

Performance-Based Funding: History, Origins, Outcomes, and Obstacles

Yahya Mohammad Alshehri
University of Kansas
University of Tabuk

This paper aims at shedding more light on performance-based funding. It offers a historical background and discusses a couple of important theories underpinning the adoption of this policy. It finds that there are diverse motives and reasons causing the implementation of performance-based funding, proportionally supported and enacted by a particular partisan group. Performance based-funding appears to have weak to modest statistical significance in regards to institutional outcomes, such as degree completion, graduation rate, and attainment of certain credit hours. This is attributed to many hindrances and obstacles encountered by such a policy. A number of implications for this policy to be effective and efficient are proposed.

INTRODUCTION

American higher education institutions have been encountering intensified scrutiny and criticisms. This is attributed to the observed fact that higher education costs have accelerated during the last decades; meanwhile, most of the costs of such educational services have been shifting from being the responsibility of the federal and state governments and higher education institutions to be mostly the responsibility of students and their families (Baum, 2001; Toutkoushian, 2001; Weeden, 2015). In his analysis of revenues and expenditures of higher education, Toutkoushian, (2001) concluded that “The cost of higher education services has outpaced the rate of inflation for the past twenty years ... That rising educational prices have been due to both rising costs of education and falling subsidies from government and private sources “(p.32).

While the costs of higher education services have increased during the last decades, accountability in higher education has augmented as well. This is because of numerous legitimate concerns pertaining to higher education efficiency, effectiveness, productivity, and responsiveness to the public, state, and market’s demands, needs, and interests (Bruke, 2005; McLendon, Hearn, & Deaton, 2006; Weeden, 2015). Due to constituencies concerning the quality, effectiveness, and efficiency of higher education institutions, there have been various initiatives, policies, and programs stressing and scrutinizing specific aspects of higher education and holding institutions more accountable for their performance (Burke, 2005; McLendon et al., 2006; Lasher & Sullivan, 2005; Schmidtein & Berdahl, 2011; Weeden, 2015; Weeden, 2015). Accountability in higher education has undergone many changes and transformations during the last decades. Burke (2005) found that “accountability programs for higher education have shifted over time from system efficiency, to educational quality, to organizational productivity, and to external

responsiveness to public priorities or market demands” (p.4). As such, higher education institutions have undertaken various initiatives in order to improve their performance and bring about desired outcomes.

One of the initiatives is the adoption of performance-accountability (McLendon et al., 2006; Weeden, 2015). Policymakers continue to be concerned with performance efficiency and effectiveness of higher education institutions. Thus, they mandate and enact several types of performance-accountability models in order to increase efficiency, effectiveness, and productivities of higher education institutions on a set of predetermined measures. Accordingly, higher education institutions will be held more accountable for their performance on the specified indicators (Barr, 2002; McLendon et al., 2006; Lasher & Sullivan, 2005; Weeden, 2015; Weeden, 2015). Performance-accountability has experienced resurgence and popularity in recent years. Since 1979, there have been three distinct forms and models of performance-accountability, performance-funding, performance-budgeting, and performance-reporting, and there have been a great number of studies investigating the emergence of such performance models (McLendon et al., 2006).

For the purpose of this paper, performance-funding will be investigated. This performance model involves the process of tying state funding directly and tightly to predetermined individual measures and metrics representing institutional outcomes, such as student retention rate, attainment of certain credit hours, student graduation rate, degree completions, and job placement (Barr, 2002; Dougherty & Reddy, 2013; Lasher & Sullivan, 2005; Weeden, 2015). There are overarching motives for investigating this type of performance model. The first pertains to the observation that this performance-based funding is widely spread across the states. It has been reported that this performance model has been established in approximately 40 states at one time or another, and there are almost 39 currently in operation (Dougherty & Natow, 2015; Dougherty & Reddy, 2013; National Conference of State Legislatures, 2015). The second motive relates to the observation that performance-based funding has undergone several transformations and modifications in order to increase its effectiveness and efficiency and has received considerable attention from diverse stakeholders, such as universities and colleges officials, governors, and legislators (Dougherty & Natow, 2015; Dougherty & Reddy, 2013).

