

The Pennsylvania State University
The Graduate School

**STATE POSTSECONDARY GOVERNANCE REFORMS IN THE TWENTY FIRST
CENTURY**

A Dissertation in
Higher Education
by
Alexander C. Cassell

© 2023 Alexander C. Cassell

Submitted in Partial Fulfillment
of the Requirements
for the Degree of
Doctor of Philosophy

May 2023

The dissertation of Alexander C. Cassell was reviewed and approved by the following:

Kelly Rosinger

Associate Professor of Education and Public Policy

Dissertation Advisor

Chair of Committee

Karly Ford

Associate Professor of Education and Sociology

John Cheslock

Professor of Higher Education

Andrew Fenelon

Assistant Professor of Public Policy and Sociology

Kevin Kinser

Department Head, Education Policy Studies

Table of Contents

LIST OF TABLES	v
LIST OF FIGURES	vi
ACKNOWLEDGEMENTS	vii
ABSTRACT	viii
Chapter 1: Introduction	1
Introduction	1
Research Questions	4
Chapter 2: Literature Review and Conceptual Framework	8
Literature Review	8
Public Higher Education Governance in the United States	9
The Role of State Higher Education Governing Boards	10
Developments in State Governance of Higher Education	13
Scholarship on State Governance Reforms	15
Conceptual Framework	20
Policy Innovation and Diffusion Theory: An Overview	21
Hearn et al.'s Policy Innovation and Diffusion in Higher Education	23
The Socioeconomic Context	23
The Organizational and Policy Context	26
The Politico-Institutional Context	26
The Policy Diffusion Context	29
Chapter 3: Data and Methods	30
Data Collection	30
Covariates	33
Political Characteristics of States	34
Socioeconomic Measures	34
State Organizational Features	35
Diffusion Measurement	35
Methods	36
Limitations	38
Chapter 4: Results	41
Descriptive Statistics	41

Analytic Results	42
Factors that Predict Any Governance Reform	43
Factors that Predict Governance Reform by Sector	44
Predicting the Type of Governance Reform by Sector	45
Reforms that Enhanced State Authority	47
Summary of Findings	48
Chapter 5: Discussion, Directions for Future Research, and Conclusion	50
Discussion: Implications for Research, Policy, and Practice	50
Features of Governance Reforms	51
Governance Reforms and the Politics of Higher Education	52
Socioeconomic Conditions of States	54
Theoretical Contributions	56
Directions for Future Research	57
Conclusion	58
References	60
Tables and Appendices	75

LIST OF TABLES

Table 1. List of boards included in dataset.

Table 2. List of governance reforms with brief descriptions.

Table 3. Variable listing and descriptions.

Table 4. Descriptive findings.

Table 5. Results from panel analysis with fixed effects exploring factors that predict any governance reform (Research Question 1).

Table 6. Results from panel analysis with fixed effects exploring factors that predict governance reform by sector (Research Question 2).

Table 7. Results from panel analysis with fixed effects exploring factors that predict type of governance reform by sector (Research Question 3).

Table 8. Results from panel analysis with fixed effects exploring factors that predictor reforms enhancing state authority (Research Question 4).

LIST OF FIGURES

Figure 1. Number of reforms by state, 2000-2020.

Figure 2. Number of reforms over time, 2000-2020.

ACKNOWLEDGEMENTS

A number of people have played an integral part in helping me reach this educational, professional, and personal milestone. First, I want to thank my wife, Katy Cassell, not only for her love and support, but for, perhaps most of all, moving to State College with me. I am also appreciative to my parents, Gerald and Kim Cassell, for all they have done for me helping me reach this point.

Dr. Kelly Rosinger invested countless time and energy in me over the last four years, and I'm forever grateful that she took a chance on me by letting me be her graduate assistant. I also express my sincere appreciation to my committee members for their time and efforts reviewing my study and helping me advance as a researcher and a person: Drs. Karly Ford, John Cheslock, and Andrew Fenelon.

Others played a crucial role in helping me develop this work from the beginning stages. I regularly met with Erin Leach, Sean Baser, Artemio Cardenas, Dr. Ali Watts, and Dr. Derek Finke to discuss progress on our dissertations, and I'm thankful that they did not let distance hinder them from helping me move my research forward. Dr. Rachel Burns was instrumental in talking through Stata code and answering questions on event history analysis. I also wish to thank Dr. Leticia Oseguera for her thoughtful comments on my dissertation proposal during her class in the fall of 2021.

I'm appreciative to my colleagues and friends at the American Council on Education for their assistance to me while completing this work. Finally, I want to thank some of the people who helped me realize the power of higher education, including Drs. Brian Noland, Heather Levesque, and Jeff Howard.

ABSTRACT

State governments are regularly reexamining the statewide board governance arrangements over public higher education, enacting governance reforms that change the structure or authority granted to boards by state legislatures. While previous research has studied governance reforms, there is a lack of recent studies on such reforms and what governance reforms look like for different sectors within public higher education. This dissertation examines the political, socioeconomic, and organizational factors associated with state-level postsecondary governance reform adoption over the last two decades, from 2000 to 2020. I apply a revised policy innovation and diffusion theoretical framework to examine the state-level factors that are associated with any type of governance reform, governance reform by sector, the type of governance reform by sector (e.g., changes in the structure of a board or changes in the authority granted to the board), and governance reforms that enhanced state authority. I drew on a unique longitudinal dataset that combines information on state higher education governance reform by sector gathered from state legislation and publicly available data on features of states and institutions and used panel analysis with fixed effects to answer my research questions. Though my results were mixed, over all this study shows that political and socioeconomic factors are most closely related to governance reform adoption. I close by providing insight into these results and their theoretical contributions and offer directions for future research.

Chapter 1: Introduction

Introduction

State governance of higher education, or the state-level board oversight of public colleges and universities, is often shifting within America's laboratories of democracy. State higher education governance is inevitably caught up in the "continuing experiment" of balancing power between state authority, institutional autonomy, public interest, and market competition (Mills, 2007, p. 162; McLendon, 2003a; McGuinness, 2016a). State-level higher education boards provide a range of functions from planning, budgeting, regulating, and creating policy for institutions (Sponsler & Fulton, 2018) to advising governors on stances in higher education policy (Lingenfelter et al., 2008).

Since the inception of statewide governance of higher education, there have been efforts to enact governance reforms — which I define as legislatively enacted policies intended to change board structure or alter authority granted to a state-level board of higher education. Governance reforms can take several forms, and I argue that reforms can be categorized according to their type and the direction. Types of reforms can broadly fall into two groups. The first is structural reforms that are intended to change the makeup of the board. These may occur through revising the number of seats or who can appoint or confirm board members. The second grouping deals with reforms that change the authority granted to the board, typically in the areas of tuition setting, who provides the budget to the legislature, and academic program approval.

Reforms can also extend the power of state government. Although previous research on governance reforms often attempts to fit reform agendas into a "centralization" or "decentralization" dichotomy, I argue that this is too narrow. I expand the empirical study of governance reforms to include a measurement of those that enhance the power of state

government over public higher education. This is perhaps more conceptual, yet it measures the directionality of governance reforms. I consider this type of reform to impact how the state uses the board to provide oversight of higher education through shifting power explicitly towards state government.

Although action from political leaders to enact governance reforms is nothing new, we do not have an understanding of how political, economic, and demographic shifts have impacted states' decisions to adopt governance reforms over the last twenty years. Previous research on state governance reforms falls into three general lines of inquiry: national trends in changes to governing structure (Marcus, 1997; McLendon & Ness, 2003), qualitative case studies on individual state reform agendas (Leslie & Berdahl, 2008; Mills, 2007; Tandberg & Anderson, 2011; Bastedo, 2005), and the political and economic features of states that predict governance reform efforts (McLendon et al., 2007). Yet much has changed since the literature was released on state governance reforms in the late 1990s and early 2000. Over the last two decades, levels of partisanship and issue polarization have risen starkly in the United States (Abramowitz & Webster, 2018; Pew, 2019; Boxell et al., 2020; Abramowitz & McCoy, 2019; Abramowitz & Webster, 2018), and there has been an increase in single-party control of state governments (National Conference of State Legislatures, 2021; Cook, 2010). Economic conditions are of concern in postsecondary governance as well. Over the last twenty years, the United States has experienced major economic recessions. Prior research points to the importance of economic factors, such as unemployment rates, in higher education policy, as colleges and universities are considered major economic engines in their states and locales (Tandberg & Griffith, 2013). Studies that are interested in the predictors of postsecondary education policy adoption should consider the economic drivers of enactment.

As these trends have developed, concerns are growing that changes to state oversight of higher education have been politicized at levels not previously fully appreciated by researchers (Ellis et al., 2020). Many have commentated on how political leaders capitalized on public skepticism towards higher education and governmental institutions (Parker, 2019; Johnson & Peifer, 2017; Fried & Harris, 2021; Gallup, 2017; Mason, 2015). Recent literature has recognized partisan differences in various areas of higher education policy, such as state appropriations for public colleges and universities (Taylor et al., 2020) and affirmative action bans (Baker, 2019). Work is needed to reexamine governance reforms in a policy environment characterized by increased partisanship and major economic recessions. Yet the policy environment has changed more than in just the political and economic sense. The United States has become increasingly racially diverse over the last twenty years (Jensen et al., 2021; Frey, 2020), and this demographic change is causing shifts in policy as well. Further, from 2000 to 2020, a greater number of Americans took part in higher education, boosting educational attainment rates. But at the same time, many states continue to lag behind the national average, causing varying policy responses. Over the last two decades, college completion has risen to the forefront of state higher education policy agendas as a tool to increase economic outcomes, such as market investment in the state and workforce development. As a response, some state governments have been forced to reconsider their entire approach to higher education governance, including statewide board governance (Perna & Finney, 2015). The timing is ripe to understand the factors that have led to state-level governance reforms in more recent years.

Research Questions

Prior work has investigated the factors that shape governance reform efforts in the 1990s and early 2000s. McLendon and colleagues (2007) found that governance reforms were most likely to occur when a single party controlled the governorship and state legislature and when a governor had less time remaining in office. Interestingly, the authors did not find any significance between the economic features of states and governance reform. Yet Marcus's (1997) study found that a key reason that states adopt governance reforms was due to a desire to cut costs. One could surmise that this was not only due to contemporary rhetoric surrounding slashing government waste but also an intrastate response to economic pressures. This would be in line with work from other policy areas that has found significant relationships between policy outcomes and economic factors such as unemployment rates and income levels (McLendon et al, 2009; Cheslock & Gianneschi, 2008; Dar & Spence, 2011; Rizzo, 2004). However, some key demographic features of states, such as enrollment by race, have not previously been addressed in the governance reform literature. Given evidence from other areas of higher education policy that has found that racial makeup of student enrollment shapes policy features (Baker, 2019; Taylor & Cantwell, 2020), we may expect racial demographics of the statewide population and college enrollees to play a role in policy reforms as well.

Research from Hearn, McLendon, and Linthicum (2017) offered a way to conceptualize how various political, economic, and demographic features of states influence higher education policy through a policy innovation and diffusion lens. The authors built upon previous literature that draws on this theoretical framework and applied it to higher education policy, creating a grouping of factors that could play into a state's likelihood of adopting a policy. The authors group these variables into four categories: political, socioeconomic, organizational, and diffusion

factors. This study from Hearn and colleagues presents a strong roadmap through which to theorize and operationalize key concepts and variables used in this study. In addition to this framework, given recent demographic shifts and growing evidence that state policymakers respond to these changes, I also consider demographics as part of socioeconomic features of states.

This work seeks to fill a gap in the literature examining the antecedents of state-level governance reforms for higher education in recent years. This study is also interested in addressing the void of research on how political, socioeconomic, and organizational factors impact states' decisions to enact governance reforms for specific sectors of higher education, namely the four-year and community college sectors. Because states are focused on leveraging the four-year and community college sectors in different ways to achieve state policy goals, we might expect there to be differences in the factors that predict reforms for each sector. I am guided by the following research questions:

1. What political, socioeconomic, and organizational factors predict the enactment of state-level governance reforms from 2000 to 2020?
2. What political, socioeconomic, and organizational factors predict the enactment of state-level governance reforms for the public four-year sector and the public community college sector over this same period?
3. What political, socioeconomic, and organizational factors predict the enactment of state-level governance reform by type of reform and sector during this same period?
4. What political, socioeconomic, and organizational factors predict the enactment of state-level governance reforms that enhance the authority of state government in statewide postsecondary governance during this same period?

To answer these questions, I have created an original dataset of governance reforms in all fifty states from 2000 to 2020. This data includes the policy features of a governance reform, including if the reform impacted a specific sector, if the reform was authoritative or structural (i.e., type of reform), and if the reform enhanced board or state government authority over higher education (i.e., direction of reform). I then merged this data with data from sources such as IPEDS, the U.S. Census Bureau, and the Council of State Governments to understand the political, socioeconomic, and organizational features that might predict governance reforms during this time period. To analyze my data, I used fixed effects panel data analysis, controlling for a set of time-varying state-level covariates as well as state and year fixed effects. I should note I only measured reforms that enhanced state authority regardless of sector due to concerns around statistical power, as the sample size for directionality of reforms by sector became very small.

This study offers important information for researchers, policymakers, and practitioners in higher education by providing evidence on what factors lead to the enactment of governance reforms. Including the type of governance reform and the direction of the reform (e.g., toward state authority), I add to the literature base for researchers to use to grow our understanding of state governance and reform agendas. Policymakers may find this study useful to understand the conditions that push states to reconsider governance arrangements. This study may also be of use to practitioners, such as college leaders, who are interested or concerned with state governance of higher education and the factors that may lead their home state to enact a governance reform.

In the second chapter, I offer a literature review and conceptual framework. The literature review provides the reader with a detailed overview of prior research on board governance in

higher education, how governance has changed over time, and previous evidence on reforms to governance. My conceptual framework is the theoretical lens that I view my study through: policy innovation and diffusion theory, which seeks to answer how policy environments shape policy adoption, alongside Hearn et al.'s (2017) application of the theory to higher education policy. In the third chapter, I share information on my data collection strategy, the data I used and why, how I leveraged fixed effects analyses to answer my research questions, and limitations to my data and method. The fourth chapter provides the results from the descriptive and analytic analysis. In my fifth and final chapter, I discuss the findings and their implications, the theoretical contribution of this study, offer directions for future research, and conclude the study.

Chapter 2: Literature Review and Conceptual Framework

Literature Review

I draw upon several literature bases for this study. First, I offer background on public higher education, and how the public four-year and community college sectors are governed in the United States. I then shift my focus to the states and examine previous research on the role of state higher education governing boards, namely how scholars view the functions of state boards, the relationships of boards to state government and to campuses, and how variations in their roles impact institutional autonomy and authority. Second, I provide a brief overview of the evolution of how scholars treated these developments over time. Third, prior research that specifically examines the features that lead to state higher education governance reforms is discussed. This third section describes evidence from qualitative case studies and prior quantitative efforts that offer additional insight into governance reforms before describing the gap in the literature I seek to fill.

I base my conceptual framework for understanding how features of states influence higher education governance reforms on policy innovation and diffusion literature. This section provides an overview of how policy innovation and diffusion theory developed and an introduction to how internal determinants and external influences shape state policymaking. I specifically apply an extension of Hearn et al.'s (2017) conceptual model that addresses how political, socioeconomic, organizational, and diffusion factors play into state higher education policy. I also apply this model to understand the role of student demographics in policymaking. Specifically, I include a measurement of percent of statewide student enrollment among students of color and consider how these factors play into policymakers' decisions regarding public

higher education governance. Given recent research that indicates policymakers may restrict funding or enact affirmative action bans in response to increasing enrollment among students of color (Baker, 2019; Taylor et al., 2020; Taylor, 2022), I believe this is an important factor to account for in predicting governance reform adoption. After discussing these factors in detail, I then use this literature and conceptual framework to form hypotheses for each research question.

Public Higher Education Governance in the United States

Compared to other nation's higher education systems, postsecondary education in the United States remains highly decentralized (McGuinness, 2016). While other countries may have a national governing body over all colleges and universities, the United States does not have such an arrangement. While the U.S. Department of Education and other agencies provide regulatory oversight on certain issues such as accreditation, financial aid, and civil rights (Natow, 2022), much of the governance and oversight of higher education institutions is left to boards at the state, institutional, or local levels. Views from scholars on this arrangement are best summarized by what Labaree (2017) calls a "perfect mess".

Yet this decentralized approach leaves a void for boards to fill on crucial issues facing institutions, including budgeting and finances, academic program approval, and oversight of other institutional programs and practices. The potential for impact by boards, particularly statewide boards, is enormous. In the fall of 2020, over 19 million students were enrolled in college, with 41% attending a public four-year institution and around 20% attending a public community college (National Center for Education Statistics, 2022). In fiscal year 2021, state and local governments gave a total of \$113.2 billion in funding to institutions, and the federal government awarded \$3.7 billion in federal stimulus funds to higher education (State Higher Education Executive Officers Association, 2022). In short, the decisions made by these bodies

pertaining to financing, budgeting, access, and attainment policies impact millions of students and their families and have the ability to reshape state economies.

