherty, Natow, et al (2014). The researchers reviewed new performance funding adoptions in Indiana (2009), Ohio (2009), and Tennessee (2010). All three states had performance funding 2.0 (PF 2.0) programs in which funding metrics are included in the base of funding from the state unlike performance funding 1.0 (PF 1.0) programs where the funding was an incentive or bonus. The beginnings of PF 2.0 were distinctly unlike those of PF 1.0 in four ways: the governors’ role; the effect of external stakeholders not affiliated with government; impetus from state higher education boards; and effects from the economy. The role of governors played a larger impact than in PF 1.0 (K. J. Dougherty, R. Natow, et al. 2014).

New ideas for performance funding 2.0 (PF 2.0) came to the forefront from policy and philanthropic organizations who were outside stakeholders. State higher education boards viewed performance funding as a new source for higher education from the state when budget constraints were present (K. J. Dougherty, R. Natow, et al. 2013). The Great Recession between 2007 and 2009 offered a specific policy window for performance funding policies to be adopted (K. J. Dougherty, R. Natow, et al. 2014).

### **Accountability Movement**

During the 1990s, historic variations materialized in the way governments provided oversight to public higher education institutions. The traditional self-regulatory methods used by college and universities were no longer seen as effective to governmental authorities and the general public. As Alexander noted, “a new economic motivation is driving states to redefine relationships by pressuring institutions to become more accountable, more efficient, and more productive in the use publicly generated resources” (2000, 411). Barnett noted that higher education institutions had moved into “the age of disenchantment” and “society is not prepared to accept that higher education is self-justifying and wishes to expose the activities of the secret garden. With greater expectations being placed on it, higher education is being obliged to examine itself or be examined by others” (1992, 16). Barnett’s reflection even in 1992 shows that performance was going to be required by higher education institutions in response to demands for more national accountability as early as the 1990s.

In this same time period, the relationship between government and higher education was changing because state governments were demanding that higher education needed to play a

larger part of the transformation from minimum-wage economies to higher levels of job performance with information technology geared economies. Governments were wanting to hold public higher education institutions responsible for expanding and increasing workforce skills to increase production and make the state's economy stronger (Alexander 2000). Higher education basically was seen as economic investment strategy affecting global competition. Internationally at this time, nations with relatively higher-level education institutions were "adopting new economic and managerial strategies to assess and compare colleges and universities performance" (Alexander 2000, 412). At this time, government reporting and funding methods for public higher education institutions were amid a very important revolution that went from total input-based funding to a more competitive outcome-based funding. This revolution caused state government to realize that they must demand more efficiency and effectiveness in the development of human capital assets from higher education. With increased government involvement in higher education performance, colleges and universities were forced into the "accountability movement" for higher education (Alexander 2000).

The priorities of states changed significantly in the last several decades from assuring access to public higher education to requiring greater accountability (J. C. Burke 2005). Due to this change to accountability, "government authorities are no longer receptive to the traditional self-regulatory processes that have dominated university development for centuries" (Alexander 2000, 411). Because of the change to outcomes, stakeholders had to concentrate on efficiency and effectiveness to provide more services with less public resources. Massy and Zemsky noted that "colleges and universities are neither privileged havens of waste nor institutions so out of touch with reality that they are on the verge of losing their relevance" (1994, 1).



The accountability movement caused most of the early adoptions by states of performance funding policies (K. J. Dougherty, R. Natow, et al. 2014). The *Reinventing Government* movement at the federal level probably caused the most important change in public management (Osborne and Gaebler 1992, Thompson and Riccucci 1998). This new public management era created a results model instead of a regulatory model (Burke and Serban 1997). With an aim to achieve greater results with scarce resources, measuring performance with benchmarks and changing outcomes were necessary to evolve to this new public management. Government agencies began to infuse these concepts of accountability by aligning their performance to specific, measurable outcomes (Osborne and Gaebler 1992). Because of the need to improve government outcomes based upon adopted policies, public higher education institutions implemented performance funding (Ingraham and Moynihan 2001, Klein 2005, Willoughby and Melkers 2001).

### **States Started Adopting Performance Funding**

In the 1990s, the state oversight and accountability climate changed significantly from concentrating on regulatory compliance to assessing performance and accounting for results or outcomes (J. C. Burke 2005, A. McGuinness 1995, M. K. McLendon 2003, J. Volkwein 2007, Volkwein and Tandberg 2008). Public policy went through a change in this period known as the “new accountability” for public higher education institutions (McLendon, Hearn and Deaton 2006, Toutkoushian and Danielson 2002, Zumeta 1998). With public higher education institutions experiencing this new accountability movement, it paralleled these institutions with

already prevalent movements of public policy, known as “re-inventing government” (Fryar 2011, Gore 2003, Osborne and Gaebler 1992, T. Rabovsky 2012).

The first official performance-funding adoption occurred in Tennessee in 1979-1980. In 1985, Connecticut adopted a performance-funding program. Following another quiet period, other states, Missouri (1991) and Kentucky (1992), adopted comparable programs for their higher education institutions. By 2001, performance programs had been adopted by twenty-one additional states. Attempts to adopt performance funding programs have been followed by departures in some states (McLendon and Hearn 2013).

The basic justification for performance funding (PF) is it encourages higher education institutions to be more effective and efficient with the limited resources they have, specifically in a time of state budget shortages and increased requirements from higher education institutions (J. C. Burke 2002b, Dougherty and Hong 2006, Jenkins, Ellwein and Boswell 2009, Shulock and Moore 2002). The objective of PF is to ensure that public higher education institutions are in line with states’ goals (A. Li 2019). The fundamental notion with PF is that public higher education institutions are delivering their services effectively and efficiently.

Burke and Modarresi (2000) reported sixteen states had adopted performance funding (PF) while nine more states were working towards adopting and four states terminated their efforts towards PF. The purpose of their research was not to debate PF, but they strived to ascertain some of the qualities in what they termed as “stable” or “unstable” programs (Burke and Modarresi, 432). According to Burke (2002a) prior to the 1990s, only three states had adopted policies that linked funding to performance: Tennessee (1970s); Connecticut (1980s); and Hawaii (1980s-aborted).

## **Variables for Performance Funding in Other Literature**

Numerous studies have focused on the beginnings of performance funding (e.g., McLendon, Hearn, and Deaton 2006), and additional studies have assessed the effects and the impacts of performance funding on the public higher education institutions. According to Dougherty and Reddy (2013), their review discovered that performance funding (PF) had fluctuating levels of influence on like issues as state funding levels; public responsiveness of state priorities and public higher education institutional performance; and institution competition.

According to Tandberg and Hillman (2014), performance funding (PF) was also observed as affecting the varying public higher education institutions' policy making and academic and student services enhancements. Rabovsky (2012) bolstered these findings in a national study using public higher education institutional-level data to show that PF was related to these institutions expending more in faculty instruction and less on research related functions. In a research study by Favero and Rutherford (2020), their findings were to a certain degree varied. When performance funding was adopted, it seemed to have the capacity to improve the volume of degrees awarded in some cases. In the same study, performance funding that is embedded in the base formula for budgets appear to have heterogeneous consequences on retention and graduation rates making a better advantage to public higher education institutions already performing well. Very little research has been done to understand why states adopted/unadopted (and even re-adopted) performance funding. Research has mainly focused on what states have adopted and not why did they adopt.

Volkwein and Tandberg (2008) utilized data from *Measuring Up*<sup>1</sup> to find that state size, prosperity, education levels, and progression within the state explain the largest portion of explained variances in states' grades. In the same research, the states' grades from *Measuring Up* linked small amount variances of higher education governance and accountability practices. Grades received on the national report card over the past decade were not cause by affected variances based upon "changes in state regulation, performance systems, and governance structures" (Volkwein and Tandberg 2008, 180).

In research by Hagood (2019), research and selective universities compared to non-research and non-highly selective universities benefit more from performance funding. Hagood states from the research "performance funding consistently benefits high-resource institutions and imposes financial burdens on low-resource institutions" (2019, 189). The research even delineates between Republican and Democratic states showing that in Republican states many institutions see funding declines with performance funding. In these Republican states, the research and highly selective institutions benefit more so than the non-research and non-highly selective institutions (Hagood 2019).

### **Performance Funding in Different States**

The most common formula to distribute state funding to higher education institutions is based upon student outcomes (Burke and Minnassians 2003). Historically, public higher education institutions were appropriated funding by state tax money generally based upon

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<sup>1</sup> The National Center for Public Policy and Higher Education supports public policies that increase Americans' chances to follow and attain excellent education and training past high school. The *Measuring Up* report card initiative which began in 2000 gives an evaluation of the nation and the 50 states in regards to delivering education and training past high school to Americans.

student enrollment. Performance funding (PF) shifts funding to public higher education institutions from enrollment-based funding to performance funding (A. Li 2019) . Policymakers have utilized PF as a key incentive to increase funding to higher education institutions.

The design of performance funding (PF) varies across states in relation to which public higher education institutions receive the funding. Some states use PF for two-year public higher education institutions while other states only fund the PF to four-year public higher education institutions. Some states may only fund PF to specific public higher education institutions. In some instances, states fund PF to both two-year and four-year higher education institutions (A. Li 2019).

States use different percentages of funding to allocate the performance funding (PF). Li compares the percentage of PF to a “dosage’ of medicine” (A. Li 2019, 9). Among the states with PF, the rates vary greatly between 1% and 100%. Two-year public higher education institutions in Washington State allocate 5% of all higher education funding based upon their performance. Two-year and four-year public higher education institutions in Ohio are funded 100% based upon performance (A. Li 2019).

Since 1990, over 30 states have adopted and un-adopted (and re-adopted in some instances) performance funding (PF) for their higher education institutions. According to a study done by Li in 2018, the report counted 29 states that were utilizing performance-funding policies and an additional 4 states in the process of implementing performance-funding policies (LiA191). Li stated that “recent academic literature estimates that 46 states are considering, transitioning to, or operating performance funding, with a number of active states policies hovering around 35” (A. Li 2019, 5). According to the National Conference of State

Legislatures, the report counted 35 states that were utilizing PF with an additional five states in the process of implementing PF (2015).

Specific metrics like rates of retention, graduation, and job placement are being used to tie performance to funding (K. J. Dougherty, R. Natow, et al. 2014). States are also linking additional funding when public higher education institutions assist the underrepresented students. Li defines these groups as “students of color (most often as Black/African American and Hispanic/Latino students, and rarely includes Asian Americans or Pacific Islanders), Pell Grant recipients (lower-income students), and adult students (age 25 and older)” (A. Li 2019, 10).

States also reward more performance funding to public higher education institutions that award degrees in STEM (science, technology, engineering, and mathematics). The National Science Board is concerned that the U.S. will lack in STEM college graduates causing lessened economic and competition globally for the United States (2016). As one would expect, states have increased performance funding to public higher education institutions for STEM degrees completed by students (A. Li 2018).

### **Independent Variables That Have Prevailed in the Literature**

For three decades, policymakers have been concerned with being able to justify increased funding to public higher education institutions through their performance. Some areas public higher education institutions are utilizing are admittance of disadvantaged students, decreasing operational costs of the institution, graduation rates, or greater awareness of the needs of state and local workforces. For policymakers to achieve value-added performance in public higher

education institutions, they have put significant effort into creating incentives to yield this performance (K. J. Dougherty, R. Natow, et al. 2014).