This paper surveys a number of empirical studies, books, book chapters, and reports in an attempt to demonstrate the effects of performance-based funding on the performance of higher education institutions, such as how this model stimulates and influences institutional practices and contributes to the effectiveness, efficiency, and productivities of higher education institutions. This paper starts with a brief history of performance-based policy. It sheds light on the action of theory embedded in performance funding policy. Then it discusses the origins and motives of establishing performance funding policy. In addition, the paper shed light on institutional outcomes (ultimate, immediate, and intermediate) resulting from the adoption of performance-based funding. Finally, it identifies a number of obstacles impeding the effectiveness and efficiency of such policy and concluded with a couple of implications and recommendations.

BRIEF HISTORICAL BACKGROUND

As stated previously, performance-based funding is the process of connecting the performance of higher education institution on a particular set of indicators to state funding (Dougherty & Natow, 2015; Dougherty & Reddy, 2013; National Conference of State Legislatures, 2015; Weeden, 2015). It means that any given institution should perform at or above individual indicators. These indicators may represent intermediate and ultimate institutional outcomes. Some of these indicators might include student retention, credit completion rate, student graduation rate, and degree completion rate, to name a few (Dougherty & Natow, 2015; Dougherty & Reddy, 2013; National Conference of State Legislatures, 2015; Weeden, 2015).

Performance-based funding falls into two main models. The first one, which is widely employed by many states, is performance funding 1.0 (Dougherty & Natow, 2015; Dougherty & Reddy, 2013). This type of funding is considered as a bonus that the institution obtains in addition to the regular state funding. Typically, the bonus is allocated because of the accomplishment of certain ultimate and

intermediate outcomes: graduation rate, job placement, completion of introductory courses, succeeding in completing certain credit hours. The second type is performance-based funding 2.0. This model is considered to be newly employed form except for a couple of states, such as Tennessee and Ohio. This type of funding varies from performance-based funding 1.0 in that it is not a bonus over and above the regular state funding; instead rather, it is an integral part of the state funding formula (Dougherty & Natow, 2015; Dougherty & Reddy, 2013; Weeden, 2015). Thus, based on the institution's performance on the pre-specified indicators, a portion of the state funding will be allocated to any given institution.

It is important to understand that the designated funds for these two models vary across the states employing these models. According to National Conference of State Legislatures (2015) the allocated funds based on performance based funding ranges from less than %1 to %100. For example, Illinois State, knowing for recently reestablished performance funding policy (2013), allots less than %1 of its appropriation for its four-and-two-year higher education institutions. Another example, knowing for its long standing performance funding policy (1979), Tennessee State allocates %100 of its appropriation for all of its higher education institutions (National Conference of State Legislatures, 2015).

THEORY OF ACTION UNDERPINNING PERFORMANCE-BASED FUNDING

Performance-based funding aims at improving and enhancing institutional performance on a set of predetermined indicators. These measures include a number of outcomes, such as student retention rate, completion of certain credit hours, student graduation rate, degree completion rate, job placement rate. However, in order to realize the aforementioned outcomes, performance-based funding is found to embody a number of theories of action, three of which were selected due to their prevalence. These include resource dependence theory, principle-agent theory, neo-institutionalism and information provision theory (Dougherty, Jones, Lahr, Natow, Pheatt, & Reddy, 2014; Dougherty & Reddy, 2013; Nisar, 2015). It is better to shed light on these three theories in some details due to their importance in guiding the implementation and investigation of performance-based funding.

Resource dependence theory assumes that the success or failure of performance-based funding depends, to a great extent, on the amount of money allocated to a given higher education institution on the basis of its performance on the pre-specified metrics (Dougherty et al., 2014; Dougherty & Reddy, 2013; Nisar, 2015). As the state appropriation tied with this funding policy increases, institutional performance is supposed to spur. Whereas, the appropriation associated with this policy decreases, the institutional performance is subject to decline. This is because of the assumption that acquisition of resources is substantially influenced by resulting benefits. Presumably, higher education institutions will intentionally exert and devote the necessary effort, time, and resources to accomplish the predefined measures in order to be eligible to receive state funding (Dougherty et al., 2014; Dougherty & Reddy, 2013; Nisar, 2015).

Principle-agent theory considers any given state as the principle while the higher education institution represent the agent (Nisar, 2015). The principle (here is the state) is to command and lay out the regulations and policies with which the agent (higher education institution/s) should comply and carry out its operation, programs, and activities. In the case of performance based funding, the principle (state) wants the agent (higher education institution/s) to execute particular tasks in order to achieve the predefined institutional outcomes (Nisar, 2015).