The Role of State Higher Education Governing Boards

Scholars have examined the practical functions of state postsecondary governance. Lingenfelter, Novak, and Legon (2008) found that a central role of a state higher education agency and its leadership is to advise the governor on appropriations to higher education. Sponsler and Fulton (2018) considered the modern commitments of state governance agencies and found that they have six primary duties: state-level planning, finance policy (i.e., budgeting), information development, regulation, administrative functions for their agency, and system and institutional governance. Rall and colleagues (2020) also point out that state boards play a key role in policymaking, particularly those that shape access, accountability, and completion. To this end, these scholars argue that boards are central players in enhancing or inhibiting racial and socioeconomic equity in public higher education.

New research from Rall, Morgan, and Commodore (2019; 2020; 2021) that has centered on the power that state boards hold in the higher education policy process. These scholars point out that much of the previous literature on state boards presents their role as just another stakeholder (Rall et al., 2021). Yet state boards play a key role in policymaking, particularly those that shape access, accountability, and completion and in either enhancing or prohibiting equity within public higher education (Rall et al., 2019). These researchers also argue that the importance of boards has been leveraged by powerful political actors seeking to use board appointments to advance agendas (Morgan et al., 2020).

Theoretically focused literature sought to conceptualize the relationship between state higher education governing boards, state governments, and campuses. An interesting line of research highlights the intermediary function that state governance serves within the policy ecology of states, serving as a knowledge resource for both political leadership and campuses (Morgan et al., 2021; Rubin & Ness, 2021). To this end, state agencies and their leadership can also act as a buffer between institutions and state government, absorbing the blows to institutions from actors such as governors and legislatures. Other theoretical developments from Tandberg (2013) applied boundary-spanning theory to state boards, arguing that the functions of postsecondary governing agencies are often blurred between that of another public administrative agency and being part of the unique space of higher education.

As with other policy areas with greater state-level control, there is variation from state to state in how states address the organization of higher education governance. Researchers have sought to explain these differences, noting the strong relationship between higher education systems and their states' political history and culture (McGuinness, 2016a; Tandberg et al., 2018; Hearn & Ness, 2017). This meant that when state higher education systems were created, these bodies were a product of political relationships, both between individuals, government, and institutions. Systems often reflected not only educational and economic needs, but power dynamics within a state as well. These dynamics and histories are therefore reflected in the authority granted to boards and institutions.

McGuinness (2003) developed, and Fulton (2019) later updated, a typology of state governance arrangements into four structures based on the share of power between the state and institution: planning agencies (least authority, least centralization), weak coordinating board (lower authority, low centralization), regulatory coordinating board (more authority, more

centralization), and consolidated governing boards (most authority, most centralization).

Tandberg and Griffith (2013) noted that within the four types of governance structures, planning agencies and weak coordinating boards have much less oversight of campus decisions and grant more autonomy to institutions. Dependent upon how institution-level boards are selected and appointed, this arrangement may give more autonomy to colleges and universities. Conversely, regulatory coordinating boards and consolidated governing boards grant less autonomy to institutions and are often susceptible to increased authority from state government.

Other studies examine how degrees of state centralization of community college governance is associated with funding outcomes from state and local appropriations (Askin, 2007; Dowd & Grant, 2006; Fletcher & Friedel, 2017; Garret, 1992; 1993; Hammond et al., 2020; Kolbe & Baker, 2019). Taken together, this research suggests that community colleges that are within states with less centralization and more local autonomy are more reliant on local funds (Hammond et al., 2020) and may be more susceptible to funding inequities that mirror the K-12 sector (Dowd & Grant, 2006). But overall, the community college sector has been an understudied area of state-level higher education governance.

Many community colleges began as an extension of K-12 education, and as such, the oversight of community colleges was traditionally vested with local school districts (Cohen et al., 2013). Because of their historically localized nature, community colleges have at times been left out of conversations of state governance of higher education. However, some studies examine community college governance at large (see Baber et al., 2019), and a smaller body of research studies state oversight of the sector, though this work primarily offers descriptive overviews of statewide structures (Friedel et al., 2014; Tollefson, 2009; Ingram & Tollefson, 1996). Taken together, this research has found that historically community colleges have been

governed locally and that state governments have treated these institutions as generally autonomous. Yet more recent evidence from Fletcher and Friedel (2017) found that states are increasingly interested in shifting control over community colleges away from local autonomy and towards state control. The community college sector has clearly changed in recent decades, but there remains a dearth of research examining the factors that could predict a state enacting a governance reform in the sector. Considering this, it is also important to note scholarship that has interrogated how states have developed higher education governance at large over time, which the following section explores in more detail.

Developments in State Governance of Higher Education

State-level higher education governance arrangements are a result of policy changes in the 1950s and 1960s and first came into being to serve as a state-level response to the massification of higher education (Lingenfelter, 2018). The Truman Commission had advocated for increased investments in higher education as an effort to boost educational attainment, address racial and social inequalities, and improve democracy. Reverberations were soon felt from unprecedented, post-World War II college enrollment spikes, the GI Bill, and significant birthrate increases, which led state governments to reconsider their role in regulating and coordinating public institutions (Thelin, 2019; Lingenfelter, 2018). This evolved into state governments creating agencies with oversight from layperson boards that were charged with creating policy for public institutions. Russell (1951) laid out the state higher education agency's original *raison d'être* as being a department focused on statewide rather than individual institutional interests while granting the highest amount of institutional autonomy as possible (Russell, 1951).

Many states began to revise existing agencies into systems arrangements in the 1960s and 1970s following a surge in popularity in structures emulating the *California Master Plan* (Lingenfelter, 2018). The California Master Plan divided institutions into three systems or “segments”, with the University of California, California State University, and California Community College systems operating separate programs and serving different missions in the state (McGuinness, 2016b). The spread of similar governance arrangements enhanced intrastate stratification—the arrangement of institutions into “sub-systems” that determined their resources, selectivity, and prestige (Perna & Finney, 2015, p. 29). Perhaps the most common feature of the spread of the California Master Plan was that community colleges were often left with fewer resources, leaving their position to be at what Brint and Karabel (1989) called the ladder’s “lowest rung” (Brint & Karabel, 1989, found in Bahr & Gross, 2016, p. 467).

As McGuinness (2016b) points out, federal changes in the 1960s and 1970s prompted updates to state governance as well. The Higher Education Act of 1965 mandated that states begin to establish agencies or boards to oversee items such as state authorization of institutions. In 1972, to receive funding for community and vocational colleges, the federal government created provisions mandating the existence a state-level commission to have at least a small level of oversight of disbursement of federal resources – so-called 1202 Commissions. This was to ensure there was accountability in state higher education policy.

Scholars have examined the developments in state governance of higher education in the latter part of the twentieth century, with a particular focus on the tug-of-war that ensued between advocates for increased accountability and state oversight versus advocates for greater institutional autonomy (Berdahl, 1971; Glenny, 1959; Glenny & Schmidtlein, 1983; Graham, 1989). Earlier studies (Glenny, 1959; Berdahl, 1971; Glenny & Schmidtlein, 1983) were

contemporary, descriptive overviews of the evolution of state oversight of postsecondary education leading to a nuanced relationship between campuses and the state. Berdahl (1971) recognized the brewing battle between institutional autonomy and the state's authority over the function of higher education.

Notably, Berdahl advocated for coordinating boards rather than governing boards so that institutions could maintain independence from what the author viewed as government infringement on the academy. Berdahl as well as Glenny and Schmidlein (1983) were among the first to recognize how state politics was impacting the structural nature of governance through changes to budgeting, academic program review, and strategic planning. Through the 1980s, researchers increasingly found that the locus of control over budgets and academic programming rested on state-level rather than institution-level leadership, particularly for the four-year sector (Graham, 1989).

Scholarship on State Governance Reforms

Scholarship that examines higher education governance in the 1990s and early 2000s provides evidence that states were beginning to buck the trend toward greater state-level control, and instead beginning to shift towards decentralizing state postsecondary governance, particularly in the four-year sector (McLendon, 2003; Dee, 2006). Qualitative state-level case studies (Bastedo, 2005; Leslie & Berdahl, 2008; Mills, 2007; McLendon & Ness, 2003; Tandberg & Anderson, 2012) offered policy process narratives and highlighted themes of state leadership working to decentralize higher education governance. This work also highlighted the work of governors and legislators using decentralization initiatives as a method of deregulating colleges and universities, which was an often politically advantageous position. Some

contemporary researchers (see McTaggart, 1998) also promoted decentralization as a tool of unbounding colleges from what was viewed as too much regulation from state boards. Yet despite the popularity of decentralization efforts, scholars have found that lower levels of state centralization led to greater political influence from governors, legislators, and interest groups due to decreased public regulation and oversight (Lowry, 2001; Nicholson-Crotty & Meier, 2003; Tandberg, 2013).

This led to two studies from Marcus (1997) and McLendon and colleagues (2007) to examine the antecedents of governance reforms. Marcus (1997) provided the first nation-wide analysis of proposed and enacted state governance reforms and was primarily interested in (a) who proposed the reforms, (b) why the reforms passed, (c) the intrastate factors associated with governance reforms, and (d) the regional diffusion of reforms across states. Relying on data from a 1994 survey of state higher education executive officers, Marcus's study yielded several notable findings. He first found that the reform agendas most likely to advance were proposed by legislators, which shed light on who was initiating governance reforms.

Second, reform agendas were centered around cost reduction. Marcus pointed out that much of the concern surrounding existing structures was derived from a broader effort to cut perceived government waste. Third, reform agendas were also influenced by a desire among policymakers for increased state accountability and cross-coordination efforts between the state and higher education institutions. McLendon and Ness (2003) provided a follow-up study to Marcus's work and centered on both *proposed* initiatives and *enacted* policies for governance reforms. Respondents in the researchers' survey noted the importance of political leadership in pushing reform initiatives, as well as campus leadership being generally unhappy with current structures.

McLendon, Deaton, and Hearn (2007) built upon unanswered questions from Marcus (1997) and McLendon and Ness (2003). Leveraging longitudinal data from 1985 to 2000 and using an event history analysis design, McLendon and colleagues wanted to provide additional insight into the understanding of why states enacted reforms. Namely, what were the political and economic factors that may have led to state adoption of reforms? The authors tested the political instability hypothesis, which posits that states are more likely adopt major policy shifts during periods of major political party change. McLendon et al. (2007) argued that if a state goes through periods where different parties are holding the governorship and legislature over multiple cycles, this would lead to a greater likelihood of governance reform adoption.

This study had several notable findings. First, the authors found that reform agendas were most likely to occur when a state had a single party controlling state government, particularly directly following a period when state government had been under divided control. Second, governors were more likely to adopt reforms when they had less time remaining in office. Third, the study did not find evidence that economic conditions of states influence the enactment of governance reforms. When we examine the literature on governance reforms side by side, we know that political features matter and that political leadership often initiates reform efforts, yet it is less clear that economic conditions drive governance reform agendas.

While this prior research provided evidence of the state-level factors drivers of governance reform efforts towards the end of the twentieth century, there are notable limitations to our understanding of higher education governance reforms, especially given today's political and economic conditions and recent demographic shifts. In a political sense, in the last twenty years, the country has experienced changing party coalitions and increased partisanship, and Americans are increasingly polarized on cultural and policy issues (Abramowitz & Webster,

2018; Pew, 2019; Boxell et al., 2020; Abramowitz & McCoy, 2019). Shifting demographic features of states have also occurred in the intervening decades, and as the country has become more racially diverse, higher education policymakers have reacted through actions that have either been focused on increasing or prohibiting access for students of color (Chambers, 2017; Taylor, 2022). There is also growing literature that provides strong linkages between state economic conditions and policy outcomes. Several studies have shown a clear relationship between unemployment rates and state appropriations, funding, and budget outcomes for higher education (Delaney & Doyle, 2011; Rizzo, 2004 McLendon et al., 2009; Dar & Spence, 2011), including that higher unemployment rates lead to an increase in funding for higher education, calling for an update to the McLendon et al. study. It should also be noted that this era has seen a notable decline in state appropriations per full time student enrollment as well as an increase in performance-based funding as a mechanism for allocating funds to institutions (Rosinger et al., 2022).

There is a major gap in recent, peer-reviewed literature on governance reforms over the last twenty years. In sum, there simply has not been recent evidence from scholars on what factors influence governance reforms over the last two decades. While we know that the country has experienced political and socioeconomic changes as described above, empirical evidence on governance reforms from 2000 to 2020 is needed. For existing studies, the quantitative work in this area draws upon data that is now over twenty years old. Given the significant political, socioeconomic, and organizational changes described above, evidence regarding the precipitants of governance reforms in more recent years is needed to address this gap.

Previous work on governance reforms did not examine differences in the enactment of governance reforms for the four-year and two-year sectors. Although community college

governance literature noted above sheds light on governance outcomes, previous work does not specifically examine reform efforts for this sector. A first step from Fletcher and Friedel (2017) provided an overview suggesting an uptick of states that have embraced statewide coordination or governance agendas for community colleges, yet this work was descriptive in nature and did not examine the antecedents of reform. Because community colleges educate a significant portion of students of color and low-income students (Bahr & Gross, 2016), and given the clear enhanced attention on the sector from policymakers in recent years, it calls to question why we do not know more about efforts from state governments to reform their community college sectors. As the efforts grow and as states continue to treat community colleges as part of their public higher education sector, rather than an extension of secondary education, research is needed to understand the factors that lead a state to adopt a reform for the community college sector.

A stronger understanding of policy features of governance reforms, such as the type of reform and the directionality of governance reforms is also needed. Previous research on governance reforms did not consider the type of reform that took place. This meant that all reforms were treated the same way and did not operationalize the elements of the reform that took place, such as whether a reform was structural or authoritative in nature. Research is needed that attempts to break down reforms and offer categorizations of governance reforms. Prior literature in this area also did not provide any directional analysis. That is, researchers did not take into account how a policy change might attempt to shift the balance of power in a state's higher education policy ecosystem. As noted above, considering the highly political nature of state boards of higher education, observers have argued that governors and legislatures are bending higher education governance to their political benefit to the detriment of institutional

autonomy (Parker, 2019; Johnson & Peifer, 2017; Fried & Harris, 2021). Research is needed that measures if a reform sought to enhance the authority of state government over a state's public higher education system.

Conceptual Framework

To conceptualize the factors that contribute to passage of state-level governance reforms, I use policy innovation and diffusion theory. This theory seeks to explain how policies develop within and spread across states and focuses on the external influences and internal determinants that lead to policy adoption (Walker, 1969). Policy innovation and diffusion has been used by scholars in numerous areas of political, economic, and social science research (see Berry & Berry, 2018 for a full review). The theory has also been used by higher education researchers examining a range of state-level policy areas (see Hearn et al., 2017), including performance funding models (Gándara et al., 2018; Li 2017), financial aid developments (Lacy & Tandberg, 2014; Doyle, 2010; Doyle, 2006), and prior work on governance reform initiatives (McLendon et al., 2007).

I apply policy innovation and diffusion theory to state governance reforms using an amended version of Hearn et al.'s (2017) conceptual framework. This conceptual approach is useful because it outlines the elements of policy innovation and diffusion applied to higher education policy and provides variables that can be operationalized through the model. I then offer limitations of this theory in relation to my research questions and provide hypotheses that are guided by this framework.

Policy Innovation and Diffusion Theory: An Overview

Research from Rogers (1962) first established that the popularity of policies often fit an “S-Curve”, meaning that a policy begins with slow adoption across a small number of jurisdictions, hits a sharp increase in popularity, then slowly tapers off. This led to a second wave of developments focused on the mechanics of policy adoption through leader-laggard models. Policies spread across states beginning with a small number of states deemed as “leaders” in a policy area and are followed by a larger number of states that are considered “laggards” (Katz et al., 1963; Mohr, 1969). Walker’s (1969) work built upon these concepts and applied them to state policymaking through a theory of policy innovation and diffusion. Walker surmised that policies diffuse across states because policymakers have limited time and incomplete access to information and are also pressured to maintain a competitive edge against other states. As a result, they look to other states for guidance on policy adoption.

In developing policy innovation and diffusion theory, Walker sought to explain why states chose to adopt a given policy. What factors lead a state to adopt, or *innovate*, a policy, and how do similar policies spread, or *diffuse*, across locales? To this end, the theory centers on the predictors of policy adoption by conceptualizing and operationalizing variables that lead a state to make the choice to take up the policy. Walker was therefore interested in two key facets: internal determinants of states and external influences on states that lead them to pursue certain policy approaches at certain times.

First, Walker defines internal determinants as intrastate factors that may lead to policy adoption. In other words, what are the features of a particular state that push the state into this decision? Walker first theorized that these determinants could be political, social, or economic. For example, Walker theorized these could include political party control, demographic features

of states, or economic conditions such as employment outlooks. The diffusion component of the theory is concerned with how policies spread across states and regions. For example, Walker theorized that states are more likely to adopt a policy following a neighboring state adopting a similar policy. Walker also argued that states respond to external determinates. External determinates are those that come from outside the specific state context. While external influences certainly come from actions from the federal government, the more important determinants for the purposes of this study on state-level governance reforms are actions from other states. States see each other as their peers and are willing to borrow and share ideas and information, leading to a greater likelihood that if one state adopts a new policy, then other states are likely to follow.