State policies for performance funding have implemented incentive funding for public higher educational institutions that assist disadvantaged students. Tennessee offers an additional 40% in funding for every student who completes their degree if the student was qualified for Pell Grants or is an adult who is 25 years or older. In Ohio, additional funding is provided to higher education institutions for students who are qualified for Pell Grants, students of color and students who are 25 years or older (A. Li 2019).

Another concern causing performance funding to materialize is the increase in tuition rates (Conner and Rabovsky 2011). According to Gray, Hanson, and Kousser, for nearly three decades higher education institutions' tuition and fees have been rising faster than inflation. "Real tuition and fee revenue per student increased 129 percent between 1979 and 2008" (Gray, Hanson and Kousser 2013, 413). In 2016-17, federal taxpayer revenue provided to public higher education institutions was over \$122 billion while states and localities provided over \$97 billion in funding (A. Li 2019). Governmental leaders and the media keep on drawing attention to the rising tuition costs in America's public higher education institutions.

Concern has grown over the past few decades regarding college completion. According to the U.S. Department of Education, approximately 63% of students in public higher education institutions who started pursuing a bachelor's degree at a four-year institution in Fall 2012 finished that degree at the same institution inside of 6 years (National Center for Education Statistics 2020). To receive a sustainable income, postsecondary education is essential and required. According to the Bureau of Labor Statistics, careers that normally only required a high school education are predicted to expand more slowly than average which will mean careers that

will require postsecondary education will expand faster (2017). With the concerns of college completion, enrollment-based funding posed the risk of only focusing on enrollment and not completion. Performance funding (PF) provided the mechanism to track the college completion successes. According to Li, states with college completion at lower rates are more probable to adopt/implement PF policies (A. Li 2017).

### **Performance Funding Became Important**

With such large amounts of funding going to state higher education institutions, it is crucial that some accountability other than the required comprehensive annual financial report (reports financial condition) be presented showing the actual outcomes (performance).

The Governmental Accounting Standards Board (GASB) determines what is required regarding financial reporting from public colleges and universities. GASB Summary of Statement No. 35 provides the required financial reporting that reports to the needs of citizens, legislative and administrative groups, and stakeholders. GASB No. 35 guidance requires public colleges and universities to include management's discussion and analysis (MD&A); basic financial statements; notes to the financial statements; and required supplementary information other than MD&A (Governmental Accounting Standards Board 1999). These requirements by GASB are the comprehensive annual financial report and it only reports the financial condition of public college or university. The actual performance (outcomes) of the public college or university is not a requirement in these GASB requirements.

Performance funding (PF) is rooted in the Government Performance and Results Acts of 1993 (GPRA). The Clinton (1993-2001) and Bush (2001-2009) administrations advanced and extended the GPRA. The efforts of these administrations were explained by the U.S.



Government Accountability Office (GAO) as a “solid foundation for achieving results” that developed a thorough performance management system concentrated on agency and program level performance (2004). In 2008, presidential candidate, Barack Obama, shared his vision of what the performance management approach would look like if elected. Late in 2010 during the first Obama administration, Congress adopted amendments to GPRA, including priority goals and quarterly reports of performance data that would report on a government-wide Web site (Kamensky 2011). Kamensky stated that the “implications of the Obama administration’s performance initiatives for the broader government performance community are profound” (2011, 144). Since the Obama administration, state and local governments have adopted/enacted statutes and codes that require performance or outcomes in some form whether it is performance reporting, performance budgeting or performance funding. In some instances, performance and outcome can be used interchangeably. The terms “performance” and “outcome” can have the same meaning.

A recent study revealed that some of the challenges with performance funding (PF) is whether the PF portion was funded in the states; variations in incentives, metrics, and the actual funding of the PF across public higher education institutions in the state; and discrepancies that would appear that states possibly did not even have PF in some instances. The same study reports that 31 states have funded their PF systems, six states had adopted PF but did not look like PF was funded, with only four states seriously considering adopting PF, and nine states have not adopted or even deliberated a PF system. In this same study, Missouri in the years of 2014-2017 was allowing the colleges to have choices in their metrics. Beginning in Fiscal Year 1994, Missouri began a PF system, and the PF was funded through Fiscal Year (FY) 2001. Missouri piloted PF again in 2012 and PF was funded again in FY 2014. Missouri continued funding PF

through FY 2017. Missouri still has the PF formula on its books and the data was still being collected during this study (Rosinger, Ortagus and Kelchen 2019).

### **Summary**

As Kingdon asks, “what makes people in and around government attend, at any given time, to some subjects and not to others” (1995, 1). The literature review answers his question in great detail. The research presents variables for each of Kingdon’s multiple streams model: problems, politics, and policies. Problems are followed by governmental and nongovernmental officials to reveal whether attention should be given to policy changes. Communities exist where specialists like academics, congressional staffers, interest groups, individuals in budget and planning offices, and researchers where ideas drift about amongst this community. These specialists have perceptions and ideas with unclear beliefs about imminent directions, and their additional proposals. These ideas float around in what Kingdon calls “primeval soup”, and they come together by numerous means (1995, 116-117).

Political events such as changes in the administration or pushes from legislative constituencies can cause the specialists in the community to be influenced and respond. These dynamics that force the political stream and the policy stream are somewhat diverse. In the primeval soup, a varied number of ideas can be considered at any stage of the problem or policy. Advocates, known as policy entrepreneurs, may be located inside or outside of government. They invest their resources in hopes of a future return.

The political stream can be public mood, group campaigns, election results, partisanship control or changes in administration. Policy windows occur when an opportunity exists for

advocates of proposals to push their solutions or gain attention for their problems. It is very important to realize that the individual streams come together at a very crucial time when the window opens.

Problems, politics, and policies are all independent of one another surviving on their own. Windows open based upon events in the problem or political streams. Policy entrepreneurs appear when the windows open completing the purpose for the system of “coupling solutions to problems, problems to political forces and political forces to proposals” (Kingdon 1995, 205).

## CHAPTER 3

### DATA AND METHODS

#### Description of the Dataset

To study the research question and test the hypothesis, a longitudinal dataset is utilized containing important political, education and economic indicators of the states. The dataset includes data for 47 states for the period of 1990 through 2020. The first adoptions of performance funding adoption started with Tennessee in 1979. When the recession hit in 2000, the adoptions of performance funding ceased to exist any longer. In 2007, a second round of adoptions for performance funding, referred to as performance funding 2.0, began. In some instances, many states had re-adoptions and they discontinued the first adoptions, referred to as performance funding 1.0. The first adoptions included a bonus over the general appropriations to states and the second adoptions included an embedded amount in the base state funding (K. J. Dougherty, S. M. Jones, et al. 2014). For this research, the dataset starts in 1990 due to the lack of data available prior to this year.

The dataset contains 47 states because Alaska, Hawaii and Nebraska are not included. The three states are generally not included in comparative research due to distinctive attributes (Doyle 2006, McLendon, Hearn and Deaton 2006, Mokher and McLendon 2007). Alaska and Hawaii are not included because they both contrast from the other states on significant values with the most important being they are non-contiguous states (Berry and Berry 1990, M. Mintrom 1997). Nebraska is not included because of their unicameral and nonpartisan assembly

causing it to be excluded from significant political variables (Doyle 2006, McLendon, Deaton and Hearn, *The Enactment of Reforms in State Governance of Higher Education* 2007).

For the 30-year duration of this research, forty-one (41) states adopted performance funding at least once. Two states completely terminated the performance funding policy and never re-adopted it. Seven states terminate the policy and later re-adopted it. Nine states never adopted performance funding policies.

### **Research Hypotheses**

This research examining the adoption of higher education performance funding policies, the dependent variable, in the United States shadows the studies of Walker (1969), Berry and Berry (1990, 1992) and others in conceptualizing state policy as occurring both from the internal attributes of the states and the external diffusion influences from surrounding states. This research extracted from the literature 11 potential explanations for state adoption of higher-education performance policies. In presentation order for this research, these hypotheses aim to an array of distant and approximate influences, including (1) party of the governor, (2) legislative party, (3) student attainment, (4) state citizen income, (5) neighboring state adoption, (6) institutional governance, (7) rising costs, (8) retention rates, (9) lower rates of college completion, (10) graduation rates, and (11) lottery adoption. Some of these variables were chosen (e.g., demographic, and economic conditions, partisanship, and higher-education governance) because prior research on state policy innovation and diffusion has established them to be related with patterns of governmental behavior in other policy areas. Other variables (e.g., higher education costs and graduation rates) were chosen to test certain assertions made in higher

education literature about the causes of current accountability mandates. This research largely relies on data from previous research (Burke and Modarresi 2000, 2001, Burke and Minassians 2003, K. J. Dougherty, R. Natow, et al. 2013, T. M. Rabovsky 2012, Rutherford and Rabovsky 2014), National Conference of State Legislatures, and other documents from state governments on the adoption of performance funding policy for higher education institutions.

***Dependent Variable:*** *States' adoption of performance funding for public higher education institutions*

The dependent variable is a binary variable, known as a dichotomous variable, coded as one (1) if a state has adopted performance funding for the first adoption or readopted the policy after terminating it. The dependent variable is coded zero (0) if a state has not adopted performance funding or has terminated the policy.

***Hypothesis 1:*** *States that have Republican governors will be more likely to adopt higher education performance policies.*

This research will test the theory that states whose governors are Republican will be more likely to adopt higher-education performance policies just as majority Republican legislatures may be more likely to adopt performance policies for higher education. To be more precise, Republicans tend to be more likely to favor policies that are not favoring public bureaucracy or not critical of public sector performance policies. This variable will likely assert that Republican gubernatorial party control will likely influence the adoption of public higher education performance policy.

***Hypothesis 2:*** *The higher the percentage of seats in the legislature held by Republicans, the more likely the state will adopt higher education performance policies.*

Prior significant research of the performance-accountability movement in higher education articulated cynicism of a relationship between partisanship and the development of new accountability policies (J. C. Burke 2002). This research will argue that party control of government institutions may assist in understanding states' policy behaviors. In opposition of this argument, a significant amount of literature suggests that party control can affect state policy outcomes in some areas (Alt and Lowry 2000, Barrilleaux and Bernick 2003, Barrilleaux, Holbrook and Langer 2002, Berry and Berry 1990, Holbrook and Percy 1992, Stream 1999). For example, Democratic Party strength has related to larger amounts of spending on education and welfare programs, and with abortion and gay rights initiatives. On the opposite spectrum, Republicans have been affiliated with regulatory and tax policies that appear to be favorable to business interests and as opposing lotteries and abortion (Barrilleaux, Holbrook and Langer 2002). Republicans, even more so than Democrats, are portrayed as "ideologically suspicious of public bureaucracy, and associated more closely than Democrats with themes of holding government to account" (McLendon, Hearn and Deaton, *Called to Account: Analyzing the Origins and Spread of State Performance-Accountability Policies for Higher Education* 2006, 6). Given that higher education performance policies are more aligned with these general accountability issues, this research will hypothesize that states with a higher percentage of Republic legislative members will more likely adopt performance funding policies for higher education institutions.

***Hypothesis 3:*** *States that have lower levels of student attainment of higher education may be more likely to adopt performance policies for higher education institutions.*

In early, robust findings of comparative state policy literature, it was suggested that socio-economic development patterns appeared to explain a great amount of the interstate variations in public policy (Dawson and Robinson 1963, Dye 1966, Walker 1969). Typically, researchers related higher levels of progress including student attainment, wealth, or economic development with greater amounts of public expenditures. In the framework of adoption of new policies, many times the reasoning evolved was that the higher levels of development afforded the states the necessary capacity (human capital and fiscal) for embarking on policy experimentation.