Neo-institutionalism theory states that success of performance-based funding or the lack thereof depends on the interaction of funding-policy advocates with various institutional components, such as university mission, structure, faculty governance orientation, and student demography (Nisar, 2015). There should be positive, cohesive, and complementary interactions between performance-based-funding providers and institutional elements. One way to do this is through the provision of information to institutional officials, including top, middle, and lower-level managers as well as faculty members (Dougherty et al. 2014). This should be done by the performance-funding providers (states). When consistent and genuine communications between the respective constituencies occur, institutional awareness will be more likely to spur. As a result, the more consistent and positive interactions between

performance funding providers and the institutional components are, the more the likelihood that this policy will succeed and bring about the desired institutional outcomes (Nisar, 2015).

However, when investigating the theory of action guiding the establishment and operation of performance funding at three states, Indiana, Ohio, and Tennessee, Dougherty et al. (2014) found that the espoused theories of action were not clearly articulated and equally shared among state-level advocates and institutional officials. They, Dougherty and his colleagues, indicated that the state-level advocates had limited vision of the espoused theory of action due to focusing almost exclusively on some aspects, such as financial incentives, while paying less attention to other aspects, such as specification of policy instruments and possible obstacles that might impede the effectiveness and efficiency of performance-based funding.

MOTIVES AND ORIGINS OF ADOPTING PERFORMANCE-BASED FUNDING

Many studies have investigated the origins, forces, and motives driving the development and establishment of performance-based funding (Dougherty et al., 2014; Dougherty & Natow, 2015; Dougherty & Reddy, 2013; Dougherty, Natow, Bork, Jones, & Vega, 2013; McLendon et al., 2006; Rabovsky, 2014). Generally speaking, these studies have found that the adoption and development of performance funding policy is to increase higher education institutions' efficiency, effectiveness, productivity, and responsiveness to societal and markets' needs, demands, and interests. Interestingly, almost all the studies reported in this paper showed a great deal of consistency associated as regards to their findings and conclusions.

For instance, when examining the forces driving the adoption of performance-based funding in six performance states, Tennessee, Florida, Illinois, South Carolina, Missouri, and Washington, Dougherty et al. (2013) found that many officials representing various organizations have contributed, to varying degrees, to the development and establishment of performance-based funding. These include state legislators, governors, universities' officials, business organizations, and professional organizations and foundations, such as Lumina Foundation and Complete College America. This finding has been corroborated by other studies (Dougherty et al., 2014; Dougherty & Natow, 2015; Dougherty et al., 2013; Rabovsky, 2014). Evidently, one of the main reasons contributing to the establishment and evolution of performance-based funding in many states is attributed to the concerted effort exerted by the various proponents to mandate such policy.

In the contrary, while there are a numerous number of proponents supporting the adoption and enactment of performance-based funding, there are many opponents against such policy. For example, the adoption of performance funding policy is found to be negatively associated with higher education governance and legislative party strength (Republicans) (Dougherty et al., 2013; McLendon et al., 2006; Rabovsky, 2014). Republican legislators appeared to tremendously advocate for performance funding policy compared to their counterpart, Democratic legislators. Hence, as the percentage of Republican legislators increases in conjunction with the absence of consolidated governing board, the higher the probability that states will adopt performance funding policy. Further, Dougherty et al. (2013) found that in non-performance states, California and Nevada, there have been great oppositions against the adoption of performance funding policy. In California, the oppositions were pronounced by the system governing boards for University of California, California State University, and the community colleges while in Nevada State, performance-based fund lacked the support from the legislators (democrats) although the Board of Regents advocated for such policy. Thus, the likelihood of adopting and enacting performance funding policy is negatively associated with democratic governors and legislators as well as consolidated higher education governing board.

IMPACTS OF PERFORMANCE-BASED POLICY

A great number of studies have been conducted in order to investigate the impacts of performance-based funding on many institutional ultimate outcomes, such as student retention rate, student graduation

rate, degree completion rate, and attainment of certain credit hours. Many studies have investigated the impacts of performance policy on two-year institutions (Hillman, Tandberg, & Fryar, 2015). Others have examined the effects of such policy on four-year higher education institutions (Rutherford & Rabovsky, 2014; Tandberg & Hillman, 2014). Still others have investigated the impacts of performance-based funding on both two and four-year higher education institutions (Hillman, Tandberg, & Gross, 2014; Tandberg & Hillman, 2013).