Following the tradition set forth by Walker, a second wave of innovation and diffusion research was brought on by Berry and Berry (1990). Using the tenets of policy innovation and diffusion, Berry and Berry launched event history analysis as a new line of inquiry into the predictors of policy adoption. Using variables that helped explain a state's political, demographic, and economic conditions, Berry and Berry brought a major methodological advancement through an event history model that can be used to examine both how states develop policies and how they spread across the states (Berry & Berry, 2018). This allowed researchers to account for both the internal and external forces that influenced policy adoption by accounting for the point in time that the policy was adopted and what factors led other states to adopt the same policy.

These theoretical and methodological developments have led to a wide body of research across areas of public policy. A strong line of research has emerged within higher education policy. This work was introduced to the field through several studies from McLendon, Hearn,

and colleagues (see Hearn et al., 2017). In several papers, McLendon (2003a, 2003b, 2003c) offered recommendations for applying innovation and diffusion theory to higher education, including the potential for event history modeling. Continuing this research agenda, innovation and diffusion models have been applied widely to topic areas of higher education policy, such as performance-based funding (Gándara et al, 2017; McLendon, Heller, & Young, 2005; McLendon, Hearn & Deaton, 2006).

Hearn et al.'s Policy Innovation and Diffusion in Higher Education

Hearn and colleagues (2017) offer a conceptual framework for understanding and examining policy innovation and diffusion in higher education. Building on aforementioned work, the authors describe four context areas that lead to policy adoption in higher education: the socioeconomic, organizational and policy, politico-institutional, and policy diffusion contexts. This conceptual model can be readily applied to state higher education governance reforms. The model is also particularly useful because the authors place a high prioritization on the intrastate factors that lead to innovation. I use an adapted version of this conceptual model with a focus on operationalizing the four key concept areas to align with the state governance reform context.

The Socioeconomic Context

Hearn et al. define the socioeconomic context as the factors that influence state higher education policy adoption through features that impact postsecondary educational attainment, who state governments are interested in centering a policy towards, and what the economic context is that drives them towards this decision. Although these scholars offer a wider range of

variables that could be included in studies dealing with different areas of higher education policy adoption, I use two key features from this section of the model in my conceptual framework. Specifically, I am interested in educational attainment rates and economic conditions of states. Each of these factors may impact policymakers' decisions to pursue and enact a governance reform as they play to the need of states to pursue agendas that are responsive to broader societal needs. These measurements place each state in a specific environment that state policymakers may choose to be responsive to or ignore. For example, educational attainment is an area that could force policymakers to enact governance reform agendas. For example, if attainment rates are lagging relative to a national average or state workforce needs, this may force the hands of states to reconsider how they handle decision-making channels in postsecondary education policy.

Economic conditions are also considered in this conceptual approach (Hearn et al., 2017). Although McLendon et al. (2007) found no relationship with economic indicators and state governance reforms, literature from other policy areas of higher education suggests a strong linkage between economic conditions of states and policy outcomes (McLendon et al, 2009; Cheslock & Gianneschi, 2008; Dar & Spence, 2011; Rizzo, 2004). Because of this, factors such as unemployment rates and average personal income warrants further inclusion given the notable recessions in recent years and can serve as measures of the economic conditions of states. These measures, derived from the U.S. Census Bureau and Bureau of Labor Statistics, could be related to governance reform agendas, as these factors create an environment that may push states to rethink changes in governance to improve accountability. States may consider changing how they address oversight of higher education to respond to economic need, such as high

unemployment rates or low per capita income levels, through improving educational opportunities.

The final research questions that guide this study regard the type of governance reform adopted by state government and if a reform increases the level of authority of a state government over higher education. Because higher education is a major engine of state economies, during times of reduced economic conditions, states may be interested in going back to the drawing board of what higher education looks like in the state. To this end, policymakers may be more willing reconsider statewide higher education governance – and specifically toy with the structure of the board or the power given to the board – during a recession because they may view this as a primary vehicle to indirectly stimulate the economy. In consideration of socioeconomic indicators such as attainment rates, average statewide income levels, and unemployment rates, this leads me to my first group of hypotheses:

Hypothesis 1: *States with lower educational attainment rates and/or reduced economic conditions are more likely to adopt a governance reform.*

Hypothesis 2: *States with lower educational attainment rates and/or reduced economic conditions are more likely to adopt governance reforms that change the structure or authority given to the board.*

Hypothesis 3: *States with lower educational attainment rates and/or reduced economic conditions are more likely to adopt a reform that enhances state authority over public higher education.*

The Organizational and Policy Context

The second context — the organizational and policy context — centers on the more structural components of postsecondary governance. The organizational ecology speaks to both the history of higher education within a state as well as the power balance between states and institutions. For this measurement, I consider student enrollment by race. I specifically examined this hypothesis using statewide student enrollment among students of color. I define this as the annual statewide enrollment percentage of Black, Hispanic/Latino/a, Asian, and Native American students. I include this measurement under the organizational context because of recent research that suggests that the share of student enrollment among students of color influences state higher education policy decisions (Baker, 2019; Taylor et al., 2020). I argue that if states are interested in addressing student enrollment and success among students of color, they may be more willing to adopt a governance reform as a method of addressing postsecondary educational disparities. However, the door could swing both ways here – states that are intending to indirectly harm students of color through policymaking may also be more interested in addressing higher education governance as tool to harm students of color. Understanding how these sectors fare within the organizational ecology of a state may be related to governance reform enactment. I hypothesize:

Hypothesis 4: *States with higher rates of enrollment with students of color are more likely to adopt a governance reform.*

The Politico-Institutional Context

The politico-institutional context is interested in operationalizing the political environment in which public higher education is situated within a state. Hearn and colleagues

note that this context area relies on political measurements of political ideology, legislative and gubernatorial strength, and timing of elections. For this study, I chose to focus on other features directly related to partisanship, party strength, and the influence of the state legislature, as governance reforms are likely impacted by who is in power, how much power they hold, and how their power is influenced both formally and informally. Empirical work that seeks to understand the political dynamics of state higher education policymaking often focuses on intra-state factors using variables that operationalize political features, such as political party control for the state legislative and gubernatorial branches of government, if a single party controls both branches (or unified control), and the professionalism of the legislature.

Yet recent research from Hopkins and Grossman (2016) points out the asymmetric behavior among the two major political parties. Over time, Republicans have become less bound to social institutions and more skeptical of higher education (Gallup, 2017; Gross, 2013; Pew, 2019), increasingly leading to varying postsecondary education policy outcomes dependent upon state political party control (Taylor, 2022; Taylor et al., 2020). Theoretically, this could mean that states with Republican control of the legislature and governorships are more likely to enact governance reforms for higher education regardless of sector, particularly reforms that change the structure and power given to the board, as well as reforms that enhance the authority given to state government over public higher education. And considering prior evidence highlighting the increase of states seeking control over the community college sector (Fletcher & Friedel, 2017), Republicans may also be working to align the two-year sector with broader agendas centered on economic and workforce development. Given these trends surrounding Republican behavior towards higher education, I also argue that Republicans may be more willing to adopt reforms that increase the authority of the state over postsecondary education.

While I hypothesize that party control will be significant, it is also possible that governance reforms may be impacted by legislative professionalism – which is a measurement that goes beyond a specific political party and focuses on the power or level of engagement legislators have. A common measure of legislative professionalism is legislative salary, which is directly correlated with other measures of professionalism (Tandberg & Griffith, 2013), because it is a stand-in for the extent to which a legislator may consider their role in the legislature as a full-time job. I argue that legislative professionalism influences governance reform adoption because governance reforms often require a politically heavy lift. Legislatures that are more professionalized may have more time to consider and push through a legislative overhaul to state higher education governance.

Hypothesis 5: *States with higher legislative professionalism are more likely to adopt a governance reform regardless of sector.*

Hypothesis 6: *States where Republicans control the legislative and gubernatorial branches of government are more likely to adopt a governance reform regardless of sector.*

Hypothesis 7: *States where Republicans control the legislative and gubernatorial branches of government are more likely to adopt a governance reform for the community college sector.*

Hypothesis 8: *States where Republicans control the legislative and gubernatorial branches of government are more likely to adopt a governance reform that enhances the authority of state government over higher education.*

The Policy Diffusion Context

The fourth and final area is the policy diffusion context. The diffusion element is concerned with how states react to other policies adopted by other states (Cohen-Vogel & Ingle, 2007). This area focuses on the main theoretical aspects of diffusion, namely the spread of information, interstate competition, regional compacts, and coercion that exist across states that may lead states to enact similar policies. My final hypothesis centers on the geographic spread of information and the idea that states learn from neighboring states:

Hypothesis 9: *States are more likely to adopt a governance reform if a neighboring state recently adopted a reform.*

Chapter 3: Data and Methods

Data Collection

To build a panel dataset on state higher education governance reforms, I use the research protocol developed by Kelchen and colleagues (2019). This framework provides the following parameters: a) select a time period for the panel dataset; b) determine the unit of analysis; c) consider the definition of what adoption or enactment looks like for your policy; and 4) develop a protocol of specific items to capture in collection.

First, to establish a timeframe for this study, I turned to the aforementioned literature on governance reforms. Because the most recent peer reviewed study to date had a panel timeline of 1985 to 2000, I determined that a more contemporary time frame would best suit this analysis. I decided on 2000 to 2020 for two key reasons. First, providing data within these years would at minimum offer a descriptive update to the research base on governance reforms. Second, because I am primarily interested in how political, socioeconomic, and organizational features of states shape reform efforts, a twenty-year panel would give me the room to pull in wider amounts of data on state-level changes in these areas. As discussed previously, because this time period encompassed two recessions, major political changes, increased efforts around degree attainment, and notable demographic shifts, 2000 to 2020 is an interesting time span to consider for this study.

The Kelchen et al. framework also directs the author to determine the unit of analysis and consider a definition of what policy adoption looks like for one's topic. Because I am interested in state-level reforms by sector, my data's unit of analysis is the state and year, specifically featuring data from all fifty states for each sector. I defined a governance reform as a legislatively enacted change to a state-level board of higher education through revising the

board's structure (such as number of seats or appointment mechanism) or authority (on issues such as budgetary, tuition-setting, or academic program approval authority). This led me to create a protocol for data collection. By means of gathering a list of boards to be included in the data, I relied on reports from state policy organizations, such as the Education Commission of the States (ECS), National Center for Higher Education Management Systems (NCHEMS), and the State Higher Education Executive Officers Association (SHEEO). Table 1 provides a list of the boards used in my data collection. Table 2 provides a list of governance reforms I code for in my data.

Since the state and state sector is my level of analysis, if there was more than one "statewide" board for the four-year or two-year sector, I collapsed those boards into their sector, creating a statewide, sector-level variable for the various types of reforms I analyze. For instance, if a state had two systems in the four-year sector (e.g., California), I collected data for whether and what type of reform occurred in either of the two systems. This allows me to examine the statewide four-year and community college sectors. To collect the data, I turned to the WestLaw database on revised state statutes on specific boards, agencies, or higher education/education statutes in general to determine if and when any statutory changes occurred to a board's structure or authority. When needed, I also used state legislature websites for clarity on specific legislation.

This allowed me to create a panel dataset from 2000 to 2020 of binary variables that capture the universe of reforms at the state level by sector (four-year and community college), type of reform (board structure or authority), and direction of reform (enhancing state authority). Years where a reform took place would be coded as "1" for the state and a "0" otherwise. For example, when Alabama adopted a reform in 2017, I coded the state as 1 in 2017 and a 0 in

following (and preceding) years where no reform occurred (See Table 3 for variable descriptions, and see Table 4 for descriptive statistics on governance reform variables).

When constructing variables on governance reform characteristics, I broke down governance reforms into two major buckets of reform type: structural reforms and authoritative reforms. Structural reforms changed the structure or outline of what the board is. Examples of what I considered a reform to be a structural reform are if the legislation created a new board, revised the number of seats, or changed the appointment mechanism for board seats. For authoritative reforms, I considered this to be a reform that revised the power granted to the board by state government. For example, if the legislation changed the authority given to the board to set tuition, provide a budget, or approve academic programs, I counted this as a board authority reform. I then broke down each type of reform by sector for a public statewide four-year board and a public statewide community college board. For example, if the reform only applied to the two-year sector, I coded it as 1 for the two-year sector and 0 for the four-year sector (unless another reform occurred for that sector in that same year).

I also included measurements to show directionality of reforms in the authority of a board. That is, within each type of reform by sector, I created a measurement that captured if a reform enhanced the role of state government officials over higher education institutions. In doing so, I intentionally moved away from classifying reforms in the traditional, dichotomous sense as part of a “centralization” or “decentralization” movement. Rather, the variable that measures if a reform enhanced state government’s authority over higher education is an attempt to get at the intangibles of governance reforms that – to this point – have not been quantified. In constructing this variable, it is my hope that future scholarship on state reform could build upon this preliminary effort.

One example of how I coded a reform was in Connecticut in 2011. In this year, the legislature passed a major reform bill that consolidated the public community colleges and public universities previously under the Connecticut State Colleges and Universities system under the new Board of Regents. I coded this as a reform for both the four-year and community college sectors in 2011 and considered this reform to change both the structure and authority granted to the board as a new system was created as a consolidation of two formerly separate higher education systems. Another example is Maryland in 2019. This reform changed the number of seats and the appointment mechanism of the board, granting more power to the legislature over board appointments. I counted this reform as a change to the four-year sector and a structural reform, as well as a reform that enhanced the state's authority over higher education governance.

Covariates

After I created the dependent variables, I then considered what covariates would be used in the analysis. Because I was interested in what political, socioeconomic, and organizational features of states would explain governance reform adoption, I chose variables that would fit into these categories. All these variables are widely used in research on state higher education policy and are measured for each state and year. The political features of states included governor party, legislature party, unified control of state government, and legislative professionalism. Socioeconomic characteristics included annual state unemployment rates, average personal income levels, and annual educational attainment rates. Organizational factors included statewide enrollment among students of color.

Political Characteristics of States

Party control of state legislatures and governorships are perhaps the most useful and applicable measures of state political characteristics. Multiple studies have found positive effects of party control on policy outcomes (Weerts & Ronca, 2008; Tandberg, 2010; Tandberg, 2008; Dar & Spence, 2011; Archibald & Feldman, 2006; McLendon et al., 2009). Researchers typically rely on Klarner's (2013) partisan balance data for this information (e.g., McLendon et al., 2009; McLendon et al., 2007; Baker, 2019; Taylor et al., 2020). I provided an update to the publicly available data from Klarner – which was only available to 2016 at the time of analysis – and filled in data elements for panel years 2016 to 2020. I use this data to control for the party that holds power for state legislatures and gubernatorial offices (coded as 1 for Republican control and 0 otherwise for both variables). Using the same data, I created another binary variable for single, unified control of state government, measuring if the same party controlled the legislative and gubernatorial branches of government.

Legislative professionalism is another variable that warrants inclusion since legislatures with greater levels of professionalism may be more likely to allocate their time to making reforms. To measure this, I use average legislative salary (logged), adjusting for inflation using the Consumer Price Index, by state obtained from the Council of State Governments, which Tandberg points out is more commonly used by political scientists (Tandberg & Griffith, 2013; Barrilleaux & Berkman, 2003).

Socioeconomic Measures

I also incorporate data on the economic conditions of states. Data from the Bureau of Labor Statistics and the U.S. Census Bureau on unemployment rates and per capita income levels have all been found to have significant effects in other areas of higher education policy (see

Tandberg & Griffith, 2013). Because unemployment rates and statewide average income levels are indicators of state-level economies, I include these variables to account for the economic conditions of states for each state and year in the panel. I adjust for inflation on per capita income levels based on the Consumer Price Index.

State Organizational Features

I also incorporate IPEDS data to measure college enrollment, a key organizational factor offered by Hearn et al. (2017). I included variables for the statewide enrollment among students of color, which I included because of recent evidence that found this measurement to be a significant factor in postsecondary policy adoption (Taylor et al., 2020). These variables will be of interest because prior work on other areas of higher education policy have found a relationship between policy change and factors such as statewide attainment rates and enrollment (Tandberg & Griffith, 2013).

Diffusion Measurement

Policy diffusion is the final grouping of variables included in the analysis. Geographic policy diffusion is commonly employed in higher education policy literature (Doyle, 2006; McLendon et al., 2006). To measure the spread of reforms across states, I use geographic neighbor indicators for each state to create a variable measuring the proportion of neighbor states that adopted a governance reform. To create this variable, I created a list of each state's geographic neighbors. If a state had a neighbor that adopted a governance reform in a given year, I coded this variable as a 1 and as a 0 otherwise. For example, if Connecticut adopted a

governance reform in 2014, I coded Connecticut's neighboring states – New York, Rhode Island, and Massachusetts – as a 1 in 2014. I lagged the diffusion variable by 1 year to account for states that might learn from policy adoption of another state and in turn adopt a governance reform.