This research will reconceptualize the connection as being one where states with lower instead of higher levels of student attainment of higher education will be more likely to adopt public higher education performance policies. Even though prior research has treated student attainment as an unspecific measure of a state's capacity or tendency to innovate, this research will consider it an indicator of the economic development requirements in a certain state and of the ever-growing requirements the state may put on its higher education institutions. In the past, higher education has been viewed as an engine of economic development for states. Higher education institutions are usually seen as contributing to economic development with the production of human capital. Since rising levels of student attainment of education correlate favorably with economic growth and diversification, paired principles of many states' development strategies (Beeson and Montgomery 1993), this research will hypothesize that the weight on public higher education institutions to show its performance will be highest in states where the levels of student attainment of education is the lowest.



***Hypothesis 4: States with lower citizens' income will be more likely to adopt performance policies for higher education institutions.***

Many studies have found data supporting a relationship between short-term economic conditions and the likelihood of states adopting specific policies (Berry and Berry 1990, 1992, Stream 1999). Prior research on the accountability movement in higher education have concluded that the new mandates could be caused partly by fluctuating economic situations in the states (J. C. Burke 2002). This research will hypothesize that states with lower citizens' income will have a greater need for guaranteeing that public agencies are using the limited public resources at maximum benefit causing the state to be more likely to adopt higher education performance policies.

***Hypothesis 5: States whose neighboring states have already adopted performance policies for higher education will be more likely to adopt similar policies.***

Interstate diffusion is a particularly abundant part of research on comparative-state policy. Numerous distinctive diffusion models are present. The most established models maintain that states are most likely to follow their proximate neighboring states, specifically the ones that share a border (Berry and Berry 1990, M. Mintrom, Policy Entrepreneurs and the Diffusion of Innovation 1997). The research of Berry and Berry (1990) found that the likelihood that a state would adopt a lottery was strongly related to the number of neighboring states that had already adopted a lottery. With various studies that had already examined the relationship between geography and state higher-education policy (Hearn, Griswold and Marine 1996, Hearn and Griswold 1994, J. F. Volkwein 1987, Zumeta, Meeting the Demand for Higher Education Without Breaking the Bank 1996), only one study by McLendon et al. (2005) through an empirical study has examined interstate diffusion pressures in higher education. However, it

should be noted that Burke has directed attention towards Tennessee's 1979 performance-funding program, the nation's first, as an "attractive and available model...ready-made for borrowing" by other states (2002, xiv). Burke acknowledges that "legislation by fax" was an everyday practice in policymaking for higher education during the 1980s and 1990s, described the Tennessee policy as a model that multiplied to "state capitols across the country" (2002, 18). This research will hypothesize the same notion that a state will be more likely to adopt performance funding policies for higher education when neighboring states have adopted the same or similar policies for performance.

***Hypothesis 6:*** *States that have more highly centralized higher-education governance structures will be more likely to adopt higher education performance policies.*

Several basic models exist for statewide governance of higher education. These models tend to vary from a range of signifying the level of centralized control by the state. From one end of the range lies the consolidated governing boards, the most centralized governance, because they have direct authority over the academic and fiscal affairs of higher education institutions. At the other end of the range lie several different coordinating boards, whose specific authority over institutional budgets and programs differs depending on the type, but, in all instances, act with less direct control over local institutions. Existing literature conceptualizes the distinctive higher education governance structures as presenting states differing analytical capabilities for formulating higher education policies (Berdahl 1971, Hearn and Griswold 1994, A. C. McGuinness 1997, M. K. McLendon 2003, Zumeta, Meeting the Demand for Higher Education Without Breaking the Bank 1996). Consolidated boards occasionally are posited to increase the likelihood of a state transforming because these boards deliver to policymakers a great quantity of analytical resources (Hearn and Griswold 1994). Several researchers have noted that there is

empirical support for a relationship between centralized governance and policy innovation in higher education (Hearn and Griswold 1994, McLendon, Heller and Young 2005). This research hypothesis draws on this literature in suggesting that states with more centralized governance structures will be more likely to adopt higher education performance policies.

***Hypothesis 7: States that have rising costs for higher education tuition will be more likely to adopt performance funding policies for higher education.***

This hypothesis identifies an influence within the higher-education arena. The cost of tuition for higher education has risen precipitously in recent decades, but the cost of tuition has increased more steeply in some states compared to other states (Hearn, Griswold and Marine 1996, Heller 2001). This research will infer that state officials may see increasing tuition levels as one indicator of higher education absence of accountability causing a problem which can be solved by new accountability directives.

Numerous elected officials suppose that public higher education has been unsuccessful in managing their budgets or achieving their sufficiently their core mission (Heller 2001, Mumper 2001). State policymakers may translate precipitous tuition increases as equivalent to higher education inserting unsustainable demands on state budgets and on the states' citizens, who are left with the burden of paying the tuition. This research will hypothesize that this precipitous growth in higher education tuition rates may influence state policymakers to adopt performance policies to guarantee higher education accountability.

***Hypothesis 8:*** States that have lower retention rates in their public higher education institutions will be more likely to adopt performance funding policies.

This hypothesis identifies another influence within the higher education arena. Retention rates of college students throughout higher education have decreased dramatically. Retention rates in higher education are measured by the percentage of first-time degree-seeking students from the previous fall semester who returned to the same institution (or completed their degree of study) by the following fall (Hillman, Tandberg and Fryar, Evaluating the Impacts of "New" Performance Funding in Higher Education 2015).

This research will surmise that state officials may regard decreasing retention rates as one indicator of the higher education sector's lack of accountability causing a problem for which new accountability directives demand a policy solution. Yet, this outcome has been viewed by elected officials yet another place where performance is not aligning with its core mission for higher education (Heller 2001, Mumper 2001). This research will hypothesis that this steep decrease in retention rates may influence policymakers to adopt performance policies to ensure higher education accountability.

***Hypothesis 9:*** States that have lower rates of college completion in their higher education institutions will be more likely to adopt performance funding policies.

This hypothesis represents yet another problem issue within the higher education arena. College completion is measured by the percentage of first-time undergraduate students who complete college within a certain time (six years). According to the U.S. Department of Education, the six-year graduation rate was sixty-two percent at public institutions (2021).

This research will hypothesis that state officials may see decreasing completion rates as one other indicator of higher education failure to meet their mission. This outcome is yet another

performance issue not aligning with the core mission of higher education for the state. This research will hypothesis that this decrease in completion rates of college may motivate policymakers to adopt performance funding for higher education policy.

***Hypothesis 10:*** *States that have lower graduation rates in their higher education institutions will be more likely to adopt performance funding policies.*

Just as the other problem issues within the higher education arena, college graduation rates are yet another problem for higher education institutions. Graduation rates are the percentage of first-time undergraduate students who received their degree. Unlike the prior variable (completion rate), graduation rate is just about receiving the degree, not the time in years it takes to obtain it. The percentage of students who graduated in 2019 was sixty-two percent.

Between 2014 and 2024, jobs needing a college education are predicted to increase more rapidly than jobs not needing a college degree (Bureau of Labor Statistics 2017). Higher education institutions are seen as the vehicle to move the states into this trend by providing the workforce needed in the 21<sup>st</sup> century (A. Li, *Lessons Learned: A Case Study of Performance Funding in Higher Education* 2019). State leaders and elected officials may interpret lower graduation rates as non-performance issue with the limited resources provided to public higher education institutions. This research will hypothesis that lower graduation rates at public higher education institutions may influence policymakers to adopt performance funding for higher education policy.

***Hypothesis 11:** States that have adopted the lottery for its public policy will be more likely to adopt performance funding policies.*

Currently, only six states have not adopted lotteries for state public policy, and only nine states have never adopted performance funding for their higher education institutions. It would seem obvious that some similarities may exist between the two policies. The only state that has neither public policy is Alaska. Alaska is not one of the states being reviewed in this research due to it is not contiguous with the other states.

Economic experts have calculated that state appropriations for higher education have decreased by thirty percent from the 1970s to the early 2000s, which has caused many public higher education institutions struggling with no other option but to increase tuition, essentially transferring the burden of college tuition to students and families. The withdrawal of state funding for colleges has weakened the affordability for many disadvantaged students while menacing the economic well-being of businesses that depend on college-educated employees. As a result of these challenging shifts in higher education funding, state leaders have adopted lottery earmark policies meant to provide supplementary funding for public higher education institutions already under pressure. According to Bell, Wehde, and Stucky (2018), the most flexible category in state budgets are appropriations for higher education. Research determined that lottery earmarks created significant scholarships or allotted for capital projects while other programs did not give specific details as to how it was to be used.

This research will hypothesis that when a state has the lottery that the state may be more likely to adopt performance funding policies. Additional research could help reveal if lottery earmarks are used for education appropriations to fill the gap where performance funding is not adequate the state's public higher education institutions.

## **Research Design**

The purpose of the research is to examine the dynamics that have an effect on states' adoptions of higher-education performance funding policies. Because the research needs to examine governmental behaviors across states and over time, this research requires a dataset that supports the spatial and temporal elements of the behavior. Thus, a longitudinal dataset with annual indicators of the conditions hypothesized that could affect the adoption of the performance policies over the thirty-year period of 1990 – 2020 is required. The data set includes 731 observations with data for forty-seven states over the thirty-year period.

## ***Variables and Measures***

This analysis used a 47-state dataset from a wide variety of secondary sources. This research's dependent variable was whether a state adopted a performance funding policy for higher education institutions each year. The adoption years were gleaned from publications by Burke et al. (2003), Ortagus et al. (2020) and other sources. The independent-variable indicators in this research correspond to the eleven hypotheses described earlier in the research.

Republican governor in this research is a yearly time-dependent variable that specifies whether a state had a Republican governor in any given year. The source for this variable was the Klarner dataset. Legislative party is an annual time-dependent variable that specifies party of the legislators in both chambers of a state's legislature that is Republican or Democratic. The data was coded as a binary variable with Democratic as zero (0) and Republican as one (1). Data for the years 1990 – 2020 was from the National Conference of State Legislatures data set, "Partisan Composition of State Legislatures 1990 – 2014" and "2009 – 2020 State and Legislative Partisan

Composition.” These two variables were combined in the statistical model to transform the partisanship independent variables into one.

Student attainment, a time-dependent variable, indicates the percentage of a states’ population age 25 and older with a 4-year degree from college. The source of the data was from U.S. Census Bureau data set, “State Educational Attainment Patterns: 1990-2000-2010.” Because data was not available for all states for all years, values for the years were held constant from 1990 through 1999, 2000 through 2009, and 2010 through 2020.

State citizen income, a time-dependent variable, is an average of median income per household. The source of the data was from U.S. Census Bureau data set, “Median Household Income by State.” The data can be found at <https://www2.census.gov/programs-surveys/cps/tables/time-series/historical-income-households/h08.xlsx>.

Neighboring state adoption of performance funding is an annual time-dependent variable explained as the number of neighboring states that have adopted performance funding policies. The idea of regional influence applied in this research delineates “nearby” states as states that share a border directly (Berry and Berry 1990, 403-404). The assumption with this variable is state’s neighbors who adopted the policy before them are presumed to be persuasive in encouraging innovation. This variable was compiled from the dependent variable data to examine the diffusion of performance funding policies for state higher education.