While performance-based funding have experienced resurgence and popularity in recent years, there has been weak to modest evidence demonstrating that this funding policy has significantly impacted institutional outcomes (Dougherty & Reddy, 2013; Hillman, Tandberg, & Fryar, 2015; Hillman, Tandberg, & Gross, 2014; Rutherford & Rabovsky, 2014; Rabovsky, 2011; Tandberg & Hillman, 2013). Statistically speaking, when scrutinizing the impacts of performance-based funding on three institutional ultimate outcomes, student retention rate, student graduation rate, and degrees completion rate, the findings reported by all these studies showed mixed results and demonstrated weak to modest significant effects on such outcomes.

For example, Hillman, Tandberg, & Gross (2014) investigated the impact of performance-based funding, which was established on 2000, on the Pennsylvania State System of Higher Education (PSSHE). They found that the performance funding policy has not systematically contributed to the increase of degrees production and completion rate. Even though they found modest impacts resulting from the implementation of such policy when compared to neighboring states, these effects vanished when compared to other similar universities and colleges situated in other non-performance states. Furthermore, when comparing performance state to non-performance states, Tandberg & Hillman (2014) found no statistically significant differences in the production and completion of baccalaureate degrees at public four-year higher education institutions. Interestingly, as the implementation of performance funding progressed through the years, it started to show some positive and significant impacts on the baccalaureate degrees produced. However, the magnitude of the effect size is small, as the coefficient range from 0.035 to 0.042 on the seventh and eightieth years, respectively. It is reported that after 11 years, the magnitude showed slight increase, demonstrating that the duration of operation of such programs correlated with the increase of bachelor's degrees completion (Tandberg & Hillman, 2014). Hence, the longer the operation of performance funding policy is, the more likelihood the production of baccalaureate degrees will increase.

Additionally, Tandberg & Hillman (2013) found performance-based funding has not yielded significant impacts on degree completions and productivities. However, after seven years of the inception of such funding policy, positive effects were associated with baccalaureate degrees completions while after five years negative impacts were related to associate degrees productions. Another recent study has confirmed that there was no statistically significant association between performance funding and graduation rate, retention rate, and baccalaureate completion rate (Rabovsky, 2011; Rutherford & Rabovsky, 2014). However, not statistically significant, the study found negative relationships existed between performance funding (both 1.0 and 2.0) and student outcomes except for positive relationship with one indicator, graduation rate. Furthermore, when comparing Washington community and technical colleges implementing performance funding policy (31) with non-performance funding institutions (Western Interstate Commission for Higher Education Institutions (175), neighboring states' community and technical colleges (18), and a sample of (64) community and technical colleges), there were limited impacts of performance funding on student retention and associate degrees completions (Hillman, Tandberg, & Fryar, 2015). However, short-term goals showed some statistical increases as the time progressed. Furthermore, Washington community and technical colleges, on average, produced an increase number of short-term certificates after implementing performance funding policy while producing lower number of long-term certificates and associate degrees (Hillman, Tandberg, & Fryar, 2015).

While many studies have investigated the impacts of performance-based funding on institutional ultimate outcomes, especially student retention rate, student graduation rate, and degrees completion rate, other immediate institutional outcomes have been reported (Dougherty et al., 2014; Dougherty & Reddy,

2013; Nisar, 2015). In regards to the immediate institutional outcomes, Dougherty & Reddy (2013) have done a great work in summarizing such outcomes. One outcome pertains to institutional finances that have experienced many changes. Performance-based funding 1.0 reported to have little impacts on institutional outcomes because it has accounted mostly for less than 1 to 6 percent of the state appropriation. However, it was anticipated that under the full implementation of the second type of performance funding 2.0, the institutional finances will be changed dramatically provoked well-planned measures to bring about the predetermined outcomes (Dougherty et al., 2014; Dougherty & Reddy, 2013; Rabovsky, 2014). Another impact is the share knowledge of state priorities and goals. Performance funding states along with its institutions were reported to have more communications and information sharing, leading to spur institutional responsiveness to states' priorities, needs, and interests. Still another impact is the increase of the institution self-awareness. Performance-based funding is reported to force institutions to reflect on and find out about their performance in comparison to other institutions. This in fact leads to the fourth impact pertaining to the increase of status and competition between and among institutions. Final impact is building capacity for organizational learning. Supposedly, this impact leads the institutions to focus more on data collections and evaluation of their various activities and programs (Dougherty & Reddy, 2013).