Methods

Panel analysis is a useful tool to understand how changes over time influence a policy outcome. Panel analysis is commonly used in higher education research, because the data is cross sectional and has a time series component (Titus, 2021; Hsiao, 2007). A type of regression, panel data analysis allows the user to account for both time and place, which can be done by using a fixed effects model. In this study, I was interested in how certain state-level factors influence governance reform adoption, and used the fixed effects model to examine the relationship between changes in each state for each year in my panel related to governance reform decisions. Because a state could pass multiple governance reforms during my panel timeline, if a state passed a governance reform, the state did not drop out of my dataset. I considered each state to be able to subsequently adopt a governance reform even if the state had already adopted a governance reform. Since my outcomes were dichotomous variables (1 if a state enacted a particular reform and 0 otherwise), I used a linear probability model with fixed effects. To make a final determination if a fixed effects model should be used rather than a random effects model, I performed a Hausman test, which showed that a fixed effects model would be the strongest fit. The model can be expressed:

$$Y_{it} = \beta_0 + \beta_1 x_{it} + a_i + \delta_t + u_{it}$$

Where $Reform_{i,t}$ are a series of state-level time-varying covariates, α are state fixed effects, δ are time fixed effects, and u is the error term. The specific variables that make up $Reform_{i,t}$ are the political, socioeconomic, organizational, and policy diffusion variables described earlier.

To answer research question 1, $Reform_{i,t}$ is defined as any legislatively enacted governance reform. To examine the features of states that are associated with different types of reforms by sector (research question 2), $Reform_{i,t}$ is defined as any governance reform for the public four-year or community college sectors. To answer research question 3, I define $Reform_{i,t}$ as any governance reform that changes the structure of the board or the authority granted to the board. To answer my fourth and final research question, I define $Reform_{i,t}$ as any reform that enhances the power of state government over higher education.

I began by setting my data for a panel data analysis using the `xtset` command. After performing the Hausman test described above which determined that a fixed effects model was more appropriate, I used the `regress` command and filled in the variables in my model. Because my unit of analysis was state and year, I ended each model with `i.stateid` and `i.year`. This allowed me to account for changes over time within each state for each year in my panel dataset.

My full results are discussed in Chapter Four. I place special focus on variables found to be statistically significant, or those results with a p-value of .05 or lower. However, while I place an emphasis on statistically significant variables, I also discuss variables that may be practically significant, those with particularly strong effect sizes, or those that may follow or go against the hypotheses I offer in Chapter Two.

Finally, sensitivity checks were used to catch pieces or variations in my model that I may have missed. Specifically, I ran different combinations of variables, used variations of variables such as inclusion or exclusion of a lag, and included or excluded diffusion in the models. This was an effort to account for potential interactions or collinearity that may have shifted results in the main analyses.

Limitations

This dissertation has several limitations to note. This study specifically examines legislatively enacted governance reforms. Although this provided me with a clear pathway toward strong data collection, not all governance reforms are legislatively enacted. Some reforms have taken place at the board level, and it is possible that boards that already have significant leeway granted to them by state governments may be more likely to enact reforms on their own. Yet it was clear early on in this study that gathering information on board-enacted reforms represented a significant data collection hurdle for a dissertation. Future researchers interested in state-level governance reforms might consider data collection strategies to capture board-initiated reforms and what factors might predict their enactment.

The data I constructed has some additional limitations. I argue that governance reforms can most often be broken down into two large buckets of reforms – structural and authoritative. This is because I found that at the heart of these governance reforms were state governments being concerned with what does the board look like and what should the board be allowed or not allowed to do. However, it is certainly possible that there are other types of governance reforms that should be included in future analyses. I hope that future researchers will build upon this first step toward understanding and categorizing state-level higher education governance reforms.

Another data limitation I recognize is the measurement for statewide enrollment for students of color. I had originally hoped to consider each Census-designated racial category separately, yet I quickly ran into two serious issues from an analysis perspective. Sample size represented an issue as some states have incredibly low enrollment levels for specific racial categories. Another problem was that the statistical power of each racial grouping was reduced when they were separated out. Although I had conceptual concerns with this, I borrowed from the literature on racial threat that students of color are often treated as a monolith, as are policies that are intended to impact them – whether overtly or discretely. To enhance the statistical power of students of color in my analysis, I chose to group the racial categories of Black, Hispanic/Latino/a, Asian and Pacific Islander, and Native American students into a single measure of students of color.

Another limitation regards my diffusion measurement. Although geographic diffusion remains a widely used measure for the spread of policies across locales, there are concerns that states may not necessarily take an idea from another state simply because they border each other. For example, Idaho, a notably conservative state, borders both Oregon and Washington, two liberal states. Simply because both Oregon and Washington adopt a policy does not mean that Idaho will follow suit. However, diffusion is not a central feature of my research questions but rather one feature of policy adoption that I control for in examining the influence of political, socioeconomic, and organizational features on governance reforms. Future research on governance reforms might consider emerging models of diffusion (see Li & Kelchen, 2021) that consider how policies and ideas spread as a central feature of analysis. In the next chapter, I discuss results from the event history analysis using the methods outlined above. I also provide detail on results from diagnostic tests and sensitivity checks.

Chapter 4: Results

In this chapter, I offer a breakdown of descriptive statistics (See Table 4) and results from my panel analysis (Tables 5-8). My results are organized by descriptive findings and research question. When testing my models, I ran separate models for each research question. I replaced the dependent variable based on my research question and then tested it with my political, socioeconomic, and organizational features of interest.

Within each results section for my research questions, I describe if any covariates were found to be statistically significant, which I define as coefficients with a p-value of .05 or lower. If any variables are found to be statistically significant, I provide information on coefficients. Sensitivity checks tested models with varying combinations of covariates to test for issues such as collinearity. Overall, my analysis yielded mixed results. The variables that led to more consistent and strong results were political features and socioeconomic features. While many variables were not significant in any model, I describe important results below.

Descriptive Statistics

Because this study is the first to examine both sector-level differences in governance reforms and the characteristics of governance reforms, this study yielded important descriptive findings. Full descriptive statistics for dependent and independent variables of interest are found in Table 4. I found sixty-five governance reforms occurred between 2000 and 2020. The number of reforms (of any type) addressing a specific sector were around the same for the four-year (N=48) and two-year sectors (N=43), suggesting that states seem to be equally invested in addressing higher education governance for both universities and community colleges.

Board authority reforms – which I define as reforms that change the authority granted to a state board over certain policy areas – also had similar results between sectors, with community college sectors having more reforms (N=23) than four-year sectors (N= 20). I found that out of the total number of governance reforms, forty-five were structural reforms, which I define as reforms that change what the board looks like through the number of seats, appointment mechanism, and who may be allowed to serve on the board. Structural reforms were also nearly equal for the community college (N=32) and four-year sectors (N=33), again suggesting that states have had similar levels of investment in reform for both sectors.

Finally, I measured reforms that could be categorized as enhancing state authority over higher education. Reforms that boosted the authority of the state made up the majority of reforms (N=49, or around 76% of all reforms enacted over the two decades). Figure 1 displays a heat map of the number of reforms adopted by state, which shows that several states that adopted any reform often adopted more than one. Figure 2 displays the number of reforms over time. This shows that there was not a large uptick in reforms during a certain period of time in my panel. While there were some years earlier on that experienced a large number of reforms (2003 and 2007, for example), reforms appear to have occurred at a more even distribution of time from 2010 to 2020, or after the Great Recession.

Analytic Results

I next estimated a series of regressions that included political, socioeconomic, and organizational features of states understand how they relate to overall governance reform (RQ1), governance reform by sector (RQ2), the type of governance reform (RQ3), and the direction of governance reform (RQ4). For each outcome, I estimated three models: the first considered

governance reforms across both sectors, the second considered governance reforms in the two-year sector, and the third considered governance reforms in the four-year sector. I discuss results for political, socioeconomic, and organizational features in turn below. Since diffusion is not a primary independent variable of interest but rather a feature that is important to adjust for, I include this variable as a control across models. Overall, diffusion was not statistically significant across models.

Factors that Predict Any Governance Reform

To answer my first research question, I used a model with any governance reform (regardless of sector or type of reform) as the dependent variable. Full results for this research question are in Table 5. I will first provide information on variables that were statistically significant. I found legislative salary to be significant in this model, with a coefficient of .003. Because this is a monetary variable (and as described above, was divided by 1,000 for analytic purposes), this should be interpreted that a dollar increase in legislative professionalism increases the likelihood of reform by .3%. Practically, this shows a positive relationship between legislative professionalism and governance reforms. Another significant variable was Republican governor control. Republican governors had a coefficient of -.042. This suggests that a governance reform was 4.2% less likely with a Republican governor. A variable that was nearly statistically significant was the enrollment of students of color, which had a coefficient of -.008. While the effect size is small, this shows that there is a negative relationship between statewide enrollment for students of color and governance reforms. Put another way, states were less likely to adopt a governance reform if student of color enrollment was decreasing.

Other findings from this model that may not have been statistically significant but should be discussed were the political features of states. Relative to the other results for research question 1, I found larger effect sizes Republican legislatures and unified control of state government. Republican legislatures had a positive relationship with reform adoption, and a reform was 3.5% more likely to occur with a Republican legislature. Unified control of state government was another interesting finding, showing that single party control of government was associated with a 2.4% increase in likelihood of reform adoption.

Factors that Predict Governance Reform by Sector

My second research question was interested in the factors that influence states to enact governance reforms for either the four-year or community college sectors. For this question, I ran two models using dependent variables measuring any reform to the four-year sector and any reform to the community college sector. Full results for this research question are in Table 6.

First, I provide results for the model examining any reform for the four-year sector. A statistically significant variable in this model was enrollment among students of color, with a coefficient of $-.009$. This suggests a negative relationship between reform adoption for the four-year sector and student of color enrollment. Other variables were nearly statistically significant. Republican governors had a negative relationship in this model, with a coefficient of $-.032$, or a 3.2% decrease in likelihood of reform adoption for the four-year sector with a Republican governor. However, Republican legislatures were positively associated with reform adoption in this model, showing a 4.1% increase in the likelihood of four-year reform adoption. Another variable that was nearly statistically significant was educational attainment rates. In this

model, educational attainment was associated with a 1.1% increase in the likelihood of policy adoption.

A second model ran for this research question addressed reforms for the community college sector. In this model, legislative professionalism was statistically significant, with a coefficient of .003, again suggesting a positive relationship with policy adoption. Effect sizes for this model were somewhat small, though stronger results again were found with my political variables. Again, Republican governors had a negative relationship with community college reform adoption (2.4% decrease). Yet this model diverged from others with Republican legislatures, which showed a 1.5% decrease in likelihood of reform adoption for the two-year sector. Unified control of state government was associated with a 2.6% increase of adoption, again showing a positive relationship when state governments are controlled by a single party. In this model, increases to unemployment rates and educational attainment were also positively associated with reform adoption.

Predicting the Type of Governance Reform by Sector

For my third research question, I asked what factors lead to the adoption of a governance reform by the type of reform and the type of reform to both sectors. This meant that I wanted to know what factors lead to a state adopting either a reform that changed the structure of the board (such appointment power or changes to board seats) or a reform that changed the authority granted to the board by the state. I broke these models down into two sections based on the type of reform (i.e., structure or authority). Full results for this research question are in Table 7.

I first examined board structure reform. The first model I ran used any board structure reform (regardless of sector) as the dependent variable. In this model, legislative professionalism was statistically significant and was positively associated with a board structure reform regardless of sector. While no other variables were statistically significant, there are other results to note for this model. Republican governors were again negatively associated with this type of reform adoption, with a 1.6% decrease in likelihood. Republican legislatures, however, had a 2.0% increase in policy adoption. Directionally, average statewide income, unemployment rates, and educational attainment rates were all positively associated with the adoption of any reform to board structure.

My second model measured board structure reforms for the four-year sector. There were no statistically significant variables in this model. However, Republican legislatures should be noted here as the findings line up with the trend seen in other models. In this model, Republican legislatures were 2.8% more likely to adopt a reform that changed the structure of a four-year board. The third model examined board structure reforms for the community college sector. In this model, I found legislative professionalism to be statistically significant, showing that a dollar increase in legislative professionalism is associated with a .2% increase in likelihood of policy adoption. While effect sizes for this model were also somewhat weak, unemployment rates were found to increase the likelihood of policy adoption by 1.0%.

I then looked at reforms to board authority. Full results for this research question are in Table 6. The first model I ran for this type of reform used any board authority reform regardless of sector as the dependent variable. In this model, Republican governors were again negatively associated with reforms to board authority, with a 2.5% decrease in likelihood. Though the effect size was small, Republican legislatures were also negatively associated with this type of reform.

This lines up well with results from unified control of state government in this model, showing a 1.1% increase in the likelihood of adoption when a single party controls state government. A final variable of note in this model is legislative professionalism, which though not statistically significant again shows that for every dollar increase in legislative salary, there was a .1% increase in likelihood of policy adoption.

I then tested board authority reforms for the four-year sector. While this model resulted in no statistically significant results, the results fell in line with a trend for Republican governors, which had a negative relationship with policy adoption. Republican legislatures, however, were positively associated with the adoption of a reform to the authority of a four-year sector board. I also examined board authority reforms for the two-year sector. Again, this model did not have results that were statistically significant. However, Republican governors and Republican legislatures were both negatively associated with reforms to community college board authority. Unified control of state government, legislative professionalism, and state unemployment rates were positively associated with this type of policy adoption.

Reforms that Enhanced State Authority

I ran a final model testing a variable that measures if a given reform enhanced the level of authority given to state government over higher education. As discussed in the previous chapter, this is a variable that is focused on operationalizing how state government is seeking to use governance reforms to increase the level of oversight that it has over boards, systems, and institutions. Results from this model are available in Table 8. While no results were statistically significant, two variables were quite close. One such variable was unified control of state government, which resulted in a 3.1% increase in the likelihood of adoption. Another was

legislative professionalism. For this model, legislative professionalism was associated with a .2% increase in the likelihood that a state will adopt a reform that increased the power given to state government over higher education. Other results in this model fit with a similar trend seen in other models. For example, Republican governors were again negatively associated with this type of reform adoption. Conversely, Republican legislatures and educational attainment rates were both positively associated with reforms that enhanced the authority given to state government.

Summary of Findings

Using panel analysis with fixed effects, I sought to answer research questions centered on how various political, socioeconomic, and organizational features of states influence governance reform adoption. I examined research questions based on variations to governance reform adoption by sector, varying types of governance reform, and if governance reforms enhanced state government authority over higher education. I used data from the U.S. Census Bureau, IPEDS, Council of State Governments, and Klarner politics to measure covariates related to state-level political, socioeconomic, and organizational characteristics. In sum, I found that Republican legislatures, unified control of state government, unemployment rates, and educational attainment rates were most often positively associated with reform adoption. While Republican governors were at times positively associated with reform adoption, more often Republican governors were negatively associated with reform adoption. In the fifth and final chapter, I discuss these findings in more detail and offer implications for policy and practice.

Chapter 5: Discussion, Directions for Future Research, and Conclusion

Discussion: Implications for Research, Policy, and Practice

This study has examined how political, socioeconomic, and organizational characteristics of states influence governance reform adoption, governance reform adoption by sector, type of governance reform adoption, and adoption of reforms that increase state governmental authority over higher education. I answered these research questions by building an original panel dataset of governance reforms in all fifty states from 2000 to 2020. This data not only measured if any governance reform took place during a given year, but also collected data on if a reform impacted a specific sector's state-level board, if a reform changed the state board's structure or authority granted, and if a reform enhanced the power that state government holds over higher education in the state. The data I collected alone represents a clear contribution to the literature base on governance reforms in state postsecondary education. Using event history analysis with multiple events, I have shown that as states have experienced major shifts in their political party control, economies, and demographics of students and the population, they are more likely to reform their statewide postsecondary governance arrangements.

This builds upon the prior literature in this area. Previous research examining the predictors of governance reforms (McLendon et al., 2007) found that unified, single party control of state government influenced governance reform adoption, while also finding that economic conditions of states did not impact policy adoption. Yet my findings differ from previous research in this area by finding that the economic conditions of states, namely unemployment rates, plays a significant role in governance reform adoption. My study also branches out from prior research by examining sector-level differences and the type of reform, where I find that the

factors that influence governance reform adoption vary by sector. In this final chapter, I offer results in several key areas. I first describe my descriptive results and what these findings tell us about governance reforms. Second, I discuss the implications of my study on the politics of higher education and why these findings are important for researchers and policymakers. Third, I describe how and why the economic conditions of states are important in governance reform adoption. I close by providing directions for future researchers to explore in the area of state higher education governance reforms.

Features of Governance Reforms

Perhaps the clearest contribution of this study lies with its data collection and descriptive features. First, while this study adds to literature on governance reforms broadly, importantly, this study is also the first to address governance reforms by sector. As discussed in the literature review, I found no other research that went beyond statewide governance reforms and into the realm of state governance reforms for the four-year and two-year sectors. On its own, this research is a strong addition to the knowledge base on governance reforms, system governance, and governance for community colleges.

This study has several notable findings at the descriptive level. I provide information on how states are reforming governance for four-year and community college systems. As noted in my results, states appear to be similarly interested in reforms for both sectors. This somewhat goes against traditional thought surrounding community colleges: that they are less often impacted by state-level governance structures and that they are locally governed. While this is still the case in some areas, this study shows that states are increasingly willing to reexamine the functions, structure, and authority of statewide community college governance.