Institutional governance for state higher education institutions is modeled into four different categories as listed with coding references: single, coordinating board (1); single, governing board (2); coordinating or governing board (3); and administrative/service agency (4). A single, coordinating board oversees the significant aspects of the state’s responsibility with public higher education institutions and, in some instances, with independent institutions. A



statewide single, governing board directs and administers many of the functions for the institutions and typically has far-reaching power over the institutions. Coordinating or governing boards have oversight within a major, postsecondary system. In this governance structure, states do not possess a single, statewide coordinating or governing board. Higher education administrative agencies manage a variety of programs and services for higher education across the state. In this governance structure, the states also have system-level coordinating or governing boards and/or governing boards for individual colleges or universities (Fulton 2019). The source for this data was from the Education Commission of the States, “An Analysis of State Postsecondary Governance Structures.”

Rising costs of higher education is an annual time-dependent variable that measures the average costs of tuition on a national level. The data was available for 1996 and 2001 through 2019. It was held constant for each state for each year data was available. The source was the U.S. Department of Education through its National Center for Education Statistics, “Tuition Costs of Colleges and Universities.” With this variable for this research, the data could not be obtained, so this variable was omitted due to the lack of data available. Though this variable is of high theoretical interest, it could not be included in this research. Earlier research from Moynihan (2008) suggests that a significant benefit of passing performance management reform is creating an awareness that something is being done to limit bureaucracies that appear to be spending too much public money without performance accountability. Increases in public higher education tuition are likely to cause performance policy adoptions as decision-makers for public policy are looking for alternatives for taking actions for the public concern over accountability (Birdsall, Policy Adoption, Innovation, and Performance Management: The Case of Performance-Funding Policies in State Postsecondary Education 2019).

Retention rates is a time-dependent variable that represents the percentage of students returning for their second year of college. The variable was only available for 2004 through 2019. The source was the National Center for Higher Education Management Systems, “NCHEMS Information Center for Higher Education Policymaking and Analysis.” This variable causes a data problem because of the lack of data that could be obtained for this research. For this reason, this variable had to be omitted. Retention rates is of great theoretical interest because of the increase in first-year experience programs and various attempts trying to cause high-risk students to stay enrolled (Rutherford and Rabovsky 2014).

College completion is a time-dependent variable that represents the percentage of first-time undergraduate students who complete college within a certain amount of time (six years for this research based upon the national averages). This research compiled data only from 2013 through 2019. The source was Nation Student Clearinghouse Research Center found at <https://nscresearchcenter.org/completing-college/>. Due to the lack of data that could be obtained for this research, this variable had to be omitted. Making this variable theoretically interesting is the fact that in 2019 only 63% of first-time undergraduate students completed their degree in six years (U.S. Department of Education, National Center for Education Statistics 2021).

Graduation rates is a time-dependent variable that represents the percentage of first-time freshman undergraduate students who complete their degree from college. The data was available for 1990 and 1995 through 2018. The source for the data was the U.S. Department of Education through its National Center for Education Statistics, “Digest of Education Statistics.”

Lottery is a binary variable used in this research to determine the policymaking effects of one policy on another policy. The data was coded as adoption of lottery as one (1) and no

adoption of the lottery as zero (0). The source for the data was from the National Conference of State Legislatures.

### ***Research Model***

This research was designed to predict the probability that a state will adopt performance funding for their public higher education institutions. Due to the dichotomous nature of the dependent variable (adoption or no adoption), the research applied a regression logit model which can be used to predict a binary response from multiple independent variables (Pollock 2016). A logit, or logistic regression, model was developed where states are faced with policy decisions of two choices. Logistic regression is suitable for the study of categorical outcome variables in a public policy context of adoption or no adoption.

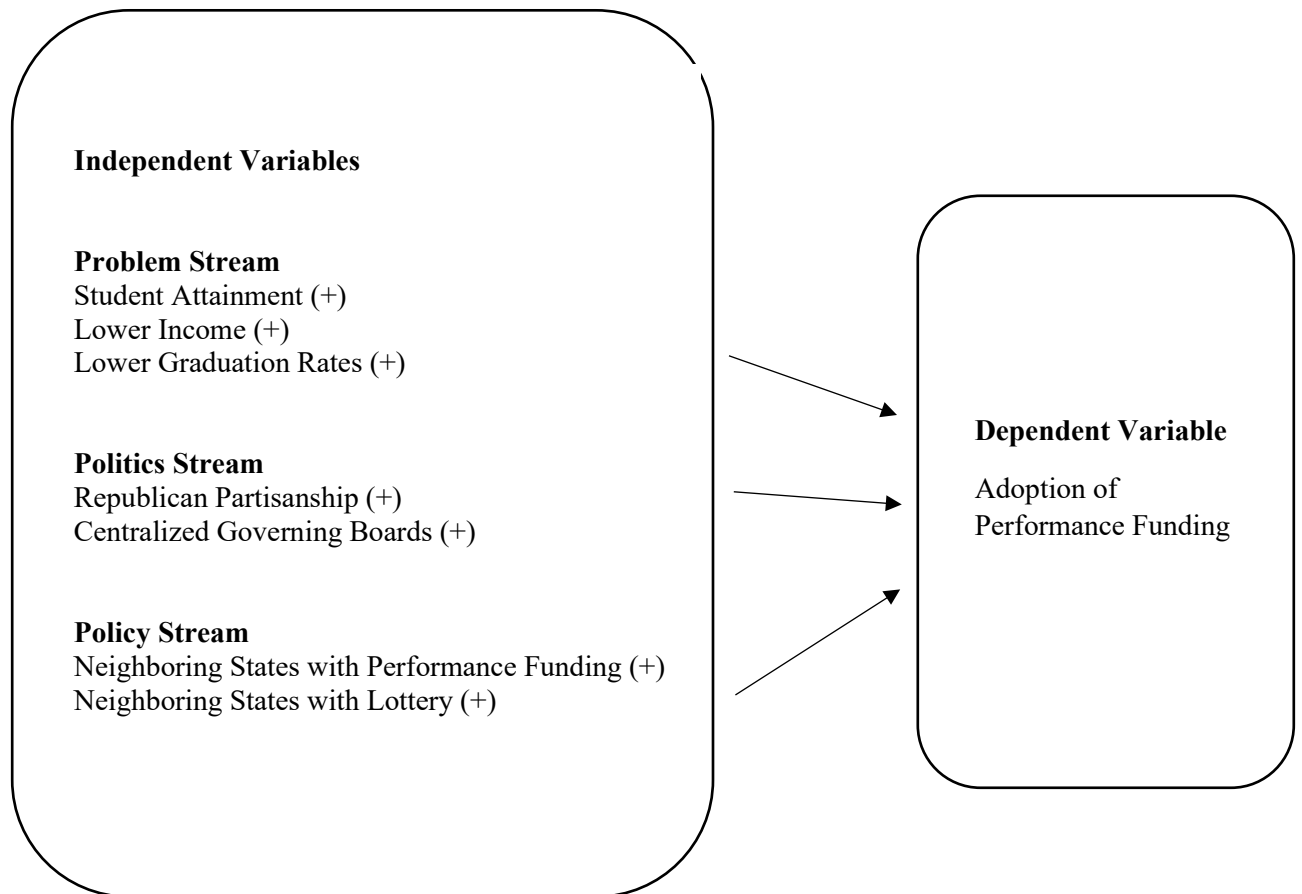
The logit model was selected for this research because it has the capability to work with binary response independent and dependent variables. It is also not restricted by normality or equal variance/covariance suppositions for the residuals. Regarding the classification and prediction, it has been shown to produce somewhat accurate results (Fan and Wang 1999). With logistic regression, it is essential to change the thought process from proportions to probabilities because logistic regression is directed at concluding how well an independent variable (multiple variables) predicts the probability of occurrence. Logistic regression permits the research to identify a model that considers a nonlinear relationship between the various independent variables and the probability of adopting performance funding (Pollock 2016).

This research utilizes a logistic regression model to predict adoption of performance funding for states' public higher education institutions. Predictive modeling "analyzes past data to make future predictions, or in economic terms, data is analyzed to estimate a model which is

used to make out-of-sample predictions” (Goenner and Pauls 2006, 936). The purpose of this predictive adoption model is to better understand the contributing characteristics of the states that have adopted performance funding that assists in identifying the variables which influence states’ decisions to adopt the specific public policy.

By pairing this predictive model and Kingdon’s framework of the multiple streams model, this research will be the first to utilize a quantitative method and the multiple streams model for performance funding for the research of public higher education institutions. Kingdon’s streams framework: “(a) has an explicit focus on the politics of the policy process; (b) captures institutional arrangements; (c) suits the description of lengthy and complex policy and decision-making processes; and (d) assumes that external events create windows of opportunity” (Simanjuntak, et al. 2012, 563). With the Kingdon framework, this research will examine the various independent variables in relation to the dependent variable. The independent variables for this research can be categorized into the three streams of Kingdon’s framework. The political stream variables are the partisanship of the governor and legislative party, diffusion, and institutional governance. The problem stream variables are student attainment, tuition increases, retention rates, college completion and graduation rates. The dependent variable, performance-funding adoption, is in the policy stream. Figure 1 is a depiction identifying the multiple streams model with each variable.

**Figure 1**  
**Variables with Identifying Kingdom Multiple Streams Model**



## CHAPTER 4

### RESULTS

#### Review of the Analytical Approach

This research examines the indicators of states' adoptions of performance funding for higher education institutions. The goal of this research is to identify the specific precursors of the policy adoption or no adoption. This research reviews performance funding adoption by state for 47 states from the period of 1990 to 2020. Alaska and Hawaii are not included mainly because they are both non-contiguous states. Nebraska is not included because of its unicameral assembly with its nonpartisan and legislature elections. The dependent variable is the actual adoption or un-adoption of the policy, performance funding, for higher education institutions. This research uses independent variables that represent the three multiple streams of Kingdon's model - political stream, problem stream and policy stream (1995). The party of the governor and legislative branch and the institutional governance of the states' colleges and universities are categorized as independent variables that represent the political stream. Student attainment, median income, rising costs of tuition, retention rates, college completion, and graduation rates are categorized as independent variables that represent the problem stream. For the policy stream, this research uses the independent variables, neighboring state adoption of performance funding and lottery adoption.

During the observation period, nine states never adopted the performance funding policy (Figure 1) for public higher education institutions. Seven states (Arkansas, California, Illinois, Missouri, New Jersey, Virginia, and Washington) terminate the policy after adoption and re-adopt the policy later.

**Figure 2**  
**United States Map Displaying the Nine States Without Performance Funding Adoptions**



- Performance Funding States
- Non-Performance Funding States

The purpose of this research is to test a logistical regression model to predict the state adoption of performance funding for higher education institutions using political, problem, and policy variables like Kingdon’s multiple streams model (1995) with the intention of using the power of the theoretical framework to explain adoption of the dependent variable, performance funding. This research analyzes various independent variables to best predict their influence on

the nominal dependent variable, performance funding adoption. This chapter reviews the research question (RQ), the hypotheses test to address it, the statistical analysis to address the research question and the results of the hypothesis testing.

### **Descriptive Statistics**

The independent variables for the political stream under Kingdon's multiple streams model (MSM) are party of the governor, legislative party, and institutional governance. Within the 47 states reviewed during the research period, Republican governors are in office 541 instances over the 30-year period. Democratic governors are in office 477 instances over the same period. During this same period in the 47 states, Republican legislative control exists in 512 instances and Democratic legislative control exists in 526 instances. Public higher education institutional governance is reviewed for four types of governance. During the period in the 47 states, single-statewide coordinating boards exist in 260 instances. Single-statewide governing boards exist in 31 instances. Systemwide coordinating or governing boards exist in 211 instances. Administrative/service agencies exist in 24 instances.