In addition to the immediate impacts resulting from the implementation of performance-based policy, there are many intermediate effects (Dougherty & Reddy, 2013; Rabovsky, 2012; Rabovsky, 2011). These can be categorized into three areas. First category portrays changes on academic policies, programs, and practices, such as amount of money devoted for instruction was reported to be higher than amount of money allocated for research purposes, especially at four-year institutions (Rabovsky, 2012; Rabovsky, 2011). Another change is associated with the reorganization and restructuring of the structure of academic department and staffing like shutting down an inefficient and an unproductive programs and consolidating administrative activities under small unit. Still another change pertains to the alteration and improvement in curricula. Second category depicts the alteration to development education and tutoring like supplemental instruction and intensive tutoring programs, physically and virtually. Third category pertains to changes on students' service policies, programs, and practices such as alteration to registration and graduation policies and procedures like changing the registration system for enrolling courses (date and time). Another change is the improvement and simplification of financial aid policies and practices through the provision of sufficient information. Still another change is the slightly increased focus on low-income students, improving retention rate of first-year students, such as aligning students with the appropriate advisors, having alert system to notify students, faculty, and students affair personnel about the performance of such student, and increasing the effectiveness in student counseling and advising services (Dougherty & Reddy, 2013).

While there intended outcomes (immediate, intermediate, and ultimate), there are a number of unintended impacts resulting from the adoption of performance-based policy. One undesirable impact is the considerable amount of money that has been spent in order to comply with performance funding mandates and regulations (Dougherty & Natow, 2015; Dougherty & Reddy, 2013; Dougherty et al., 2014; Dougherty et al., 2013). For example, institutions are required to provide adequate data covering operations and processes contributing to the accomplishment of the predetermined and agreed-upon measures (Schmidtein & Berdahl, 2011). Accordingly, this complicated and intricate process might entail additional resources like recruiting well-qualified personnel who can deal with data gathering, analyzing, and reporting. Another unintended impact pertains to the narrowing and deemphasizing of institutional missions. Having a set of particular indicators measuring and gauging institutional performance may narrow intuitional officials' perceptions and practices and may cause them to neglect other important aspects in their respective institutions. Another undesirable effect relates to the debilitating of academic standards. As such, there will be more propensities on the side of institutions to concentrate on lower-level goals because they seem to be easier to accomplish and are more likely to spur institutions' potential of receiving the designated funds (Dougherty & Natow, 2015; Dougherty & Reddy, 2013; Dougherty et al., 2014; Dougherty et al., 2013).

Still another unintended outcome associates with limiting student admission, especially for those coming from disadvantaged backgrounds (Dougherty & Natow, 2015; Dougherty & Reddy, 2013; Dougherty et al., 2014; Dougherty et al., 2013). This is because of the notion that some institutions may game the system by either reducing the academic standard to help underprepared student complete their courses and graduate in the specified time or increasing the academic and admission standards that will ultimately lead to the exclusion of such students. Still another undesirable impact is the undercutting of faculty's role in the academic governance. It has been documented that faculty members have not substantially contributed to the planning and creation of performance-based policy (Dougherty & Natow, 2015; Dougherty & Reddy, 2013; Dougherty et al., 2014; Dougherty et al., 2013). Consequently, the undercutting of faculty's role in academic governance has, to varying degrees, contributed to a number of obstacles impeding the effectiveness and efficiency of performance-based funding.

OBSTACLES HINDERING PERFORMANCE FUNDING POLICY

There are a number of obstacles impeding the effectiveness and efficiency of performance-based policy. These obstacles obstruct performance funding policy from bringing about desirable effects on institutional outcomes (Ellis, 2015; Dougherty & Natow, 2015; Dougherty & Reddy, 2013; Dougherty et al., 2014; Dougherty et al., 2013; Rabovsky, 2014). These obstructions includes the inappropriate indicators and measures embedded in the funding policy: the instability of measures and indicators, the short living of many performance funding policies, the insufficiency and irregularity of state funding of performance funding, the lack of awareness within the institution boundaries, the inequality of institutional capacity, the resistance and gaming in the institutional systems in response to performance funding, the deceptive compliance with the requirements associated with performance funding, and the lack of genuine and effective participations of institutional officials, especially middle and lower-level managers as well as faculty members (Dougherty & Natow, 2015; Dougherty & Reddy, 2013; Dougherty et al., 2014; Dougherty et al., 2013; Ellis, 2015; Rabovsky, 2014) . In fact, many of the aforementioned obstacles might be attributed to the way that state appropriation has been distributed and allocated.