Third, I add to the literature base by attempting to measure policy design characteristics of governance reforms. In an effort to address heterogeneity of governance reforms, I created variables that measured if a reform focused on structural components of the board or the authority granted to the board. I went further to create two more measures of governance reforms: those that enhanced the power of the state over boards or those that boosted the authority granted to the board by the state. These variables do not get into a “centralization” or “decentralization” dichotomy, but rather attempt to directly address components of power within state governments and state boards in higher education.

Governance Reforms and the Politics of Higher Education

Certainly, strong results among my political variables were in unified control of state government. I found that when one party controls both the legislature and governorship there is an increased likelihood of reforms that center on the community college sector and board authority. This would be in line with previous research examining the political predictors on governance reforms, specifically from McLendon et al (2007). This finding warrants further discussion. It is important to point out again that my variable for unified control of state government is not a stand-in for any single political party and rather measures if either major political party controlled both the legislative and gubernatorial branches of government in a given year.

The most likely explanation for this is that governance reforms – possibly even relatively “small” reforms with minimal changes to structure or authority – are difficult to pass. Even with major will power and buy-in from leaders and members, there are often serious time constraints on a legislative session, providing limits on what can be pushed through and forcing decisions on

priorities. Furthermore, as we know, higher education is not nearly the only issue that legislatures deal with in a session, and governors are in the same position. It therefore becomes much easier to pass a reform if one does not need support from members of the other party to pass a bill of any kind – including higher education governance reforms.

This also makes my findings on the effects of political party in the state legislature or governor's office all the more interesting. I had hypothesized that political party would affect governance reform adoption, and while these factors were rarely statistically significant, there is practical significance in their directionality. I thought that since both major political parties increasingly treat higher education differently from a policy standpoint, reforms would look different dependent upon what party is in power at the state level. While Republican governors appear to have a negative relationship with governance reform adoption, Republican legislatures often had a positive relationship with adopting reforms. When considering the positive relationship that unified control of government appears to have with governance reform adoption, these findings might appear to be contradictory with each other. Governors clearly continue to play a central role in state policymaking, particularly on budgeting and on key issues by using the bully pulpit (Beyle, 2004). Yet recent research suggests that the locus of authority in the states is shifting to state legislatures (McGrath et al., 2015; Kousser & Phillips, 2012; Barrilleaux & Berkman, 2003). A limitation in my findings is that I did not have a measurement to account for state variations in power and authority granted to the governor and legislature.

Findings on the politics of higher education also relate to broader conversations on policymaking in America's laboratories of democracy. I opened this dissertation with the quote from Michael Mills (2007) referring to state postsecondary governance as a "continuing experiment". My findings clearly suggest that governors and legislators are often focused on

making changes to higher education governance structures and authority – even if they appear to be small. Over the last year, having over sixty legislatively-enacted governance reforms across the nation shows that these policymakers are invested in making sure their state boards align with their interests. This will be where qualitative inquiry and building upon the quantitative data we have in this area will be important in coming years to understand the reasoning behind taking up these reforms within each state’s specific context.

In short, more research will be needed to focus on this relationship between governors and legislatures to account for the power dynamics that are clearly present in governance reform adoption. Republican legislatures may truly play an important role as my findings suggest, and it is certainly possible that political party does play a central factor in governance reforms as I had hypothesized. Again, while more research is needed, these findings build upon previous research showing that, at least to a point, there are at least some differences in how the parties are handling higher education within the states. Findings that political party control and strength are significant in postsecondary education policymaking again show why this research is important. When coupled with concerns surrounding politicization and distrust of higher education, and recent examples of state legislators and governors actively looking to remake colleges and universities in their own political image, this offers further evidence that this research is now and will continue to be relevant in the coming years.

Socioeconomic Conditions of States

The economic conditions of states appear to play a role in governance reforms as well. Specifically, unemployment was found to be a significant predictor of governance reforms across several models. Again, this finding is in line with research on other areas of higher education

policy (Tandberg & Griffith, 2013). I had hypothesized that unemployment rates would play a role in governance reform adoption. Because unemployment rates is a primary economic feature used in higher education policy research to measure economic conditions of states, I assumed that rising unemployment would force state governments to rethink the structures and authorities that they grant to state boards.

One reason states may move in this direction is that state political leaders know state boards are a strong vessel to directly impact their state's public colleges. In doing so, reforming higher education governance is perhaps a way to make the board potentially more responsive to the economic needs of the state and workforce development needs. Since unemployment was significant specifically in models testing board authority reforms changing items such as program approval or tuition setting authority, again, these reforms can be better understood as an effort on the part of states to make boards and their institutions more in line with state goals.

This would also make sense considering that unemployment is more likely to impact governance reform adoption at for the community college sector. Considering that this study is the first to longitudinally measure governance reforms for state-level community college boards, this on its own is a key finding. Since community colleges are key drivers of the economic engines of states through workforce development, transfer functions, and community education programs (Cohen et al., 2013), this could explain the increase in governance reform adoption for the two-year sector during periods of high unemployment or economic recession.

A final note on the significance of unemployment rates on governance reform adoption is that these results may be considered in consultation with results from my political variables. As noted above, unified control of state government was found to be significant in multiple models. A practical implication is that governance reforms are easier to pass when a single party oversees

the legislative and gubernatorial branches of government. These findings can be discussed further when taken together with those regarding unemployment.

I discussed above that state legislatures and governors often have a limited amount of time to deal with problems and a wide range of issues to deal with. This might lead to a question of policy environment. Even when considering that unified control of government means bills are easier for one party to pass – what might be the problems that force state government to reconsider governance? Since unemployment is a primary way to measure the economic environment of a state, times of high unemployment are times when state leaders are looking for ways to boost the economy. Because higher education is a major economic engine of any state, it would make sense that tough economic times are the conditions that might force state leaders to reconsider how governance is addressed in the state.

Theoretical Contributions

For this study, I applied a revised policy innovation and diffusion model from Hearn et al (2017), which in short theorizes that state-level factors and environments – including political, socioeconomic, and organizational features – impact policy adoption. Perhaps one key theoretical contribution from this study is that we know that, at least to a point, governance reform adoption is influenced by these factors. Another contribution goes back to the classic Walker (1969) piece that argued that state policy enactment is influenced by internal determinants and external factors. I build upon the heart of this theory, as other studies have done, by showing that state governance reforms are influenced by both internal and external features, such as political features of states and broader economic issues such as unemployment rates and recessions. Another contribution is that this study shows the weakness of a geographic

diffusion measurement. At least in the area of governance reforms, with diffusion neither being significant nor positive across models, it is clear that simply because a state neighbors another state, that does not mean that a state will enact a similar policy. Although other researchers have used this measurement for different higher education policy areas, it is clear that in the modern age of increasing both partisanship and polarization that researchers will need to expand their understanding of how states are learning from each other in postsecondary education policy.

Directions for Future Research

This study has examined the predictors of governance reforms for higher education. While I have made several contributions with this research that is described in this chapter, there are several areas that I believe warrant further examination. First, more research is needed to add policy design characteristics of governance reforms. Though the two key areas of structural and authoritative reforms are major components of governance reform policy, other researchers may be led to build on this data.

More research is also needed to understand state-level changes to institutional boards. While this study focuses exclusively on statewide boards of higher education, there are numerous examples of states enacting changes that impact the structure and authority of single institution-level boards. Efforts to gather and analyze data on the factors that might lead states to enact these types of changes will be an important line of research for governance and governance reforms in the coming years.

Finally, I should note that several other variables in my model that dealt with the socioeconomic conditions of states were not statistically significant. One such variable was educational attainment rates. Historically, scholars view college attainment as a measure of demand for higher education and as an area in which policymakers are increasingly interested. I

had hypothesized that states with lower educational attainment rates would be more likely to enact a governance reform, yet this turned out not to be the case. The same was true for organizational features, including sector-level enrollment and enrollment among students of color. These findings were disappointing, and more research will be needed to examine if these factors may influence future governance reform efforts.

Conclusion

This study examined the political, socioeconomic, and organizational predictors of state-level governance reforms. Through a panel dataset of state-level governance reforms from 2000 to 2020, this study fills a gap in the literature first by offering updated data in this area. The literature base on governance reform adoptions has been in need of newer and stronger data. I build on this by providing more detailed data on governance reform adoptions by sector, the types of reforms, and if a reform enhanced the authority of state government. In doing so, I have added more recent evidence on the factors leading to reforms and made a first attempt in addressing heterogeneity in governance reform adoption. My study yielded two significant findings. First, political features, especially unified, single party control of state government has a strong effect on governance reform enactment, especially those related to board authority and those for the two-year sector. Second, I find that unemployment rates have a clear impact on governance reform adoption, particularly reforms that shift the authority granted to a board. While this study represents a clear addition to the literature base, more research will be needed to fully understand the factors that push states to enact reforms to statewide postsecondary governance.

References

- Abramowitz, A.I. (2018). *The great alignment: Race, party transformation, and the rise of Donald Trump*. New Haven, CT: Yale University Press.
- Abramowitz, A.I., & McCoy, J. (2019). United States: Racial resentment, negative partisanship, and polarization in Trump's America. *The ANNALS of the American Academy of Political and Social Science*, 681(1), 137–156.
- Abramowitz, A. I., & Webster, S. W. (2016). The rise of negative partisanship and the nationalization of U.S. elections in the 21st century. *Electoral Studies*, 41(March 2016), 12-22.
- Abramowitz, A.I., & Webster, S.W. (2018). Negative partisanship: Why Americans dislike partisanship but behave like rabid partisans. *Advances in Political Psychology*, 39(1), 119-135.
- Acock, A.C. (2018). *A gentle introduction to Stata, 6th Edition*. College Station, TX: Stata Press.
- Allison, P. (1984). *Event history analysis: Regression for longitudinal event data*. Sage Publications.
- Allison, P. (2004). Event history analysis. In M. Hardy & A. Bryman (eds.) *Handbook of data analysis*. Thousand Oaks, CA: Sage Publishing.
- Ampaw, F. D., & Jaeger, A. J. (2012). Completing the three stages of doctoral education: An event history analysis. *Research in Higher Education*, 53(6), 640–660.
<https://doi.org/10.1007/s11162-011-9250-3>
- Askin, M. (2007). Community college mission: Resources make a difference. *Community College Journal of Research and Practice*, 31(12), 977-997.
- Association of Governing Boards. (2018). *Public confidence in higher education*. Washington, DC: Author.
- Association of Governing Boards. (2020). *The AGB 2020 Trustee Index: Concern deepens for the future of higher education*. Washington, DC: Author. Retrieved from:
https://agb.org/wp-content/uploads/2020/01/AGB_2020_Trustee_Index.pdf
- Baber, L.D., Zamani-Gallaher, E.M., Stevenson, T., and Porter, J. (2019). From access to equity: Community colleges and the social justice imperative (pp. 203-240). In M. Paulsen and L. Perna (Eds.) *Higher Education: Handbook of Theory and Research*. New York: Springer Publishing.
- Bahr, P., & Gross., J. (2016). Community colleges. In M. Bastedo, P. Altbach, & P. Gumport (eds.) *American Higher Education in the 21st Century: Social, Political, and Economic Challenges, 4th Edition*. Baltimore, MD: Johns Hopkins University Press.

- Baker, D. (2019). Pathways to racial equity in higher education: Modeling the antecedents of state affirmative action bans. *American Educational Research Journal*.
- Barber, M., & Pope, J.C. (2019). Does party trump ideology? Disentangling party and ideology in America. *American Political Science Review*, 113(1), 38-54.
- Barrilleaux, C., & Berkman, M. (2003). Do governors matter? Budgeting rules and the politics of state policymaking. *Political Research Quarterly*, 56(4), 409-417.
- Bastedo, M. (2005). The making of an activist governing board. *Review of Higher Education*, 28(4), 551-570.
- Bastedo, M. (2009). Convergent institutional logics in public higher education: State policymaking and governing board activism. *Review of Higher Education*, 32(2), 209-234.
- Berdahl, R. O. (1971). *Statewide coordination of higher education*. Washington, D.C.: American Council on Education.
- Berry, F. S., & Berry, W. D. (1990). State lottery adoptions as policy innovations: An event history analysis. *American Political Science Review*, 84(2), 295–416.
- Berry, F. S., & Berry, W. D. (2018). Innovation and diffusion models in policy research. In C. Weible & P. Sabatier (eds.) *Theories of the policy process*, 4th Edition. Boulder, CO: Westview Press.
- Beyle, T. (2004). The governor. In V. Gray & R. Hanson (eds.) *Politics in the American states: A comparative analysis* (8th Edition). Washington, D.C.: CQ Press.
- Bluestein, G., & Stirgus, E. (2021). Sonny Perdue Under Consideration to Lead Georgia's Higher Ed System. *The Atlanta Journal Constitution*, March 16, 2021. Retrieved from: <https://www.ajc.com/politics/politics-blog/sonny-perdue-under-consideration-to-lead-georgias-higher-ed-system/2I6E6D4EKBGUNFA5BTBYJBBJJE/>
- Box-Steffensmeier, J., & Jones, B. (2004). *Event history modeling: A guide for social scientists*. Cambridge University Press.
- Boxell, L., Gentzkow, M., & Shapiro, J. (2020). Cross-country trends in affective polarization. National Bureau of Economic Research, Working Paper 26669. Retrieved from: <https://www.nber.org/papers/w26669>.
- Brekken, K., Bernick, E., Gourrier, A., & Kellogg, L. (2021). The people's college: A review of local community college governing boards through the lens of descriptive representation. *Community College Journal of Research and Practice*, 45 (1).

- Brint, S. & Karabel, J. (1989). *The diverted dream: community colleges and the promise of educational opportunity in America, 1900-1985*. New York, NY: Oxford University Press.
- Buckley, J. B., & Westerland, C. (2004). Duration dependence, functional form, and corrected standard errors: Improving EHA models of state policy diffusion. *State Politics and Policy Quarterly*, 4(1), 94-113.
- Cantwell, B., & Taylor, B. (2020). Political rancor and educational inequality: Why building consensus is necessary to renew American higher education. *Change*, 52(3), 68-72.
- Cebul, B., Geismer, L., & Williams, M.B. (2019). Beyond the red and blue: Crisis and continuity in Twentieth Century U.S. political history. In B. Cebul, L. Geismer, & M.B. Williams (eds.) *Shaped by the state: Toward a new political history of the Twentieth Century*. Chicago, IL: University of Chicago Press.
- Chambers, C.R. (2017). *Law and social justice in higher education*. New York, NY: Routledge.
- Chen, R. (2012). Institutional characteristics and college student dropout risks: A multilevel event history analysis. *Research in Higher Education*: 53(5), 487-505.
- Cheslock, J., & Gianneschi, M. (2008). Replacing state appropriations with alternative revenue sources: The case of voluntary support. *Journal of Higher Education*, 79.
- Christakis, M. (2009). Gubernatorial authority and influence on public higher education. *The Review of Higher Education*, Vol. 33, No. 1, Fall 2009.
- Cohen, A. M., Brawer, F. B., & Kisker, C. B. (2013). *The American community college*. San Francisco, CA: Jossey-Bass.
- Cohen-Vogel, L., & Ingle, W. K. (2007). When neighbours matter most: Innovation, diffusion and state policy adoption in tertiary education. *Journal of Education Policy*, 22, 241–262.
- Cohen-Vogel, L., Ingle, W. K., Levine, A. A., & Spence, M. (2008). The ‘spread’ of merit-based college aid: Politics, policy consortia, and interstate competition. *Educational Policy*, 22, 339–362.
- Cook, R. (2010). '94 and '10: Similarities, but Differences, Too. *Sabato's Crystal Ball*: University of Virginia Center for Politics. Retrieved from: <https://centerforpolitics.org/crystalball/articles/frc2010111801/>
- Creswell, J. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*, 4th Edition. Thousand Oaks, CA: Sage Publishing.
- Dar, L. & Lee, D. W. (2014). Partisanship, political polarization, and state higher education budget outcomes. *The Journal of Higher Education*, 85(4).

- Dar, L., & Spence, M. J. (2011). Partisanship, political polarization, and state budget outcomes: The case of higher education. *SSRN eLibrary*, Retrieved from <http://ssrn.com/abstract=1577365>
- Desjardins, S.L. (2003). Event history methods: Conceptual issues and an application to student departure from college. In J.C. Smart (ed.) *Higher Education: Handbook of Theory and Research*, Vol. 18. Springer Press.
- Dowd, A., Rosinger, K., & Fernandez-Castro, M. (2020). Trends and perspectives on finance equity and the promise of community colleges. In L. Perna (Ed.), *Higher education: Handbook of theory and research* (pp. 517-588). Dordrecht, The Netherlands: Springer Publishing.
- Doyle, W. (2006). Adoption of merit-based student grant programs: An event history analysis. *Educational Evaluation and Policy Analysis*, 28(3), 259-285.
- Doyle, W. R. (2007). The political economy of redistribution through higher education subsidies. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (pp. 335-409). Dordrecht: Springer Netherlands.
- Doyle, W.R., McLendon, M. K., & Hearn, J. C. (2010). The adoption of prepaid tuition and savings plans in the American states: An event history analysis. *Research in Higher Education*, 51(7), 659-686.
- Ellis, L., Stripling, J., & Bauman, D. (2020). The new order: How the nation's partisan divisions consumed public college boards and warped higher education. *The Chronicle of Higher Education*, 67(3), 10.
- Feinstein, B.D., & Wood, A.K. (2021). Divided agencies. Forthcoming in *Southern California Law Review*.
- Fletcher, J., & Friedel, J. (2017). Typology of state-level community college governance structures. *Community College Journal of Research and Practice*, 41(4-5).
- Fletcher, J. A., & Friedel, J. N. (2018). Interrelationships between funding and state community college governance systems. *Journal of Applied Research in the Community College*, 25(1), 1-15.
- Foster, J.M., & Fowles, J. (2018). Ethnic heterogeneity, group affinity, and state higher education spending. *Research in Higher Education*, 59(1), 1-28.
- Fried, A., & Harris, D.B. (2021). *At war with government: How conservatives weaponized distrust from Goldwater to Trump*. New York, NY: Columbia University Press.
- Friedel, J. N., Killacky, J., Miller, E., & Katsinas, S. G. (2014). *Fifty state systems of community colleges: Mission, governance, funding, and accountability* (Fourth ed.). Johnson City, TN: Overmountain Press.