The independent variables for the problem streams under Kingdon's MSM are student attainment, median income, and graduation rates. Student attainment, an annual percentage of population 25+ years old with college degrees, is less than a 20% rate in the 47 states in 193 instances. Student attainment in states with greater than 20% but less than 30% appear in 216 instances. Student attainment in states with 30% to 39% (highest of the population sample) appear in 103 instances. The average percentage of student attainment is 24% for the period reviewed.



State citizen income, an annual measure of dollars of median income earned by state, viewed as the problem stream in the model, has a range from \$32,735 to \$91,712. The standard deviation for this variable is \$24,726 which is one of the largest standard deviations for the independent variables. This variable is utilized because prior literature examines this variable as an economic-problem measure of adoption of public policy. In the problem stream, graduation rates, an annual percentage of first-time undergraduate students who complete their degree, has the most variance between the lowest rate of 32% and the highest rate of 91%. The average graduation rate is 57% during the period reviewed.

The independent variables identified for the policy stream variables under Kingdon's model are neighboring states' adoption of performance funding and lottery adoption.

Neighboring states adoption of performance funding policies occur in 377 instances and non-adoption of the policy occur in 135 instances for the period of 1990-2020 for the 47 states reviewed. The average for neighboring states' adoption of performance funding is 77%.

Neighboring states that have adopted the lottery occur in 388 instances and non-adoption of the lottery occur in 137 instances for the research. The average for states' lottery adoptions is 78%.

The dependent variable, adoption of performance-funding policy, occurs in 165 instances and non-adoption occurs in 361 instances for the 47 states over the thirty-year research period. States adopt, un-adopt, and in some instances, re-adopt performance-funding policies for their public higher education institutions.

The sample size of this research model is 731. Descriptive statistics for the continuous and categorical independent variables, along with the dependent variable are provided in Table 1. The unit of analysis is the state and year for the thirty-year period. This table includes the variables, observations, minimums, maximums, means, and standard deviations of the

independent and dependent variables. Appendix A includes the variable descriptions and the source of each variable.

**Table 1**  
**Descriptive Statistics for the Independent and Dependent Variables**

<b>Variable</b>	<b>Observations</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Standard Deviation</b>
Party of the Governor	1,040	0	1	0.53	0.49
Legislative Party	1,457	-1	2	0.28	1.08
Student Attainment	1,410	12.3%	39%	23.59%	5.40%
State Citizen Income	1,269	\$32,735	\$91,712	\$64,535	\$24,726
Neighboring State Adoption	1,426	0	1	0.77	0.42
Institutional Governance	1,426	1	4	2.09	0.997
Graduation Rates	1,222	32.3%	90.8%	56.88%	11.27%
Lottery	1,456	0	1	0.78	0.41
Performance Funding (DV)	1,456	0	1	0.42	0.49

### **Correlation of the Independent Variables**

A correlation table is created to detect collinearity among the independent variables (Table 2). Multicollinearity among variables can generate unpredictable outcomes. The coefficients in this research are all less than an absolute value of 0.30, except for the 0.7466

correlation between graduation rates and college completions. Only one of these independent variables, graduation rates, is used in the model causing the intercorrelation concern to be irrelevant. College completion is not chosen because it is removed from the research due to the lack of data for the variable for this research.

**Table 2**  
**Correlation Table for the Independent Variables**

	ia_median_~e	neigh_stat~t	insti_gov	reten_rates	coll_compl	grad_rates	lottery
ia_median_~e	1.00000						
neigh_stat~t	-0.0911	1.00000					
insti_gov	0.0040	-0.1646	1.00000				
reten_rate	0.0016	0.0010	-0.0713	1.00000			
coll_compl	-0.0076	-0.1098	0.1766	0.1400	1.00000		
grad_rates	-0.0152	0.0507	0.1944	0.0906	0.7466	1.00000	
lottery	0.1234	-0.0921	0.1084	-0.1251	0.2901	0.3821	1.00000

### Hypothesis Testing

The research question for this study is: Why do states adopt performance funding policies for public higher education institutions?

The following section, presenting the research results, mirrors the theoretical frames and proceeds with each independent variable categorized into Kingdon’s (1995) multiple streams model (MSM). This research examines each independent variable’s effect on the adoption of performance funding by the 47 states over the 30-year period, while controlling for the effects of

the other variables. The null hypothesis asserts that in the population from which the sample was extracted no relationship exists between the independent variable(s) and the dependent variable (Pollock 2016). The null hypothesis is rejected if a relationship does in fact exist (denoted by the statistical significance at the 0.05 level of confidence) between the independent and dependent variables.

Overall, the model results indicate that the primary drivers in this research of state adoption of performance funding for higher education institutions is partisanship strength and higher education governance structures. The predictive model results are displayed in Table 3.

**Table 3**  
**Logistic Regression Results**

<b>Predicting PBF Adoption</b>	<b>Coefficient (Standard Error)</b>
Divided Government (baseline)	---
Unified Democratic	-0.827 (0.240)**
Unified Republican	0.486 (0.220)**
Student Attainment	0.045 (0.026)*
Median Income	-0.064 (0.076)
Neighbor Adoption of PF	-0.612 (0.321)*
SCB (baseline)	---
SGB	-1.531 (0.294)**
CGB	-1.027 (0.196)**
ASA	-2.913 (0.636)**
Graduation Rate	-0.022 (0.014)
Lottery	0.426 (0.231)*
Intercept	-1.710 (1.469)
Log likelihood	-405.726
N	731

Year fixed effects estimated but not presented

\*\*p<0.05; \*p<0.10

### *Partisanship Control*

This research hypothesizes that states with Republican governors will be more likely to adopt higher education performance policies. The research hypothesizes that the higher the percentage of seats in the legislature held by Republicans, the more likely the state will adopt higher education performance policies. These two variables are transformed into one independent variable, partisanship, for this research. This research rejects the null hypothesis because the model suggests that partisanship of the government is statistically significant at the 95% level with a coefficient of 0.486. The coefficient for the Republican party depicts a positive relationship between adoption of performance funding and a unified Republican party. Divided government is considered the baseline for this variable. The significance of the coefficient declines as the partisanship shifts to Democratic. The model depicts a negative relationship with a coefficient of -0.827 for the Democratic party. The coefficient for the Democratic party suggests that a negative effect occurs when it is a unified Democratic party in control of the state government.

Based upon prior research regarding performance funding policy adoption behaviors, this research hypothesizes the partisanship control relationship does exist for performance funding adoptions. Consistent with prior research, we see that Republican partisanship increases the likelihood of performance policy adoptions controlling for other factors known to influence adoptions of the policy. Republican-controlled state legislatures have adopted early versions of performance funding (McLendon, Hearn and Deaton 2006). Scholars have observed that states with higher percentages of Republican-controlled states (specifically a Republican governor and/or majority of Republican legislators) are inclined to appropriate less on higher education particularly than Democratic-controlled states (McLendon, Hearn and Mokher 2009). This

observation may lead to states adopting performance funding to incentivize the public higher education institutions to earn their state dollars by achieving set outcomes. Prior research from Hagood, regardless of the adverse views of higher education that Republicans have, suggests that “high-resource institutions” persist in benefitting from performance funding in Republic states (2019, 206).

### ***Student Attainment***

This research hypothesizes that states with lower levels of student attainment of higher education are more likely to adopt performance policies for higher education institutions. The research accepts the null hypothesis because the model did not exhibit statistical significance at 95% or greater for this independent variable. Prior research from Li suggests that jobs requiring a degree would rise tremendously between 2014 and 2024 and that “public colleges, therefore, are seen as vehicles to increase educational attainment and prepare the workforce that states need in the 21<sup>st</sup> century” (2019, 7). Since the intended consequences associated with performance funding policies commonly consist of the stated goals of increased student attainment, these metrics are typically evaluated when evaluating a public higher education institution’s performance. This research considers the lower student attainment as an indicator of adoption of performance funding policies, but it can be assumed to be only a metric of performance for higher education.

### ***State Citizens’ Income***

As a state economic indicator, this research hypothesizes that states with lower citizens’ median income will be more likely to adopt performance funding policies for higher education institutions. The research accepts the null hypothesis because the model does not depict any statistical significance for this independent variable. According to prior research about

performance funding, policies typically attach funding to attainment outcomes, such as student attainment (Dougherty and Natow 2015). Given this fact, this research assumes that lower median income would be an indicator of adoption of performance funding policies to assist the state in economic growth. By 2020, 41 states have adopted performance funding policies with more than half concentrating performance of underrepresented students (Ortagus, et al. 2020).

### ***Neighboring State Adoption of Performance Funding***

Considering that interstate diffusion is a particularly abundant part of research on comparative state policy, this research hypothesizes that states whose neighboring states had already adopted performance policies for higher education will be more likely to adopt the same policies for their own states. The research accepts the null hypothesis because this independent variable only exhibits statistical significance at 90% with a -0.612 coefficient which is not acceptable for this model. Much prior research has been conducted on the relationship between geography and state higher-education policies (Hearn, Griswold and Marine 1996, Hearn and Griswold 1994, J. F. Volkwein 1987, Zumeta 1996), and only one study by McLendon et al. (2005) examines interstate diffusion pressures in higher education. Given that prior research models (Berry and Berry 1990, M. Mintrom 1997) maintain that states are most likely to follow their proximate neighboring states, this research hypothesizes incorrectly for this independent variable.

This research takes the approach of one-size-fits-all for this variable. According to Bricker and LaCombe (2021, 377), “recent research has challenged contiguity as a measure of diffusion and proposed alternative understandings of policy adoption and innovation”. Scholars are tapping into more complex measures and methods to identify diffusion outside the function of contiguity (Desmarais, Harden and Boehmke 2015, Nicholson-Crotty and Carley 2018,

Pacheco 2012, Shipan and Volden 2008). Shipan and Volden refer to policy diffusion as a “good starting point” that is “often overly limiting, sometimes misleading (or even wrong)” (2008, 789).

### *Educational Governance Structures*

Based upon prior research (Hearn and Griswold 1994, McLendon, Heller and Young 2005), this research hypothesizes that the states that have more highly centralized higher education institutional governance structures are more likely to adopt performance funding policies. This research rejects the null hypothesis because this predictive model finds that institutional governance structures are significant at the 95% level. Single-statewide coordinating board governance structures are considered the baseline for this variable. The model depicts a negative relationship for all the governing structures. The state systemwide coordinating or governing board had the strongest significance with a coefficient of -1.027. The significance of the variable in the context of the model is evident while controlling for all other effects.

Prior research by Li (2017) finds no effect of the governing structures for public higher education institutions. Birdsall (2019) reports that states with consolidated governing boards are less likely to adopt performance funding which does not follow the findings of this research. The period for the Birdsall research was 1990-2011 which could be why the research has different conclusions about governing structures. Research by McLendon and Hearn (2013) also suggests that states with centralized governing boards are less likely to adopt performance funding policies. Given the period of this research (1979-2002) by McLendon and Hearn (2013), this research will suggest that the period of the research is causing the different conclusions. Since governing boards are charged with the crucial authority of making policies and decisions for



colleges and universities, the policy behavior of the boards is very important and can have profound effects on performance funding policies.

### *Graduations Rates*

Seen as probably the most crucial goal of higher education institutions, graduation rates, this research hypothesizes that states with lower graduation rates in higher education will be more likely to adopt performance funding policies. The research accepts the null hypothesis because the independent variable is not statistically significant in the model. However, as this critical outcome is not met by states, lower graduation rates are a definite negative performance problem. Higher graduation rates at public higher education institutions indicates a greater success rate for students. Higher education must produce graduates to achieve their goals to be aligned with their states' missions.