Dougherty & Reddy, (2013) and Ellis (2015) have identified three distribution patterns of states appropriation based on the performance funding policy. The first pattern pertains to the finding that the allocated amount of fund for performance based funding is very little compared to the total state higher education appropriation. The fund might be little as low as %1 to as high as %15; except for two states, Tennessee and Ohio, that allocate %100 of their higher education appropriations to performance based funding. The second pattern refers to the distribution of the amount of fund between and among the performance-based funding standards and indicators. As such, some indicators might be allotted a great amount of money while others might not receive sufficient amount of fund. This means that some measures will obtain more money and get more attention than others. For example, the range of state allocated fund for all performance funding standards is accounted for less than %1 in Michigan; whereas %100 of state allocated fund is devoted to one single standard in North Dakota. Still another example is that Science, Technology, Engineering, and Mathematics (STEM) are found to be most common metric and were accorded a higher portion of the state designated fund. This means that competitiveness between and among the institution's departments, programs, and activities will surge in an attempt to secure the prospective fund for such departments, programs, and activities (Dougherty & Reddy, 2013; Ellis, 2015).

Additionally, in each state there is various type of higher education institution espousing different missions, representing different governance structures, and serving various populations (Dougherty & Reddy, 2013; Ellis, 2015). Hence, these institutions, to great degrees, function differently and carry out their programs and activities differently. Therefore, to run their organizations they must secure adequate resources in order to accomplish their purposes and goals and materialize their missions. As such, competitiveness between and among these institutions will certainly heighten. Those, flagship universities, having already in place massive resources to achieve the state's designated standards are more likely to secure the fund. Conversely, those, regional universities especially community colleges,

possessing modest resources might not be able to attain the state's designated indicators and are more likely to lose the funds (Dougherty & Reddy, 2013; Ellis, 2015).

IMPLICATIONS

The findings of this paper pinpoint a couple of compelling implications for the adoption and development of performance-based funding. Firstly, many of the studies discussed the undercutting role of faculty members in planning and developing performance-based policy (Dougherty & Reddy, 2013). It is of paramount importance to increase faculty members' engagement in the planning, developing, and implementing processes of performance-based funding. Faculty members are the most educated and knowledgeable ones about student learning and development. They have continuous and intimate interactions with students, including graduates and undergraduates. Faculty members are in better positions to figure out students' need and interests and how to cater to such demands. Most importantly, faculty members will be able to identify the essential resources to bring about desirable institutional outcomes related to student learning and development. This, in fact, leads to the second implication.

This implication pertains to the development of performance-based funding measures. There is a great deficiency in terms of creating and developing comprehensive indicators representing the various types of higher education as well as the diverse programs offered at these institutions. Measures of performance-based funding should include a wide spectrum of institutional outcomes. These outcomes should represent the missions, purposes, objectives, and programs of the diverse types of higher education institutions. For example, it is evidently that the mission and purpose of research institution will be dramatically different from the mission and purpose of two-year institution. The first type of institution is research-orientated and mostly employs selective admission criteria while the latter is teaching and technical-oriented and mostly utilizes open access admission. As such, these two institutions serve mostly different populations and embody distinct purposes, programs, and activities. Therefore, it is essential to take into consideration the aforementioned differences when building and developing measures gauging the institutional performance.

When the indicators of institutional performance represent the diverse missions, purposes, objectives, and programs of higher education institutions, fairness and equality in the allocation and distribution of state appropriation will take place. Each institution, along with its various departments and programs, is more likely to secure the sufficient amount of money. This is not because they compete with others for the given fund; instead rather, it is due to the accomplishment of the pre-specified standards. Thus, counterproductive competition occurring between and among higher education institutions will be reduced and minimized.

At last but not least, while there is little evidence demonstrating the significant impacts of the adoption of performance funding policy, it should be kept in mind that performance-based funding has experienced discontinuity and instability in many states. As such, the discontinuity and instability might have hindered such policy from bringing about intended outcomes. Further, it is essential to understand that most of the studies reviewed in this paper investigated performance-based funding 1.0. This is due to the inadequate number of studies examining the impact of performance-based funding 2.0. Therefore, it is important to allow such policy (performance-based funding 2.0) more time to stabilize and institutionalize. As such, positive and significant desired outcomes may flourish.