- Frey, W. (2020). The nation is diversifying even faster than predicted, according to new census data. The Brookings Institution. Retrieved from: <https://www.brookings.edu/research/new-census-data-shows-the-nation-is-diversifying-even-faster-than-predicted/>
- Fulton, M. (2019). An analysis of state postsecondary governance structures. Education Commission of the States, Oct. 2019. <https://www.ecs.org/wp-content/uploads/An-Analysis-of-State-Postsecondary-Governance-Structures.pdf>
- Gándara, D. (2019). How the sausage is made: An examination of a state funding model design process. *The Journal of Higher Education*, 91(2), 192-221.
- Gándara, D., Rippner, J., & Ness, E. (2017). Exploring the "how" in policy diffusion: National intermediary organizations' roles in facilitating the spread of performance-based funding policies in the states. *The Journal of Higher Education*, 88(5), 701-725.
- Gallup. (2017). Why are republicans down on higher ed? Author. Washington, D.C. Retrieved from: <https://news.gallup.com/poll/216278/why-republicans-down-higher.aspx>
- Garrett, R. L. (1992). Degree of centralization of governance of state community college systems in the United States, 1990. *Community College Review*, 20(1), 7-13.
- Garrett, R. L. (1993). A profile of state community college system characteristics and their relationship to degrees of centralization. *Community College Review*, 20(5), 6-15.
- Glenny, L. A. (1959). *Autonomy of public colleges: The challenges of coordination*. New York, NY: McGraw-Hill.
- Glenny, L. A., & Schmidlein, F. A. (1983). The role of the state in the governance of higher education. *Educational Evaluation and Policy Analysis*, 5(2), 133-153.
- Graham, H. (1989). Structure and governance in American higher education: Historical and comparative analysis in state policy. *Journal of Policy History*, 1(1), 80-107.
- Gross, N. (2013). *Why are professors liberal and why do conservatives care?* Cambridge, MA: Harvard University Press.
- Hamm, K. (2021). An assessment of state-legislative research. *Political Science & Politics*, 52(3), 440-444.
- Hammond, L., Baser, S., & Cassell, A. (2020). The relationships between state community college governance centralization and local appropriations. *Higher Education Politics & Economics*, 6(1), 20-38.
- Hamm, K., & Moncrief, P. (2004). Legislative politics in the states. In V. Gray & R. Hanson (eds.) *Politics in the American states: A comparative analysis* (8th Edition). Washington, D.C.: CQ Press.

- Hanna, R.W. & Guilbeau, J.P. (2018). The role of the SHEEO and the board in changes in higher education governance. In D. Tandberg, B. Sponsler, R. Hanna, and J. Guilbeau (eds.) *The state higher education executive officer and the public good: Developing new leadership for improved policy, practice, and research*. New York, NY: Teachers College Press.
- Hearn, J. C., & Griswold, C. P. (1994). State-level centralization and policy innovation in United states postsecondary education. *Educational Evaluation and Policy Analysis*, 16, 161–190.
- Hearn, J. C., & McLendon, M. K. (2012). Governance research: From adolescence toward maturity. In M. Bastedo (Ed.), *The organization of higher education: Managing colleges for a new era* (pp. 45-85). Baltimore, MD: The John Hopkins University Press.
- Hearn, J., McLendon, M., & Linthicum, K. (2017). Conceptualizing state policy adoption and diffusion. In M. Paulsen (ed.) *Higher Education: Handbook of Theory and Research*, Vol. 32. Springer, Cham.
- Hearn, J. C., & Ness, E. C. (2017). The ecology of state-higher education policymaking in the US. In D. Palfreyman, T. Tapper, & S. Thomas (Eds.), *Towards the private funding of higher education: Ideological and political struggles* (pp. 19-47). London, UK: Routledge.
- Henig, J. (2009). Politicization of evidence: Lessons for an informed democracy. *Educational Policy*, 2009; 23; 137.
- Holbrook, T. (2016). *Altered states: Changing populations, changing parties, and the transformation of the American political landscape*. New York, NY: Oxford University Press.
- Hopkins, M., & Grossman, D. (2016). *Asymmetric politics: Ideological Republicans and group interest Democrats*. Oxford University Press.
- Hougaard, P. (2000). *Analysis of Multivariate Survival Data*. Springer Press.
- Hutton, R.S. (2018). Survival analysis. In B.B. Frey (ed.) *The SAGE encyclopedia of educational research, measurement, and evaluation*. Thousand Oaks, CA: SAGE Publishing.
- Ingram, W. G., & Tollefson, T. A. (1996). Local autonomy is alive and well: The results of a national study on locations of effective decision-making authority in state community college systems. *Community College Journal of Research and Practice*, 20(2), 133-150.
- Jensen, E., Jones, N., Rabe, M., Pratt, B., Medina, L., Orozco, K., & Spell, L. (2021). The chance that two people chose at random are of different race or ethnicity groups has increased since 2010. U.S. Census Bureau. Retrieved from:

<https://www.census.gov/library/stories/2021/08/2020-united-states-population-more-racially-ethnically-diverse-than-2010.html>

- Johnson, L. & Borman, K.M. (2007). Competing agendas for university governance: Placing the conflict between Jeb Bush and Bob Graham in context. In K.M Borman & S. Dorn (Eds.), *Reform in Florida: Diversity and equity in public policy* (pp. 185-210). Albany: State University of New York Press.
- Johnson, D.R. & Peifer, J.L. (2017). How Public Confidence in Higher Education Varies by Social Context. *The Journal of Higher Education*, 88(4), 619-644.
- Katz, E., Levin, M. L., & Hamilton, H. (1963). Traditions of research on the diffusion of innovation. *American Sociological Review*, 28(2), 237-252.
- Kelchen, R. (2018). *Higher education accountability*. Johns Hopkins University Press.
- Kelchen, R., Rosinger, K., & Ortagus, J. (2019). How to create and use state-level policy datasets in education research. *AERA Open*. <https://doi.org/10.1177/2332858419873619>
- Kirst, M. W. (2010). The political and policy dynamics of K-12 education reform from 1965 to 2010: Implications for changing postsecondary education. Retrieved from: https://cepa.stanford.edu/sites/default/files/Evolution%20of%20K-12_9_2_10.pdf
- Kirst, M. W., & Wirt, F. M. (2009). *The political dynamics of American education*. McCutchan Publishing Company.
- Klarner, C. (2013). State partisan balance data, 1937 – 2011. Harvard Dataverse, V1. <https://doi.org/10.7910/DVN/LZHMG3>.
- Kolbe, T., & Baker, B. (2019). Fiscal equity and America's community colleges. *The Journal of Higher Education*, 90(1).
- Kousser, T., & Phillips, J. H. (2012). *The power of American governors: Winning on budgets and losing on policy*. New York, NY: Cambridge University Press.
- Kramer, D., Ortagus, J., & Lacy, A. (2017). Tuition-setting authority and broad-based merit aid: the effect of policy intersection on pricing strategies. *Research in Higher Education*, 59, 489-518.
- Labaree, D. F. (2017) *A perfect mess: The unlikely ascendancy of American higher education*. Chicago, IL: University of Chicago Press.
- Lacy, T. A. (2011). Measuring state postsecondary governance: Developing a new continuum of centralization [Unpublished doctoral dissertation]. The University of Georgia.
- Lacy, T. A. (2015). Event history analysis: A primer for higher education researchers. In M. Tight & J. Huisman (eds.) *Theory and method in higher education research*. Bingley, U.K.: Emerald Group Publishing Limited.

- Lacy, A., Fowles, J., Tandberg, D., & Hu, S. (2017). U.S. state higher education appropriations: assessing the relationships between agency politicization, centralization and volatility. *Policy and Society*, 35(1).
- Lacy, A. & Tandberg, D. (2014). Rethinking policy diffusion: The interstate spread of “finance innovations”. *Research in Higher Education*, 55, 627–649.
- Lacy, A. & Tandberg, D. (2018). Data, measures, methods, and the study of the SHEEO. In D. Tandberg, B. Sponsler, R. Hanna, and J. Guilbeau (eds.) *The state higher education executive officer and the public good: Developing new leadership for improved policy, practice, and research*. New York, NY: Teachers College Press.
- Layzell, T.D. (2018). Letter to a New SHEEO. In D. Tandberg, B. Sponsler, R. Hanna, and J. Guilbeau (eds.) *The state higher education executive officer and the public good: Developing new leadership for improved policy, practice, and research*. New York, NY: Teachers College Press.
- Leslie, D.W. & Berdahl, R.O. (2008). The politics of restructuring higher education in Virginia: A case study. *The Journal of Higher Education*, 31(3), Spring 2008.
- Leslie, D. W., & Novak, R. J. (2003). Substance vs. politics: Through the dark mirror of governance reform. *Educational Policy*, 17(1), 98–120.
- Li, A. & Kelchen, R. (2021). Policy diffusion of performance funding equity metrics: Traditional neighbor and dyadic survival analyses. *Educational policy*, online first. <https://doi.org/10.1177/089590482111058>
- Lingenfelter, P.E. (2004). The state and higher education: An essential partnership. *New Directions for Higher Education*, 127, 47-59.
- Lingenfelter, P., Novak, R., & Legon, R. (2008). *Excellence at scale – What is required of public leadership and governance in higher education?* Washington, D.C.: Association of Governing Boards.
- Lougheed, J.P. & Benson, L. (n.d.). Recurring episode model with time-invariant predictors. Penn State Quantitative Systems Methodology. Retrieved from <https://quantdev.ssri.psu.edu/tutorials/part-4-recurring-episode-cox-regression-model-time-invariant-predictors>
- Lowry, R.C. (2001). The effects of state political interests and campus outputs on public university revenues. *Economics of Education Review*, 20(2), 105-119.
- MacTaggart, T. J. (1998). Why the time is ripe for restructuring. In MacTaggart, T. J. & Associates (Eds.), *Seeking excellence through independence: Liberating colleges and universities from excessive regulation* (pp. 3-20). San Francisco, CA: Jossey-Bass.

- Marcus, L.R. (1997). Restructuring state higher education governance patterns. *The Review of Higher Education*, 20(4), 399-418.
- Mason, L. (2015). "I disrespectfully disagree:" the differential effects of partisan sorting on social and issue polarization. *American Journal of Political Science*, 59(1), 128-145.
- Mason, L. (2018). *Uncivil agreement: How politics became our identity*. Chicago, IL: University of Chicago Press.
- McGrath, R., Rogowski, J., & Ryan, J. (2015). The power of institutional design: Governors, vetoes, and legislative outcomes. In D. Redlawsk (ed.) *The American governor: Power, constraint, and leadership in the states*. New York, NY: Palgrave MacMillian.
- McGuinness, A. (2016a). The states and higher education. In M. Bastedo, P. Altbach, & P. Gumpert (eds.) *American higher education in the 21st century: Social, political, and economic challenges*. Baltimore, MD: The Johns Hopkins University Press.
- McGuinness, A. C. (2016b). History of state coordination and governance and alternatives for the future. <http://www.ecs.org/wp-content/uploads/051616-State-Policy-Leadership-for-the-Future-KL-final2.pdf>
- McLendon, M. (2003a). The politics of higher education: toward an expanded research agenda. *Educational Policy*, 2003, 17, 165.
- McLendon, M. (2003b). Setting the governmental agenda for state decentralization of higher education. *The Journal of Higher Education*, 74(5), Sept./Oct. 2003.
- McLendon, M. (2003c). State governance reform of higher education: patterns, trends, and theories of the public policy process. In J. Smart (ed.) *Higher Education: Handbook of Theory and Research*, 18, 57-143.
- McLendon, M., Deaton, R., & Hearn, J. (2007). The enactment of reforms in state governance of higher education: Testing the political instability hypothesis. *The Journal of Higher Education*, 76(6).
- McLendon, M. K., & Hearn, J. C. (2007). Incorporating political indicators into comparative-state research on postsecondary policy. In K. Shaw & D. E. Heller (Eds.), *The challenges of comparative state-level higher education policy research*. Sterling, VA: Stylus.
- McLendon, M., Hearn, J., & Deaton, R. (2006). Called to account: Analyzing the origins and spread of state performance accountability policies for higher education. *Educational Evaluation and Policy Analysis*, 28(1), 2006.
- McLendon, M., Hearn, J., & Mokher, C. (2009). Partisans, professionals, and power: The role of political factors in state higher education funding. *The Journal of Higher Education*, 80(6).

- McLendon, M. K., Heller, D. E., & Young, S. P. (2005). State postsecondary policy innovation: Politics, competition, and the interstate migration of policy ideas. *The Journal of Higher Education*, 76(4): 363–400.
- McLendon, M. K., Mokher, C. G., & Doyle, W. (2009). “Privileging” public research universities: An empirical analysis of the distribution of state appropriations across research and non-research universities. *Journal of Education Finance*, 34(4), 372–401.
- McLendon, M., & Ness, E. (2003). The politics of state higher education governance reform. *Peabody Journal of Education*, Vol. 78, No. 4, pp. 68-88.
- Mills, M. (2007). Stories of politics and policy: Florida’s higher education reorganization. *The Journal of Higher Education*, 78(2), March/April 2007.
- Mohr, L. B. (1969). Determinants of innovation in organizations. *American Political Science Review*, 63(19), 111-126.
- Morgan, D. L., Rall, R. M., Commodore, F., Fischer, R. A., & Bernstein, S. (2021). Hiding in plain sight: The potential of state-level governing boards in postsecondary education policy agenda-setting. *The Journal of Higher Education*, 92(4), 570–595.
- Morgan, S., & Winship, C. (2007). *Counterfactuals and causal inference: Methods and principles for social research*. New York, NY: Cambridge University Press.
- Moynihan, D. (2005). Why and how do state governments adopt and implement “managing for results” reforms? *Journal of Public Administration Research and Theory*, 15(2), 219-243.
- Moynihan, D. (2006). Managing for results in state government: Evaluating a decade of reform. *Public Administration Review*, 66(1), 77-89.
- Moynihan, D. (2020). Populism and the deep state: The attack on public service under Trump. (May 21, 2020). Available at SSRN: <https://ssrn.com/abstract=3607309>
- Moynihan, D. and Roberts, A.S. (2021) Dysfunction by design: Trumpism as administrative doctrine. Forthcoming in *Public Administration Review*. Available at SSRN: <https://ssrn.com/abstract=3740765>
- National Center for Education Statistics. (2022). *Back-to-school statistics*. Author. Retrieved from: <https://nces.ed.gov/fastfacts/display.asp?id=372#Postsecondary-enrollment>
- National Conference of State Legislatures (2019). *Access to and use of voter registration lists*. Retrieved from: <https://www.ncsl.org/research/elections-and-campaigns/access-to-and-use-of-voter-registration-lists.aspx>
- National Conference of State Legislatures. (2021a). State partisan composition. Retrieved from: <https://www.ncsl.org/research/about-state-legislatures/partisan-composition.aspx>

- National Conference of State Legislatures. (2021b). Partisan control of state legislatures, 2002-2014. Retrieved from: https://www.ncsl.org/documents/statevote/legiscontrol_2002_2014.pdf
- Natow, R. S. (2022). *Reexamining the federal role in higher education: Politics and policymaking in the postsecondary sector*. New York, NY: Teachers College Press.
- Ness, E., Hearn, J. & Rubin, P. (2018). The SHEEO and Intermediary Organizations. In D. Tandberg, B. Sponsler, R. Hanna, and J. Guilbeau (eds.) *The state higher education executive officer and the public good: Developing new leadership for improved policy, practice, and research*. New York, NY: Teachers College Press.
- Ness, E. & Gándara, D. (2014). Ideological think tanks in the states: An inventory of their prevalence, networks, and higher education policy activity. *Educational Policy*, 28(2) 2014.
- Ness, E., & Tandberg, D. (2013). The determinants of state spending on higher education: how capital project funding differs from general fund appropriations. *The Journal of Higher Education*, 84(3), pp. 329-362.
- Nicholson-Crotty, J., & Meier, K.J. (2003). Politics, structure, and public policy: The case of higher education. *Educational Policy*, 17(1), 80-97.
- Parker, K. (2019). The growing partisan divide in views of higher education. Pew Research Center. Retrieved from: <https://www.pewresearch.org/social-trends/2019/08/19/the-growing-partisan-divide-in-views-of-higher-education-2/>
- Perna, L., & Finney, J. (2014). *The attainment agenda: State policy leadership in higher education*. Baltimore, MD: Johns Hopkins University Press.
- Pew Research Center. (2019). In a politically polarized era, sharp divides in both partisan coalitions. Author. Retrieved from: <https://www.pewresearch.org/politics/2019/12/17/in-a-politically-polarized-era-sharp-divides-in-both-partisan-coalitions/>
- Rall, R., Morgan, D., & Commodore, F. (2020). Toward culturally sustaining governance in higher education: Best practices of theory, research, and practice. *Journal of Education Human Resources*.
- Rall, R., Morgan, D., & Commodore, F. (2021). Bounded boards: A commentary on the limitations of knowledge and scope of research on boards of higher education. *Innovative Higher Education* (2021). <https://doi.org/10.1007/s10755-021-09582-6>
- Redlawsk, D. (2015). *The American governor: Power, leadership, and constraint in the states*. New York: Palgrave MacMillan.