Contrary to the original purpose for adoptions of performance funding policies for higher education, it is uncertain as to whether the policies are improving higher education institutions as intended. Decades ago, the first performance funding policies for states were adopted, but existing research has not shown any substantial indications that these performance policies are improving higher education outcomes (Hillman, Tandberg and Gross 2014, Rutherford and Rabovsky 2014, Lahr, et al. 2014, Hillman, Fryar and Crespín-Trujillo 2018). What the studies do not reveal is whether there are unintended consequences to performance policies for higher education in which selected groups experience positive advantages while other reap disadvantages (Favero and Rutherford 2020). Li (2019) notes some of the unintended consequences of performance funding policies: more two-year college certificates awarded;

selectivity admission criteria at a higher standard; and decreased academic excellence and opportunities.

### *Lottery Adoption*

Through the diffusion lens of lottery adoptions, this research hypothesizes states that adopt the lottery are more likely to adopt performance funding policies. This research accepts the null hypothesis of lottery adoptions by states is not an indication that performance funding will be adopted for higher education. This independent variable has statistical significance at 90% with a negative coefficient of -0.022 which does not meet the significance threshold. With state lottery revenues being partially appropriated to higher education in most states, more accountability for performance of the higher education institutions would seem to be needed.

About a decade after Georgia's original enactment of the state lottery with the purpose of funding merit aid programs for higher education, Tennessee and North Carolina, two neighboring states, also adopted lotteries. In 2003, Tennessee by voter ballot at a 58% majority implemented a state lottery earmarking funds for college scholarships. In 2005, the North Carolina General Assembly enacted a state lottery but did not earmark the funds for merit scholarships. Prior to North Carolina's adoption of the lottery, every southeastern state enacting the lottery allocated a small portion at least of the funds to merit scholarships (Ness and Mistretta 2009). According to Lebioda (2014), of the 44 states that had adopted lotteries, only 26 states had earmarked funds for educational purposes which was K-12, higher education or both.

## **Closer Look at the Findings**

### ***Partisanship Control***

The marginal effects figure below takes a closer look at the complex relationships of this research relating to partisanship control. The marginal effects of performance funding adoption by partisanship government types are depicted in Figure 3. The unified Republican variable is at almost a 50% probability of performance funding adoption policies. In contrast, the unified Democratic is depicted at an estimated 25% probability for performance adoptions.

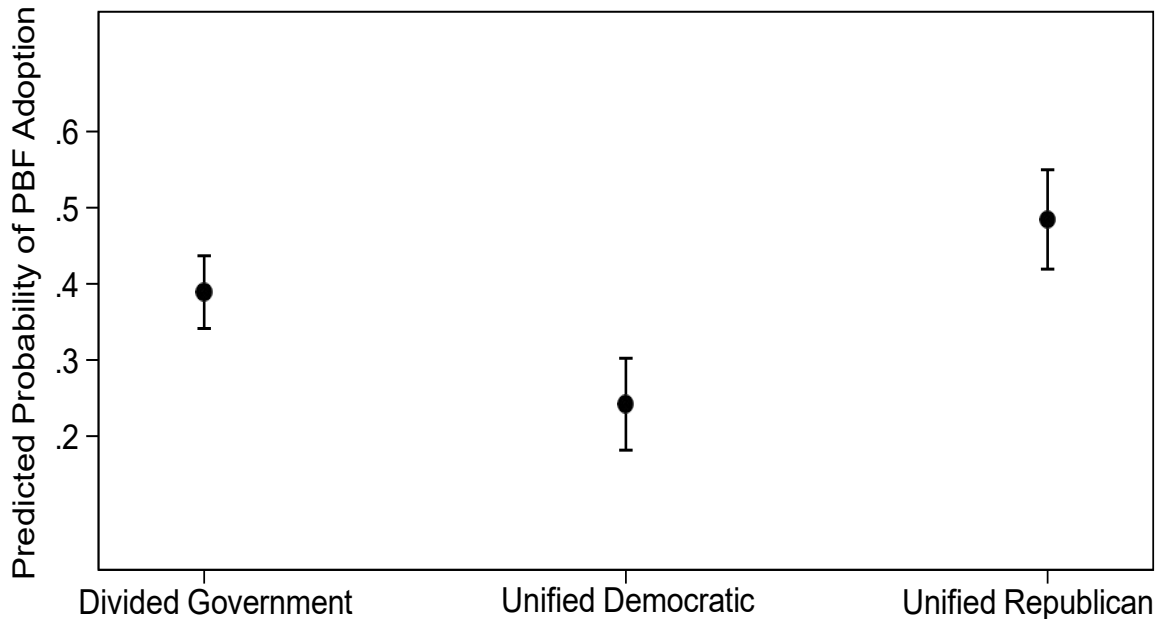
What is interesting in the figure below is the fact that the divided government and unified Democratic do not overlap. Even more interesting in the graph is that the unified Democratic and unified Republican not only do they not overlap but they are not even close to each other.

Depicted graphically, unified Republican has a strong effect on the probability of adoption of performance funding for higher education. As state government partisanship moves from divided government to unified Democratic, performance funding is less likely to be adopted for higher education. It is depicted as a negative effect. As state government partisanship moves from unified Democratic to unified Republican, performance funding is almost 25% more likely to be adopted. When looking at a shift from divided government to unified Republican, performance funding is not even 10% more likely to be adopted. It is a much greater effect for adoption when the partisanship control moves from unified Democratic to unified Republican.

The implications of this research suggest that state partisanship with unified Republican control is more likely to adopt performance funding for their higher education institutions. Prior research with this finding suggests that Republican partisanship control favors performance funding policies because these policies are more aligned with accountability, and not just huge bureaucracies (McLendon, Hearn and Deaton 2006). Research has shown that states that are

Republican-controlled are more likely to spend less overall and spend less on higher education specifically than Democratic-controlled states (McLendon, Hearn and Mokher 2009). Hagood (2019) suggests that performance funding states have more expenditures for financial aid, decreased amounts of need-based aid, and have larger percentages of Republican state law makers in contrast to non-performance funding states.

**Figure 3**  
**Marginal Effects of the Predicted Probability of Performance Funding Adoption by Partisanship Government Types**



***Governing Structures***

The marginal effects of the predicted probability of performance funding adoption by state governing structures of public higher education institution types are depicted in Figure 4. The state-systemwide coordinating or governing board variable (most centralized of the four types reviewed) is at an almost 35% probability for performance funding adoption policies. In contrast, the single-statewide governing board is depicted at a little above 20% probability for

performance adoptions. States with administrative/service agencies are predicted to have a much lower probability at approximately 10% of performance funding adoption.

The figure depicts some overlap between single-statewide governing board and the state-systemwide coordinating or governing board. No overlaps are depicted by single-statewide coordinating board and the administrative/service agency with any of the other types of governing structures. As the governing structure changes from single-statewide coordinating board to single-statewide governing board, it has a negative effect on adoption of performance funding for higher education. As the governing structure changes from single-statewide governing board to state-systemwide coordinating or governing board, it has a positive effect on adoption. As the governing structure changes from state-systemwide coordinating or governing board to administrative/service agency, it has a negative effect almost as great as the change from single-statewide coordinating board to single-statewide governing board effect.

The implications of the research findings for state governing structure for higher education suggests that state-systemwide coordinating or governing boards (centralized/consolidated) appear to more likely to adopt performance funding policies. A vast amount of research has suggested that differing higher education governance structures present states differing analytical capabilities for formulating higher education policies (Berdahl 1971, Hearn and Griswold 1994, A. C. McGuinness 1997, M. K. McLendon 2003, Zumeta 1996). Research has also offered empirical support for the relationship between centralized governance and policy innovation in higher education (Hearn and Griswold 1994, McLendon, Heller and Young 2005).

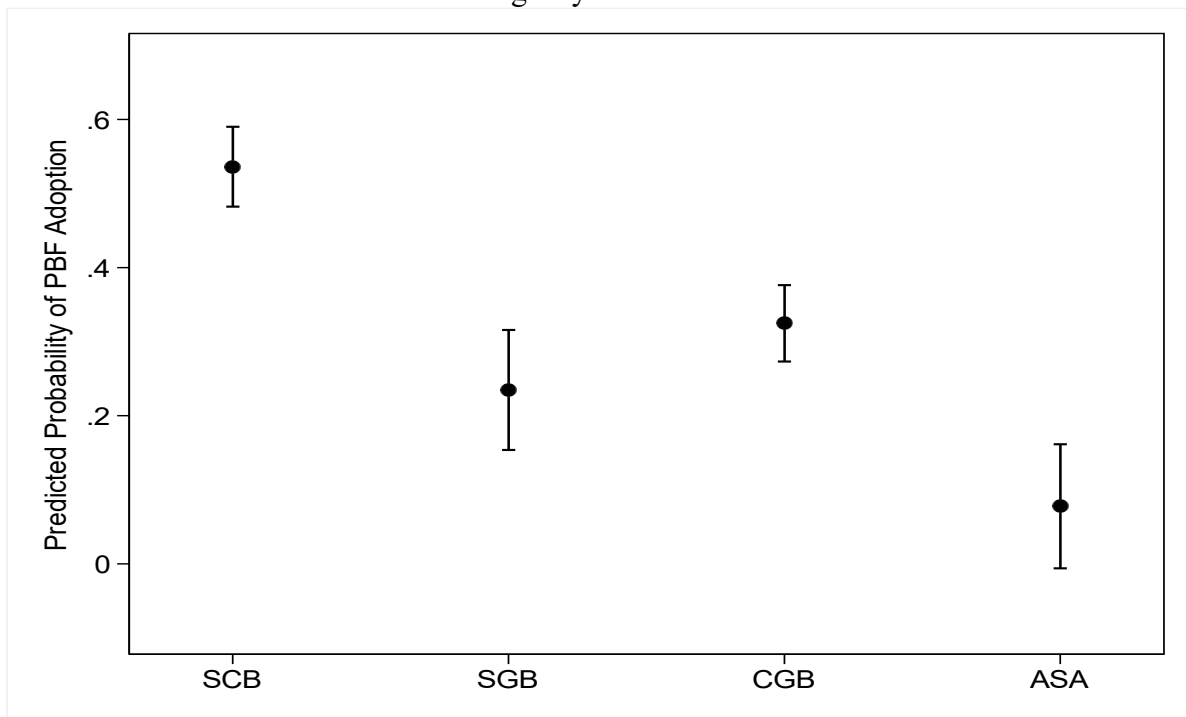
Prior research (McLendon, Hearn and Deaton 2006, Rutherford and Rabovsky 2014, Lacy and Tandberg 2014, Birdsall 2019) only gathers data based on the presence of a

consolidated (centralized) board or not, this research uses four types of governance structures bringing more robustness to the study by researching the governing structures in greater detail. Lacy and Tandberg code consolidated governing boards as an indicator whether it existed or not, referring to the consolidated governing structures as state’s “politics of postsecondary education” and considered as the “fourth branch of the government” (2014, 633). Their research covering the period of 1979-2008 finds no statistical significance between governing structures and financial innovations (Lacy and Tandberg 2014).

**Figure 4**  
**Marginal Effects of the Predicted Probability of Performance Funding Adoption by State Governing Structures of Public Higher Education Institutions**

Independent variable acronyms for the governing structures are below.