- Rhoda, R.G. & Linthicum, K.C. (2018). State Leadership for Student Success. In D. Tandberg, B. Sponsler, R. Hanna, and J. Guilbeau (eds.) *The state higher education executive officer and the public good: Developing new leadership for improved policy, practice, and research*. New York, NY: Teachers College Press.
- Rizzo, M. (2004). State preferences for higher education spending: A panel data analysis, 1997-2001. In *Federal Reserve Bank of Cleveland's conference on education and economic development*.
- Rogers, E. (1962). *Diffusion of innovations*. New York, NY: Free Press of Glencoe.
- Rosenthal, A. (2009). *Engines of democracy: politics and policymaking in state legislatures*. Washington, D.C.: CQ Press.
- Rosinger, K., Ortagus, J., Kelchen, R., Cassell, A., & Brown, L. (2022). New evidence on the evolution and landscape of performance funding for higher education. *The Journal of Higher Education*, 93(5). <https://doi.org/10.1080/00221546.2022.2066269>
- Rubin, P. & Ness, E. (2021). State higher education agencies and the knowledge brokering process: Investigating their role as multi-facing agencies in the United States. *Higher Education Policy*, 34(3), 643-663.
- Russell, J.D. (1951). Patterns of coordinated state control over higher education. (Box 18). John D. Russell Papers, Harry S. Truman Presidential Library, Independence, MO.
- Schneider, B., Carnoy, M., Kilpatrick, J., Schmidt, W. H., & Shavelson, R. J. (2007). *Estimating causal effects using experimental and observational designs* (Report from the Governing Board of the American Educational Research Association Grants Program). Washington, DC: American Educational Research Association.
- Shadish, W., Cook, T., & Campbell, D. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Belmont, CA: Wadsworth Cengage Learning.
- Shorette, K., Thiele, M., & Bolzendahl, C. (2021). Degrees of support: State spending on higher education and public postsecondary degrees across state legislatures, 2005 and 2014. *Socius*, January 2021.
- Singer, J. D., Willett, J. B. (1993). It's about time: Using discrete-time survival analysis to study duration and the timing of events. *Journal of Educational Statistics*, 18, 155-195.
- Smith, K., & Larimer, C. (2017). *The public policy theory primer*. Boulder, CO: Westview Press.
- Sponsler, B. A., & Fulton, M. (2018). Modern era trends in state higher education coordination, governance, and alternatives for the future. In D. A. Tandberg, B. A. Sponsler, R. W. Hanna, & J. P. Guilbeau (Eds.), *The state higher education executive officer and the*

- public good: Developing new leadership for improved policy, practice, and research* (pp. 219-254). Teachers College Press.
- Sponsler, B. A., Pingel, S., & Anderson, L. (2015). Policy trends impacting community colleges: An ECS perspective. *Community College Journal of Research and Practice*, 39(10), 891-895.
- Squire, P., & Hamm, K. (2005). *101 chambers: Congress, state legislatures, and the future of legislative studies*. Columbus: Ohio State University Press.
- Stancill, J. (2015). Margaret Spellings chosen as next UNC system president. *The Charlotte Observer*, October 23, 2015. Retrieved from: <https://www.charlotteobserver.com/news/local/education/article41183529.html>
- State Higher Education Executive Officers Association. (2022). State Higher Education Finance Report: FY 2021. Author. Retrieved from https://shef.sheeo.org/wp-content/uploads/2022/06/SHEEO_SHEF_FY21_Report.pdf
- Sullivan, P. (2017). Diverted dreams, cruel hoaxes, and institutional effectiveness: the community college “failure” narrative. In P. Sullivan (Ed.), *Economic inequality, neoliberalism, and America’s community colleges*. Cham: Springer Press.
- UCLA. (n.d.). Survival analysis using Stata. UCLA: Statistical methods and data analytics. <https://stats.oarc.ucla.edu/stata/seminars/stata-survival/>
- Tandberg, D. (2013). The conditioning role of state higher education governance structures. *The Journal of Higher Education*, 84(4).
- Tandberg, D. & Anderson, C.K. (2012). Where politics is a bloodsport: Restructuring state higher education governance in Massachusetts. *Educational Policy*, 26(4), 2012.
- Tandberg, D., Fowles, J., & McLendon, M. (2017). The governor and the state higher education executive officer: how the relationship shapes financial support for higher education. *The Journal of Higher Education*, 88(1).
- Tandberg, D. A., & Griffith, C. (2013). State support of higher education: Data, measures, findings, and directions for future research. In *Higher Education: Handbook of Theory and Research* (pp. 613–685).
- Tandberg, D., Sponsler, B, Hanna, R., & Guilbeau, J. (2018). Introduction., In D. Tandberg, B. Sponsler, R. Hanna, and J. Guilbeau (eds.) *The state higher education executive officer and the public good: Developing new leadership for improved policy, practice, and research*. New York, NY: Teachers College Press.
- Taylor, B. (2022). *Wrecked: Deinstitutionalization and partial defenses in state higher education policy*. New Brunswick, NJ: Rutgers University Press.

- Taylor, B., & Cantwell, B. (2019). *Unequal higher education: Wealth, status, and student opportunity*. New Brunswick, NJ: Rutgers University Press.
- Taylor, B., Cantwell, B., Watts, K., Wood, O. (2020). Partisanship, white racial resentment, and state support for higher education. *The Journal of Higher Education*, 91(6).
- Thelin, J. (2019). *A history of American higher education*, 3rd ed. Baltimore, MD: Johns Hopkins University Press.
- Therneau, T.M., & Grambsch, P.M. (2000). *Modeling survival data: Extending the Cox model*. New York: Springer Press.
- Thiele, M., Shorette, K., & Bolzendahl, C. (2012). Returns to education: Exploring the link between legislators' public school degrees and state spending on higher education. *Sociological Inquiry*, 82(2), 305-328.
- Titus, M. (2021). *Higher education policy analysis using quantitative techniques: Data, methods, and presentation*. Springer, Cham.
- Tollefson, T. A., Garrett, R. L., & Ingram, W. G. (1999). *Fifty state systems of community colleges: Mission, governance, funding, and accountability*. Johnson City, TN: Overmountain Press.
- Toutkoushian, R.K., & Hollis, P. (1998). Using panel data to examine legislative demand for higher education. *Education Economics* 6(2), 141– 158.
- Walker, J.L. (1969). The diffusion of innovations among the American states. *American Political Science Review*, 63, 880-899.
- Weerts, D. J., & Ronca, J. M. (2006). Examining differences in state support for higher education: A comparative study of state appropriations for Research I universities. *The Journal of Higher Education*, 77, 935–967.
- Wen, C., & Chen, Y. (2020). Discrete-time survival data with longitudinal covariates. *Statistics in Medicine*, 39(29), 4372-4385. <https://doi.org/10.1002/sim.8729>
- Wong, K. (2004). The politics of education. In V. Gray and R.L. Hanson (eds.), *Politics in the American states: A comparative analysis* (8th Edition). Washington, D.C.: CQ Press.
- Zhang, L. (2010). The use of panel data models in higher education policy studies. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research*, Vol. 25. New York: Springer Press.
- Zumeta, W. & Kinne-Clawson, A. (2018). The State Higher Education Executive Officers and Higher Education Finance Policy. In D. Tandberg, B. Sponsler, R. Hanna, and J. Guilbeau (eds.) *The state higher education executive officer and the public good:*

Developing new leadership for improved policy, practice, and research. New York, NY: Teachers College Press.

Tables and Appendices

Table 1. List of boards included in dataset.

Alabama	Alabama Commission on Higher Education; Alabama Commission on Community Colleges
Alaska	Alaska Board of Regents
Arizona	Arizona Board of Regents
Arkansas	Arkansas Higher Education Coordinating Board; Arkansas Department of Education – Division of Higher Education
California	University of California; California State University; California Community Colleges
Colorado	Colorado Commission on Higher Education
Connecticut	Connecticut Board of Regents
Delaware	No statewide board
Florida	State University System of Florida Board of Governors
Georgia	Georgia Board of Regents
Hawaii	Board of Regents of the University of Hawaii
Idaho	Idaho State Board of Education
Illinois	Illinois Board of Higher Education; Illinois Community College Board
Indiana	Indiana Commission on Higher Education
Iowa	Iowa Board of Regents; Iowa State Board of Education
Kansas	Kansas Board of Regents
Kentucky	Kentucky Council on Postsecondary Education
Louisiana	Louisiana Board of Regents
Maine	University of Maine System; Maine Community College System
Maryland	Maryland Higher Education Commission
Massachusetts	Massachusetts Board of Higher Education
Michigan	No statewide board for higher education
Minnesota	Minnesota Office of Higher Education
Mississippi	Mississippi Board of Trustees of State Higher Education Institutions; Mississippi Community College Board
Missouri	Missouri Coordinating Board for Higher Education
Montana	Montana Board of Regents
Nebraska	Nebraska Coordinating Commission for Postsecondary Education
Nevada	Board of Regents of the Nevada System of Higher Education
New Hampshire	New Hampshire Department of Education/ Higher Education Commission
New Jersey	State of New Jersey Office of the Secretary of Higher Education
New Mexico	New Mexico Department of Higher Education
New York	State University of New York
North Carolina	University of North Carolina Board of Governors; North Carolina State Board of Community Colleges
North Dakota	North Dakota State Board of Higher Education

Ohio	Ohio Department of Higher Education
Oklahoma	Oklahoma State Regents for Higher Education
Oregon	Oregon Higher Education Commission
Pennsylvania	Pennsylvania State System of Higher Education Board of Governors
Rhode Island	Rhode Island Board of Education/Council on Postsecondary Education
South Carolina	Commission on Higher Education
South Dakota	South Dakota Board of Regents
Tennessee	Tennessee Higher Education Commission; Tennessee Board of Regents
Texas	Texas Higher Education Coordinating Board
Utah	Utah Board of Higher Education
Vermont	Vermont State Colleges Board of Trustees
Virginia	State Council of Higher Education for Virginia; Virginia State Board for Community Colleges
Washington	Washington Student Achievement Council; Washington State Board for Community and Technical Colleges
West Virginia	West Virginia Higher Education Policy Commission; West Virginia Council for Community and Technical College Education
Wisconsin	Board of Regents of the University of Wisconsin System
Wyoming	University of Wyoming Board of Trustees; Wyoming Community College Commission

Table 2. Brief Descriptions of Governance Reforms, 2000-2020.

Year	State	Reform Description	Sector
2015	AL	Transferred oversight of community colleges to Alabama Commission of Community Colleges.	2-year
2017	AL	Allowed board to determine expenditures and allocate resources to institutions.	2-year
2000	AZ	Added a seat to the Arizona Board of Regents to be appointed by governor.	4-year
2003	AZ	Abolished the State Board of Directors for Community Colleges.	2-year
2015	AR	Changes appointment confirmation powers.	Both sectors
2019	AR	Changes board membership number; changed eligibility of who may be appointed to the board; merged the Higher Education Coordinating Board under the state Department of Education.	Both sectors
2000	CA	Added seats to board.	2-year
2003	CA	Revised board membership number and appointment mechanism.	2-year
2007	CA	Specified all board members are appointed by governor.	2-year
2020	CA	Added Lt. Governor as voting member.	2-year
2001	CO	Added seats to board.	4-year
2010	CO	Changed tuition setting authority.	Both sectors
2011	CO	Allowed board the ability to approve fees.	Both sectors
2011	CT	Consolidated two systems into a single board.	Both sectors
2014	CT	Added seats to board.	Both sectors
2000	FL	Legislature adopted the structure outlined in public referendum.	Both sectors
2002	FL	Changed appointment mechanism.	2-year
2005	FL	Updated eligibility of board members and duties of board.	4-year
2010	FL	Changed powers and duties of board.	Both sectors
2007	HI	Changed to how appointment recommendations are made.	Both sectors
2013	HI	Changed number of board seats.	Both sectors
2004	IL	Added a faculty voting member that is appointed by governor and confirmed by Senate.	4-year
2005	IL	Added a faculty voting member that is appointed by governor and confirmed by Senate.	2-year
2007	IL	Adds 2 student members appointed by governor and confirmed by senate	4-year
2012	IL	Mandates that 1 board member must be a CC president to be appointed by governor with senate approval	2-year
2007	IN	Ivy Tech given own board	Both sectors
2004	IA	Changed number of board members by adding a student voting member.	4-year
2003	KY	Turned over certain functions from the older UK CC system to KTCS	2-year
2013	KY	Changed appointment mechanism of student representatives to board.	4-year
2016	KY	Changed confirmation to Senate approval only.	4-year

2017	KY	Changed appointment and removal authority.	4-year
2008	LA	Changed appointment time period.	Both sectors
2012	LA	Changed the total number of seats.	Both sectors
2003	ME	Community college system created.	2-year
2019	MD	Added seats; Changed appointment mechanism.	4-year
2010	MA	Reformed oversight of board over institutions.	Both sectors
2020	MA	Changed appointment mechanism.	Both sectors
2006	MS	Added seat to board and changed appointment mechanism.	Both sectors
2007	NH	Established a community college system for the state	2-year
2016	NH	Added board seats.	2-year
2009	NJ	Added board seats.	4-year
2005	NM	Made NM Dept of Higher education a Cabinet-level agency.	Both sectors
2017	NC	Reduced the number of seats and changed appointment mechanism.	4-year
2007	OH	Changed board member terms and succession processes.	Both sectors
2015	OH	Made Board of Regents a cabinet-level agency.	Both sectors
2011	OR	Established the Higher Education Coordinating Commission.	Both sectors
2013	OR	Changed authority granted to HECC.	Both sectors
2020	PA	Changed number of seats on board; established boundaries for future reforms to PASSHE.	4-year
2006	RI	Changed the number of seats and appointment mechanism.	Both sectors
2014	RI	Board of regents replaced by the Council on Postsecondary Education.	Both sectors
2018	SD	Changed term limits of board members.	4-year
2016	TN	Changed oversight and authority given to board over institutions.	4-year
2018	TN	Changed oversight and authority given to board over institutions.	4-year
2003	TX	Revised number of board seats and appointment mechanism.	Both sectors
2020	UT	Changed authority granted to board over institutions.	Both sectors
2015	VT	Changed appointment mechanism.	Both sectors
2005	VA	Revised authority granted to board over institutions.	4-year
2008	VA	Revised authority granted to board over institutions.	4-year
2012	WA	Revised the authority granted to board and appointment mechanism.	Both sectors
2000	WV	Created Higher Education Policy Commission.	4-year
2001	WV	Created the Community and Technical College Board.	2-year
2004	WV	Changed authority given to board.	2-year
2008	WV	Changed oversight and authority given to board over institutions.	Both sectors
2017	WV	Reformed authority given to Commission.	4-year

Table 3. *Variable Descriptions and Sources.*

Variable	Description	Source
Governance reform	Binary variable (yes = 1; no = 0) expressing the state-level enactment of a governance reform	WestLaw and state legislation
Governor party	Binary variable expressing the party that controls the governorship (1=Republican; 0= Democratic)	Updated from Klarner (2013) state partisan balance data
Legislature party	Binary variable expressing the party that controls the legislative branch of government (1=Republican; 0= Democratic)	Updated from Klarner (2013) state partisan balance data
Legislative professionalism	Continuous variable denoting average legislative salary by state and year	Council of State Governments
Statewide student enrollment by race	Racial composition of enrolled college population	IPEDS
Statewide student enrollment by sector	Share of statewide enrollment by sector	IPEDS
Educational attainment rates	Percent of statewide population with a baccalaureate degree or higher	Census
State unemployment rates	Statewide unemployment rate	Census
Personal income	Annual aggregate income levels by state	Census

Table 4. Descriptive Results.

Variable	Obs.	Mean	Std. Dev.	Min	Max
Reform	1,050	0.060952	0.239357	0	1
Reform (4-Year)	1,050	0.044762	0.206879	0	1
Reform (2-Year)	1,050	0.040952	0.198274	0	1
Republican legislature	1,043	0.547939	0.45803	0	1
Republican governor	1,038	0.560694	0.496542	0	1
Unified control of state government	1,050	0.594286	0.491264	0	1
Legislative professionalism (logged)	1,050	32000.9	29234.77	0	148821.5
State unemployment rates	1,050	5.42	1.973741	2.3	13.7
Statewide average personal income (logged)	1,050	39983.73	10018.73	20684	79087
Percent of state population with a BA or higher	1,050	20.08376	4.566913	10.77994	35.80809
Statewide total enrollment for students of color	1,024	20.21085	12.38591	1.544198	64.25436
Diffusion (1 year lag)	1,000	0.233	0.422954	0	1

Table 5. Results from panel analysis with fixed effects, *Research Question 1*.