- SCB – Single-statewide coordinating board
- SGB – Single-statewide governing board
- CGB – State-systemwide coordinating or governing board (consolidated/centralized)
- ASA – Administrative/service agency



## Summary

In summary, this research finds that partisanship strength of elected officials and governing structures of state public higher education institutions affect the likelihood of adoption of performance funding policies. This research replicates prior research of Republican control government and the adoption of higher education performance policies as being statistically significant (McLendon, Hearn and Deaton 2006, Gorbunov 2013, Hagood 2019, Godin 2020, Bricker and LaCombe 2021).

The policy implications for politicians and policy advocates suggest by this research are that partisanship control with a unified Republican party seems to favor performance funding policies for higher education institutions. Prior research by McLendon et al. (2006) relating to Republican and Democratic party control and the different types of performance policies (performance-funding policies, performance-budgeting policies and performance-reporting policies) suggests that Republicans support performance-funding policies because these initiatives extend to the elected officials the most powerful force for bringing about accountability demands in the large public bureaucracy of state higher education institutions. In contrast, Democrats with a tendency of less government-accountability agendas will lean towards performance-budgeting policies which exhibit a “rhetorical commitment to accountability without the triggers that mechanically penalize campuses” (McLendon, Hearn and Deaton 2006, 18). Regarding performance-reporting policies, they did not seem to present to either party the amount of accountability required by Republicans, or the rhetoric needed for the Democratic party (McLendon, Hearn and Deaton 2006).

The findings of the importance of centralized governing structures with adoptions of performance funding for higher education replicates prior research (Rutherford and Rabovsky

2014, Birdsall 2019, Favero and Rutherford 2020, Godin 2020). The policy implications for politicians and policy advocates suggest that state-systemwide coordinating or governing boards tend to favor performance funding policies for higher education institutions. These boards tend to have “centralized decision-making authority, more formal authority, professional staffs, and high autonomy, allowing them to play a central role in developing and implementing public higher education policy” (Birdsall 2019, 38). The characteristics of these boards tends to hold them more accountable as compared to the other governing structures which tend to be more like a bureaucracy. Less centralized boards like coordinating boards in contrast are decentralized and an insignificant amount of independence and their responsibilities basically limiting them to performing as boundary between public higher education institutions and state government (Birdsall 2019).

McLendon et al. (2006, 19) suggests that states with consolidated governing boards were more likely to adopt performance funding policies because their hypothesis was “grounded in a higher-education literature that tends to differentiate between governance structures on the basis of analytical capabilities they afford policymakers (i.e., centralized arrangements provide greater analytical resources, which in turn spur policy innovation)”. Their findings were different than the findings in this research which finds that states with state-systemwide coordinating or governing boards are more likely to adopt performance funding policies for higher education. They further their discussion by stating that coordinating boards (less centralized) are appointed by state legislatures or governors and are basically an expanding arm of the elected officials. In contrast, “because consolidated boards tend to institutionalize the preferences of faculty and administrators, their existence in a state should lead to policies that are more consistent with the preferences of academic stakeholders” (McLendon, Hearn and Deaton 2006, 19). The



implications of their research suggested that “we now view governance arrangements as serving to institutionalize the preferences of different sets of stakeholders, which seek to shape policy consistent with their preferences” (McLendon, Hearn and Deaton 2006, 19). They view consolidated governing boards as “distinctive organizationally because they represent a kind of academic cartel in which a central group of university-system administrators directs the affairs of campuses on a statewide basis” (McLendon, Hearn and Deaton 2006, 19). Lastly, this condition can help in explaining why states with consolidated boards may not adopt performance funding policies choosing performance-budgeting policies to circumvent rigorous performance rules holding campuses accountable (McLendon, Hearn and Deaton 2006).

Table 4 includes a summary of the hypothesis findings for this research. The hypotheses that are found to be statistically significant are highlighted with a gray background under the accept/reject column.

**Table 4**  
**Hypothesis Findings Categorized by Usage for Kingdon’s Multiple Streams Model**

<b>Kingdon’s Streams</b>	<b>Hypothesis</b>	<b>Accept/Reject – Null Hypothesis</b>
Problems Stream	Student Attainment	Accept
	Lower Income	Accept
	Lower Graduation Rates	Accept
Politics Stream	Republican Partisanship	Reject
	Centralized Governing Boards	Reject
Policy Stream	Neighboring States with Performance Funding	Accept
	Neighboring States with Lottery	Accept

\*Statistically significant findings indicated with a gray background. For all others, we accept the null hypothesis.

## **CHAPTER 5**

### **CONCLUSIONS**

This chapter includes a summary of the research, examines the results within the perspective of the theoretical framework, and accentuates this research's contributions to the literature and possibilities for future research.

In 1979, Tennessee was the first to adopt higher education policy for accountability. Almost 15 years later in 1993, Missouri adopted their version of performance funding amongst growing troubles of increasing higher education costs and the lack of confidence in higher education. By 2013, American states' adoptions for performance funding of some form was at 70%. Currently, over 80% of states have adopted some form of performance funding.

#### **Implications of the Findings**

The findings of this research suggest the importance of partisanship control of elected officials and the state governing structures of public higher education institutions to accountability policies. Building upon a prior suggestion in this research, that Republicans tend to be more likely to favor policies that are not favoring public bureaucracy, Republicans support performance funding policies because these initiatives present elected officials the strongest leverage for reigning in accountability burdens usually present in the vast bureaucracy of public higher education (McLendon, Hearn and Deaton 2006). Previous research reveals strong support for the effect of Republican governors and legislators on performance funding policy adoption (McLendon, Hearn and Deaton 2006, A. Li 2017, K. J. Dougherty, R. Natow, et al. 2013).

Birdsall (2019) finds that the partisan composition of the legislature has no significant results on adoption of performance policies for higher education.

These findings from this research pertaining to the partisanship control of elected officials direct the research back to Kingdon's multiple streams model, particularly to the politics stream. Kingdon notes in his work that changes in party control through elections may result in an agenda or alternative moving to the forefront of issues. Kingdon further points out that a critical point of advantage for agenda issues and alternatives could be elected officials and political parties. This critical point of advantage aligns with earlier trends about congressional oversight. Smith (2003) notes that Democrats with their popular party control can dominate the offices of elected officials causing the foundation and expansion of the vast (federal) bureaucracy. He continues by stating that Republicans, once they gain control of the Congress, may be more forceful in their control and oversight of the Democratic-type bureaucracy.

This same policy behavior can be applied to states' control and oversight over the Democratic bureaucracy. McLendon, Hearn and Deaton (2006) attempted to explain the partisanship effects on higher education performance policies. Relating to appropriations and enrollments, the public higher education bureaucracy increased in size starting in the late 1950s through the middle of the 1970s, at a time when the Democratic party control of state legislative seats had reached its highest. In the 1980s and 1990s when Republican party control reached its highest level, the Republican legislature desired to adopt more accountability oversight for public higher education institutions.

From the conservative-liberal perspective, performance funding seems to be more parallel with reduced government spending, stringent accountability policies, and more efficiency in government by means of market incentives mirrored from the private sector

(McLendon, Tandberg and Hillman 2014, Li and Zumeta 2015). Regarding party preferences, Democrats historically are more supportive of funding to public services without much accountability (Alt and Lowry 2000). Because performance funding uses performance metrics to appropriate state funds based upon outcomes to support more efficient spending, the performance policy seems to be more aligned with Republicans (A. Li 2017).

Kingdon's model suggests that participants, inside and outside of the government, create bonds about shared ideals, tendencies, and opinions. Kingdon notes in his work that the participants in the federal administration include the president, the staff of the Executive Office, and the political appointees in the departments and bureaus (1995). The administration of the state government would include the governor, the cabinet of the governor, and any appointed officials. Governors have institutional resources just like the president. Governors have gubernatorial appointees for boards and commissions. Examining four different governing structures in state public higher education arena, this research rejects the null hypothesis that highly centralized higher-education governance structures will not be more likely to adopt performance funding policies.

As noted earlier in this research, several researchers have noted that there is empirical support for the relationship between centralized governance and policy innovation in higher education (Hearn and Griswold 1994, McLendon, Heller and Young 2005). The importance of state higher education governing boards is often emphasized in the politics of policy adoption. The features of the consolidated board may assist in decreasing the lack or absence of information and analytical data and the possibility for a performance funding policy to even be deliberated. Under federal policy, the Federal Data Strategy (FDS) action plans under the Evidence-based Policymaking Act of 2018 urge agencies to use data as a strategic asset (United

States Office of Management and Budget 2020). “Information sharing among agencies, combined with a collective understanding of the organizations’ data populations, empowers evidence-based policymaking” (Holzer 2022, 31). As a statewide organization, state systemwide governing boards offer a single passage for elected officials and university administrators to convey their actions, values and goals (Tangberg 2013). Birdsall (2019) suggests that larger analytical abilities of governing boards would be significant in this aspect.

### **Contributions to the Literature**

This research presents a new understanding of the occurrence of the policy progress process and moves forward with the knowledge of the indicators pushing states to formulate policy shifts in public higher education institutions. This research constructs theoretical and empirical contributions to the public policy field by examining hypotheses through the lens of the multiple streams model from John Kingdon regarding the adoption of performance funding policies.

This research contributes to the existing literature by viewing the adoption policy through a new theoretical framework never used statistically to examine policy shifts in public higher education. The theoretical framework, Kingdon’s multiple streams model, allows the research to view the independent variables through the lens of the multiple streams model involved in policy adoptions. As Kingdon refers to “windows opening” to allow agenda items to be adopted, this research gleans through various independent variables categorizing each one into the multiple streams model to depict when those windows may or may not open (1995). This research clearly suggests that Republican party control and state-systemwide coordinating or governing boards are present when the opening occurs in the window allowing the performance policy adoptions

for higher education. These indicators of policy adoption as seen through the lens of the multiple streams model clearly exemplify Kingdon's work on incentives and policy entrepreneurs. In some instances, these policy entrepreneurs just simply know there is a problem and they back solutions to solve the problem. Secondly, these entrepreneurs support proposals because they desire to sponsor their principles or influence the structure of public policy. Lastly, these entrepreneurs can be viewed as "policy groupies" and basically, just they "like the game" (Kingdon 1995, 123). Connected to this first contribution is the significance of politics, problems and policies coming together in the stream for the policy adoption process to occur in the window that opens.

In the Kingdon framework, he discusses the policy primeval soup where "ideas float around in these communities" (Kingdon 1995, 116-117). Using this analogy of policy primeval soup, this research further contributes to the literature through Kingdon's framework. Looking at the independent variables of Republican party control and state-systemwide coordinating or governing boards, the "policy communities" are evident with these two variables (Kingdon 1995, 117). These policy communities have proposals that possess survival criteria: "technical feasibility, value acceptability, and anticipation of future constraints" (Kingdon 1995, 131-139). These findings related to Republican party control and state-systemwide coordinating or governing boards suggest some evidence is added to the existing literature regarding policy makers viewing performance funding as a mechanism in public higher education for accountability.

Kingdon's multiple streams model is supported by the research findings of this study. The efficacy of the model is validated by this research for all two of the three streams of the model. The problem stream in this research is depicted with the variables of student attainment,

median income, and graduation rates. The political streams seen through the variables of partisanship control and highly centralized governing structures has the strongest argument for the validity of Kingdon's model in this research based upon the statistical significance. The policy streams for this research are seen through neighboring states' adoption of performance funding and lottery adoptions. Even though this research did not show statistical significance in the problem stream variables, the problems with higher education policies still exists and must be dealt with by policy makers whether it is through performance funding policies or some other policies. The political stream variables meet the highest statistical confidence level in this research. Policy makers should take heed of this importance and create the political streams that are needed to open the windows as Kingdon states. The policy stream variables in this research show some statistical significance but not at the confidence level needed for validity. Based upon the findings of this research, Kingdon's multiple streams are important. Based upon the variables chose for this research, the political stream has the greatest effect of producing adoption of performance funding policies.

This research did not limit the independent variable, institutional governing boards, by operationalizing it in a dichotomous nature as prior literature has done (McLendon, Hearn and Deaton 2006, Birdsall 2019, Rutherford and Rabovsky 2014). As a contribution to the literature, this research included four types of public higher education governing boards to really understand in more detail about the governing structures of state higher educational institutions. This research intentionally goes deeper to try to understand if other governing structures besides consolidated (centralized) governing boards do indeed significantly affect the adoption of performance funding for policy processes. This research finds that state systemwide coordinating or governing boards are more likely to adopt performance policies for higher education.



Given the findings of this research for governing structures for public higher education institutions, the implications would suggest that governors along with policy makers would create governing structures that are aligned with their goals and mission for state policies. Creating these more centralized governing structures can ensure that performance funding policies will more likely be adopted for public higher education institutions. By developing more centralized governing structures, the goals and objectives will be more aligned with the ideals of the government for the state.

A relatively small amount of research has used Kingdon's multiple streams model with quantitative methods. Prior research by Rawat and Morris (2016) notes that two important studies grounded upon quantitative methods to test Kingdon's model were found to be insufficient and unsupportive of the predictions formulated by the model. This research contributes to the literature by using a quantitative method to test Kingdon's model. The findings of this research support the predictions of Kingdon's model, specifically in the political streams and somewhat in the policy streams. The problem streams data could be quantified but due to the lack of data for some of the variables, the problem stream was not as sufficient and supportive as the two other streams.

### **Limitations to the Findings**

The research includes three independent variables, rising costs of college tuition, retention rates and college completion, with unavailable data for the study, so these variables were omitted from the research. The three independent variables use data from the National Center for Education Statistics' IPEDS. The collection of the data by IPEDS does not begin until 2003. This research covers the period of 1990 through 2020. Because of the missing data for

these three variables, hypothesis claims could be incorrect due to underlying effects from the missing data. The missing data for these independent variables could possibly introduce potential biases and affect the statistical power of the study.

The second limitation to this research is lack of general definitions of policy adoption. An adoption policy for performance funding may be adopted by the legislature but not actually funded in the year of adoption. In this case, a policy's implementation may be one or more years after adoption. Policy adoption for this research is based on Dougherty and Natow (2015). The criteria for policy adoption are established by the governing board or a result of legislative approval for performance funds. Second, student outcomes must be incentivized in the adopted policies. These incentives for performance funding to higher education institutions within the state include underrepresented students, STEM programs, and disability students just to name a few examples. The adoption year of the policy for this research is outlined as the year it was authorized, not funded (Dougherty and Natow 2015).

The third limitation relates to the second limitation and can be seen as an extension of it. This research does not distinguish between policy adoptions versus policy implementation. The policy implementation is the more significant issue here. Performance funding policies could be adopted and never funded or implemented. In some cases, states could adopt performance funding because it is the right thing to do for appearances. Mentioned earlier in the research, Democrats will be more likely to adopt performance budgeting policies that are just rhetoric.

The final limitation for this research is policy entrepreneurs, actors and influencers. These groups are not examined as an independent variable(s). In this case, states could have the same advocacy groups or foundations like Lumina Foundation that support performance funding policies for public higher educational institutions. These entities are viewed as having vast

amounts of information, informing the legislative bodies with needed information that aligns with their policy agendas. Kingdon states that these entrepreneurs possess a “defining characteristic, much as in the case of a business entrepreneur...their willingness to invest their resources—time, energy, reputation, and sometimes money—in hope of a future return” (1995, 122). In the case of the Lumina Foundation, this incentive that inspires advocacy is the support of personal interest. Another incentive is they advocate policies because they desire to advocate their values or influence the shape of public policy (Kingdon 1995). Future research could glean additional information and insight into policy entrepreneurs strengthening Kingdon’s framework.

### **Future Recommendations for Future Research**

One limitation of this research, the missing data from IPEDS, will need to be addressed in future research as the information becomes available. The three independent variables, rising costs of tuition, retention rates and college completion, can assist in identifying possible significant indicators that will need to be addressed for policy adoptions and effectiveness of performance funding. These three variables are in the problem stream for Kingdon’s multiple streams models for this research. As the cost of tuition has increased greatly over the past few decades, research could hypothesize that this problem would be likely to cause states to adopt performance funding policies. The same holds true for decreasing retention rates and decreasing college completion. Prior research shows that performance funding incentives boost enrollment for Hispanic and low-income students while Black student enrollment is negatively affected (Gándara and Rutherford 2018). Research from Louisiana for public community colleges and associate-granting colleges reveals that performance funding (PF) is positively associated with

certificate completions, but PF is not related to associate degree completions or retention rates (Hu 2019).

Little consideration has been presented about the structure of the performance funding policies and the consequences (whether intended or unintended) after the policy adoption. A significant contribution for future research is exploring whether the intentions of the performance funding policies are related to its effectiveness for the outcomes expected. Birdsall (2018) finds changes in graduation rates, more selectivity, and smaller enrollment numbers by underrepresented groups that are all associated with performance funding policies. During the prior 25 years of performance funding policies, Bogue and Johnson (2010) find that nearly all institutions in Tennessee have implemented performance assessments with some of the assessments confirming positive student outcomes while other assessments have limited effect on outcomes. Cornelius and Cavanaugh (2016) review the Florida State University System and find that a negative correlation is present between performance measurements and the institutions' population of Black or disabled students. Dougherty, Jones et al. (2016) suggest from their research that performance funding leads to unintended consequences involving greater selective admissions and decreased academic standards. Overall performance funding policies did not affect the enrollment of underrepresented students, but equity provisions are related to increased enrollment of African American students at less-selective higher education institutions. The burdens on Pell-recipient enrollment at selective institutions is decreased (Kelchen 2018). These references to prior research are just a few of the examples of unintended consequences with performance funding policies for higher education.

Future research of these unintended consequences could focus on each issue mentioned. The research could take the decreased enrollment numbers issue and validate whether it is true or

not by individual states. Much research in public higher education just examines one state or a few states in a policy area. For example, the Florida research by Cornelius and Cavanaugh (2016) could be expanded upon to take a closer look at the negative correlation between performance measurements and institutions' population of Black or disabled students possibly finding indicators causing this unintended consequence. Future research could review the underlying indicators to try to find the causes of greater selective admissions and decreased academic standards. These unintended consequences appear to be caused by the institutions wanting to meet the performance measurements which is the opposite of the intended purpose of performance funding policies. Future research could build on the Kelchen (2018) research suggesting that burdens of Pell-recipient enrollments at selective institutions has decreased. Many states have developed stipulations in their performance funding policies that clearly incentivize colleges for positively assisting underrepresented students. Future research could examine indicators associated with these stipulations to measure their effectiveness for the state policies.

A third area of potential future research involves the perspective of performance funding policies from the standpoint of the state budgeting process, which is the backbone to existence of the political process and all public policies (Gosling 2009, Wildavsky 1984). Though it will be burdensome to glean all policies for a long period of time (30 years in this research), this indicator can offer much needed information in relation to analytical programmatic attributes of the budgeting process as it relates to performance funding policies. Future research can provide much needed information about the overall fiscal health of the state and higher education budget specifically. Current research suggests that performance funding policies disproportionately benefit well-performing universities and colleges which even presently receive larger amounts of

resources (Favero and Rutherford 2019). Prior research reveals that performance funding policies affect some higher education institutions' spending priorities but has no effect on appropriations. Performance funding is related to increases in instructional spending, but negatively associates with research expenditures. Public research institutions' spending is influenced the greatest (T. M. Rabovsky 2012).

The last research recommendation relates to the state governing structures of public higher education institutions. Considerations that can influence the internal institutional relationships—like board member tenure, organizational arrangement, and appointment procedures—are not even considered in most research about performance funding policies. As mentioned earlier, most of the research only examines if there is a consolidated governing structure or not for the state. These characteristics of the governing structures could be significant for knowing whether consolidated boards shield public higher education from political influence or whether it rebuts the apparent need for performance funding policies delivering accountability. Future research can examine the function of higher education governing boards as a bridging the gap to possibly enhance the connection between the state government and public higher education institutions.

### **Final Comments**

One-size fits all to performance funding policies just does not exist. The way the policy is implemented, the indicators examined, the funding appropriated and allocated, and changes that may occur year to year are diverse in every state. In the past, research has attempted to put all forms of performance funding policies in one box in an attempt to see them as equal to examine them. However, distinctions in the policies, no matter how large or small, can have far-reaching

effects on the sponsorship and/or view of the policy. Furthermore, the effortless manner in which states adopt, un-adopt, and re-adopt policies is commonplace in state governments. Research from Dougherty and Natow (2015) state during the time of their research (1979-2013), 24 states terminated their policies, and 22 states adopted, terminated and then re-adopted their performance policies.

Under the current state of our nation's economy which bleeds down into the states' economies, public higher education institutions will experience decreased funding from states as budget reductions will be forced upon them. Keep in mind that education in general, but more so post-secondary education, is customarily one of the first pieces of the budget to be decreased. States will need to examine their budget funding formulas and performance funding policies to hold the higher education institutions accountable.

Finally, Dougherty, Natow et al. (2011) note that "performance funding systems need to be partially insulated from external and internal demands so that funding levels and performance indicators do not change suddenly and erratically, thereby interfering with colleges' efforts to plan effectively" (164). Incremental change can be furthered by planning for review and revision of performance funding systems frequently, possibly aligned with new affirmation of a major plan for higher education, and by including a large variety of stakeholders inside and outside the higher education system (K. J. Dougherty, R. S. Natow, et al. 2011). Continuous changes will negatively affect the integrity of the policy and state agency with oversight despite how completely purposeful a policy is set to be.

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**Appendix 1**  
**Variables – Descriptions and Observations**

<b>Variables</b>	<b>Variable Descriptions</b>	<b>Observations</b>
Party of the Governor	Annual dummy variable indicating whether the governor was Democratic (0) or Republican (1)	1,040
Legislative Party	Annual measure of majority seats in the legislative branch with coding of Democratic (1), Republican (-1), split (0), and divided (2)	1,457
Student Attainment	Annual measure of the percentage of population, 25+ years old with college degrees awarded	1,410
State Citizen Income	Annual measure of dollars of median income earned by state	1,269
Neighboring State Adoption	Neighboring states that have adopted performance funding (PF) coded as no PF (0) and PF (1)	1,426
Institutional Governance	States' institutional governance structure coded as single-statewide coordinating board (1), single-statewide governing board (2), systemwide coordinating or governing board (3), and administrative/service agency (4)	1,426
Rising Costs of Tuition	Annual costs in dollars of tuition statewide	940
Retention Rates	Annual percentage of first-time undergraduate students who return the next semester	749
Lower Rates of College Completion	Annual percentage of 1 <sup>st</sup> time undergraduates who complete college within a certain time (6 years national average)	306
Graduation Rates	Annual percentage of 1 <sup>st</sup> time undergraduates who complete their degree	1,222
Lottery	Neighboring states that have adopted the lottery coded as lottery adopted (1) and no lottery adopted (0)	1,456
Performance Funding (DV)	Annual performance funding (PF) adoption coded as adopted PF (1) and not adopted PF (0)	1,457