Factors that lead to any governance reform.

variable	Coef.	Std. Err.	P>t	[95% Conf.	Interval]
Republican governor	-0.04291	0.020214	0.034*	-0.08258	-0.00324
Republican legislature	0.035591	0.032725	0.277	-0.02864	0.099818
Unified control of state government	0.02439	0.019127	0.203	-0.01315	0.06193
Unified control of state government	0.003044	0.001392	0.029*	0.000312	0.005776
Legislative professionalism (logged)	0.002328	0.004708	0.621	-0.00691	0.011567
State unemployment rates	0.01031	0.011581	0.374	-0.01242	0.03304
Statewide average personal income (logged)	0.011312	0.007194	0.116	-0.00281	0.025432
Percent of state population with a BA or higher	-0.00892	0.004679	0.057	-0.0181	0.000269
Statewide total enrollment for students of color	0.012603	0.019735	0.523	-0.02613	0.051335
Number of events = 64					

Table 5. Results from panel analysis with fixed effects, *Research Question 2*.

Factors that lead to any governance reform by sector.

Any governance reform, 4-year sector.

variable	Coef.	Std. Err.	P>t	[95% Conf.	Interval]
Republican legislature	-0.032282	0.017615	0.067	-0.06685	0.00229
Republican governor	0.0410101	0.028538	0.151	-0.015	0.097019
Unified control of state government	0.0156558	0.016651	0.347	-0.01702	0.048335
Legislative professionalism (logged)	0.0000684	0.001213	0.955	-0.00231	0.002449
State unemployment rates	0.0005131	0.004044	0.899	-0.00742	0.008449
Statewide average personal income (logged)	0.0055504	0.009894	0.575	-0.01387	0.024968
Percent of state population with a BA or higher	0.0114179	0.006214	0.066	-0.00078	0.023614
Statewide total enrollment for students of color (4-year sector)	-0.0090547	0.004143	0.029*	-0.01719	-0.00092
Diffusion (1 year lag)	0.0039385	0.01714	0.818	-0.0297	0.037577
Number of events = 47					

Any governance reform, 2-year sector.

reform_2yr	Coef.	Std. Err.	P>t	[95% Conf.	Interval]
Republican legislature	-0.0248431	0.016905	0.142	-0.05802	0.008335
Republican governor	-0.0153918	0.02713	0.571	-0.06864	0.037854
Unified control of state government	0.0260786	0.016127	0.106	-0.00557	0.05773
Legislative professionalism (logged)	0.003161	0.001162	0.007**	0.000881	0.005441
State unemployment rates	0.0024009	0.003981	0.547	-0.00541	0.010215
Statewide average personal income (logged)	0.0090711	0.009765	0.353	-0.01009	0.028236
Percent of state population with a BA or higher	0.0060179	0.006064	0.321	-0.00588	0.017919
Statewide total enrollment for students of color (2-year sector)	-0.0037089	0.002998	0.216	-0.00959	0.002174
Diffusion (1 year lag)	-0.0052896	0.016598	0.75	-0.03787	0.027287
Number of events = 43					

Table 6: Results from panel analysis with fixed effects, *Research Question 3*.**Any Board Structure Reform.**

variable	Coef.	Std. Err.	P>t	[95% Conf.	Interval]
Republican legislature	-0.01652	0.016869	0.328	-0.04963	0.016592
Republican governor	0.02004	0.027311	0.463	-0.03356	0.073641
Unified control of state government	0.004942	0.015963	0.757	-0.02639	0.036272
Legislative professionalism (logged)	0.002395	0.001162	0.04*	0.000114	0.004675
State unemployment rates	0.003552	0.003929	0.366	-0.00416	0.011262
Statewide average personal income (logged)	0.009213	0.009665	0.341	-0.00976	0.028182
Percent of state population with a BA or higher	0.007157	0.006004	0.234	-0.00463	0.01894
Statewide total enrollment for students of color	-0.00408	0.003905	0.297	-0.01174	0.003588
Diffusion (1 year lag)	-0.00199	0.01647	0.904	-0.03431	0.030334
Number of events = 44					

Board Structure Reform, 4-year sector.

variable	Coef.	Std. Err.	P>t	[95% Conf.	Interval]
Republican legislature	-0.00954	0.014672	0.516	-0.03834	0.019251
Republican governor	0.028063	0.023769	0.238	-0.01859	0.074712
Unified control of state government	0.001462	0.013869	0.916	-0.02576	0.028681
Legislative professionalism (logged)	0.000425	0.00101	0.674	-0.00156	0.002407
State unemployment rates	0.002879	0.003368	0.393	-0.00373	0.009489
Statewide average personal income (logged)	0.00944	0.00824	0.252	-0.00673	0.025612
Percent of state population with a BA or higher	0.008412	0.005176	0.104	-0.00175	0.01857
Statewide total enrollment for students of color (4-year sector)	-0.00452	0.003451	0.191	-0.01129	0.002257
Diffusion (1 year lag)	-0.00325	0.014276	0.82	-0.03127	0.024765
Number of events = 32					

Board Structure Reform, 2-year sector.

variable	Coef.	Std. Err.	P>t	[95% Conf.	Interval]
Republican legislature	-0.00973	0.014562	0.504	-0.03831	0.018847
Republican governor	-0.00444	0.02337	0.849	-0.0503	0.04143
Unified control of state government	0.007478	0.013892	0.591	-0.01979	0.034743
Legislative professionalism (logged)	0.002444	0.001001	0.015**	0.00048	0.004408
State unemployment rates	0.003917	0.00343	0.254	-0.00281	0.010647
Statewide average personal income (logged)	0.010443	0.008412	0.215	-0.00607	0.026952
Percent of state population with a BA or higher	0.003241	0.005224	0.535	-0.00701	0.013493
Statewide total enrollment for students of color (2-year sector)	-0.00236	0.002582	0.36	-0.00743	0.002704
Diffusion (1 year lag)	-0.01239	0.014298	0.387	-0.04045	0.015677
Number of events = 32					

Any Board Authority Reform

variable	Coef.	Std. Err.	P>t	[95% Conf.	Interval]
Republican legislature	-0.02531	0.014103	0.073	-0.05299	0.002364
Republican governor	-0.00789	0.022831	0.73	-0.0527	0.036921
Unified control of state government	0.014429	0.013345	0.28	-0.01176	0.040619
Legislative professionalism (logged)	0.001775	0.000971	0.068	-0.00013	0.003682
State unemployment rates	-0.00073	0.003284	0.825	-0.00717	0.005721
Statewide average personal income (logged)	0.009857	0.00808	0.223	-0.006	0.025715
Percent of state population with a BA or higher	0.002869	0.005019	0.568	-0.00698	0.01272
Statewide total enrollment for students of color	-0.00513	0.003265	0.116	-0.01154	0.001278
Diffusion (1 year lag)	0.009775	0.013768	0.478	-0.01725	0.036797
Number of events = 29					

Board Authority Reform, 4-year sector.

variable	Coef.	Std. Err.	P>t	[95% Conf.	Interval]
Republican legislature	-0.01947	0.011606	0.094	-0.04224	0.003311
Republican governor	0.006212	0.018803	0.741	-0.03069	0.043114
Unified control of state government	0.008597	0.010971	0.433	-0.01293	0.030127
Legislative professionalism (logged)	-0.00032	0.000799	0.694	-0.00188	0.001253
State unemployment rates	-0.00273	0.002664	0.307	-0.00795	0.002504
Statewide average personal income (logged)	0.003351	0.006519	0.607	-0.00944	0.016144
Percent of state population with a BA or higher	0.003237	0.004094	0.429	-0.0048	0.011273
Statewide total enrollment for students of color (4-year sector)	-0.00439	0.00273	0.108	-0.00975	0.000967
Diffusion (1 year lag)	0.008254	0.011293	0.465	-0.01391	0.030417
Number of events = 20					

Board Authority Reform: 2-year sector.

variable	Coef.	Std. Err.	P>t	[95% Conf.	Interval]
Republican legislature	-0.01606	0.012486	0.199	-0.04057	0.008443
Republican governor	-0.02952	0.020039	0.141	-0.06885	0.009804
Unified control of state government	0.016803	0.011912	0.159	-0.00658	0.040181
Legislative professionalism (logged)	0.001845	0.000858	0.032	0.000162	0.003529
State unemployment rates	-0.00087	0.002941	0.767	-0.00664	0.0049
Statewide average personal income (logged)	0.01007	0.007212	0.163	-0.00409	0.024225
Percent of state population with a BA or higher	0.002895	0.004479	0.518	-0.0059	0.011686
Statewide total enrollment for students of color (2-year sector)	-0.00212	0.002214	0.338	-0.00647	0.002224
Diffusion (1 year lag)	0.002024	0.01226	0.869	-0.02204	0.026086
Number of events = 23					

Table 7: Results from panel analysis with fixed effects, *Research Question 4*.**Governance Reform Enhancing State Authority**

variable	Coef.	Std. Err.	P>t	[95% Conf.	Interval]
Republican legislature	-0.01792	0.017681	0.311	-0.05262	0.016782
Republican governor	0.023325	0.028625	0.415	-0.03286	0.079506
Unified control of state government	0.031781	0.016731	0.058	-0.00106	0.064618
Legislative professionalism (logged)	0.002229	0.001218	0.068	-0.00016	0.004619
State unemployment rates	0.000121	0.004118	0.977	-0.00796	0.008203
Statewide average personal income (logged)	-0.00097	0.01013	0.924	-0.02085	0.018912
Percent of state population with a BA or higher	0.005367	0.006293	0.394	-0.00698	0.017717
Statewide total enrollment for students of color	-0.00193	0.004093	0.637	-0.00996	0.006103
Diffusion (1 year lag)	0.006314	0.017262	0.715	-0.02757	0.040194

Figure 1. Number of Reforms by State, 2000 – 2020.

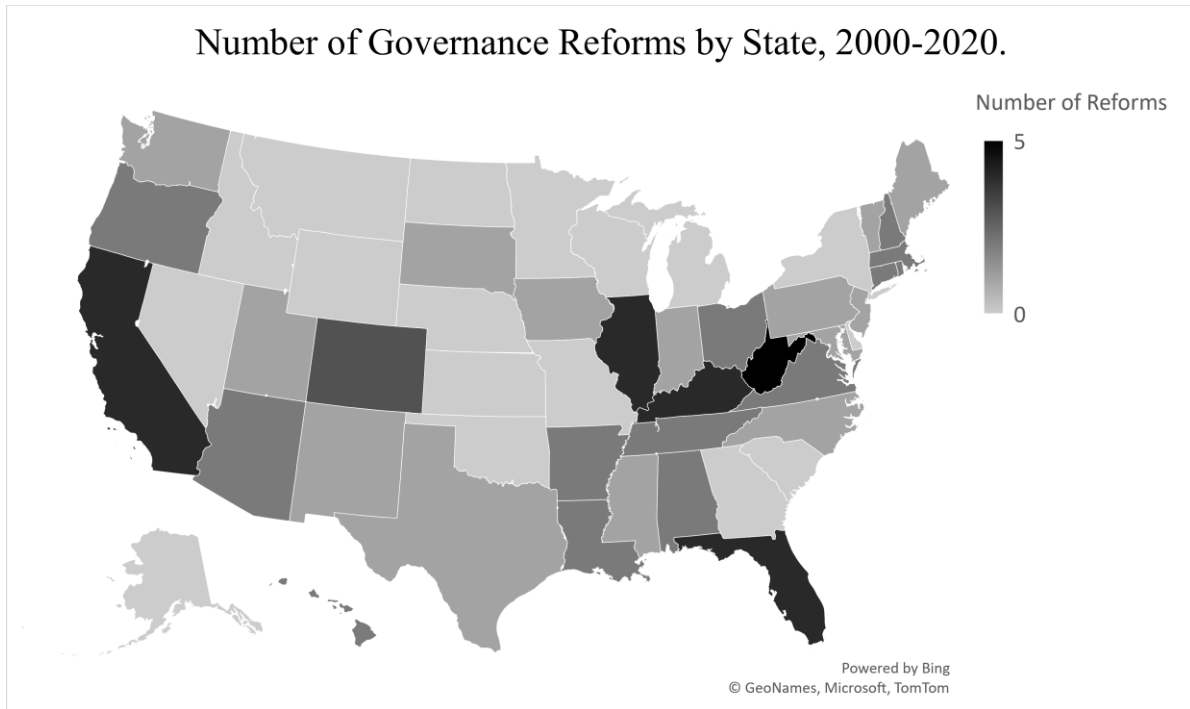
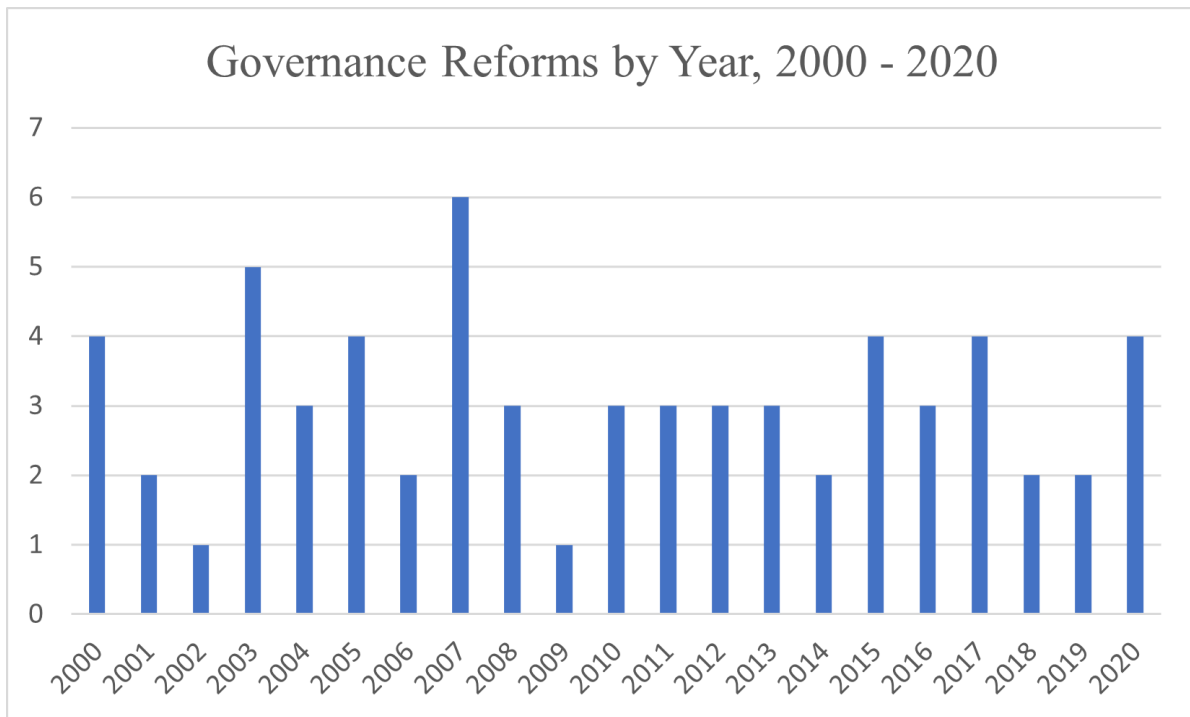


Figure 2. Governance Reforms by Year, 2000-2020.



VITA: ALEXANDER C. CASSELL

Education

Doctor of Philosophy in Higher Education

The Pennsylvania State University, *University Park, PA*

Master of Education in Higher Education

The University of Georgia – Louise McBee Institute of Higher Education, *Athens, GA*

Bachelor of Science in History; Bachelor of Science in Political Science

East Tennessee State University, *Johnson City, TN*

Selected Professional and Research Experience

Research Associate

American Council on Education, *Washington, D.C.*

Graduate Research Assistant

InformEd States Higher Education Policy Initiative

Center for the Study of Higher Education

The Pennsylvania State University, *University Park, Pennsylvania*

Peer-Reviewed Publications

Kelchen, R., Ortagus, J., Rosinger, K., **Cassell, A.** (2023). Investing in the workforce: The impact of performance-based funding on student earnings outcomes. *The Journal of Higher Education*. <https://doi.org/10.1080/00221546.2023.2171201>

Kelchen, R., Ortagus, J., Rosinger, K., **Cassell, A.** (2022). The effects of state performance funding policies on student debt and repayment. *Economics of Education Review*, Vol. 91, December 2022. <https://doi.org/10.1016/j.econedurev.2022.102328>

Rosinger, K., Ortagus, J., Kelchen, R., **Cassell, A.**, Brown, L. (2022). New evidence on the evolution and landscape of performance funding for higher education. *The Journal of Higher Education*, 93 (5). <https://doi.org/10.1080/00221546.2022.2066269>

Hammond, L., Baser, S., & **Cassell, A.** (2020). The relationships between state community college governance centralization and local appropriations. *Higher Education Politics and Economics*, 6 (1).