CONCLUSION

This paper reviews a reasonable amount of empirical studies, books, book chapters, and reports in order to demonstrate the effects of performance-based policy in higher education institutions. It discusses the origins and motives of adopting performance funding policy and a number of theories of action underpinning such policy. It also discusses the ultimate, immediate, and intermediate impacts resulting from the adoption of performance-based funding. The findings represent weak to modest significant impacts of such policy. In addition, the paper sheds light on a number of obstacles impeding the

effectiveness and efficiency of performance-based policy. It also draws some implications that might increase the effectiveness and efficiency of performance funding policy and reduce the difficulties and obstacles as well.

RESOURCES

- Barr, M. J. (2002). *The Jossey-Bass academic administrator's guide to budgets and financial management*. John Wiley & Sons.
- Burke, J. C. (2005). The many faces of accountability. *Achieving accountability in higher education: Balancing public, academic, and market demands*, 1-24.
- Dougherty, K. J., Jones, S., Lahr, H., Natow, R., Pheatt, I., & Reddy, V. (2014). *Envisioning performance funding impacts: the espoused theories of action for state higher education performance funding in three states* (Working Paper No. 63). New York: Community College Research Center.
- Dougherty, K. J., & Natow, R. S. (2015). *The politics of performance funding for higher education: Origins, discontinuations, and transformations*. JHU Press.
- Dougherty, K. J., Natow, R. S., Bork, R. H., Jones, S. M., & Vega, B. E. (2013). Accounting for higher education accountability: Political origins of state performance funding for higher education. *Teachers College Record*, 115(1), 1-50.
- Dougherty, K. J., & Reddy, V. (2013). Performance Funding for Higher Education: What Are the Mechanisms What Are the Impacts: *ASHE Higher Education Report*, 39: 2. John Wiley & Sons.
- Ellis, R. A. (2015). Performance-Based Funding: Equity Analysis of Funding Distribution among State Universities. *Journal of Educational Issues*, 1(2), 1-19.
- Hillman, N. W., Tandberg, D. A., & Gross, J. P. (2014). Performance funding in higher education: Do financial incentives impact college completions? *The Journal of Higher Education*, 85(6), 826-857.
- Hillman, N. W., Tandberg, D. A., & Fryar, A. H. (2015). Evaluating the impacts of “new” performance funding in higher education. *Educational Evaluation and Policy Analysis*, 0162373714560224.
- Lasher, W. F., & Sullivan, C. A. (2005). Follow the money: The changing world of budgeting in higher education. In *Higher education: Handbook of theory and research* (pp. 197-240). Springer Netherlands.
- McLendon, M. K., Hearn, J. C., & 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), 1-24.
- Nisar, M. A. (2015). Higher education governance and performance based funding as an ecology of games. *Higher Education*, 69(2), 289-302.
- National Conference of State Legislatures (2015). Performance-based funding for higher education. Retrieved from: <http://www.ncsl.org/research/education/performance-funding.aspx>
- Rabovsky, T. (2014). Support for performance-based funding: The role of political ideology, performance, and dysfunctional information environments. *Public Administration Review*, 74(6), 761-774.
- Rabovsky, T. M. (2012). Accountability in higher education: Exploring impacts on state budgets and institutional spending patterns. *Journal of Public Administration Research and Theory*, 22(4), 675-700.
- Rabovsky, T. (2011). Accountability in higher education: Exploring impacts on state budgets and institutional spending. In *Public Management Research Conference*, Syracuse, NY.
- Rutherford, A., & Rabovsky, T. (2014). Evaluating impacts of performance funding policies on student outcomes in higher education. *The ANNALS of the American Academy of Political and Social Science*, 655(1), 185-208.
- Schmidtlein, A. F., & Berdahl, O. R. (2011). Autonomy and accountability: Who Controls Academe? In Altbach, P. G., Gumpert, P. J., & Berdahl, R. O. (Eds.), *American higher education in the twenty-first century: Social, political, and economic challenges* (pp. 69-87). JHU Press.

- Tandberg, D. A., & Hillman, N. W. (2014). State higher education performance funding: Data, outcomes, and policy implications. *Journal of Education Finance*, 39(3), 222-243.
- Tandberg, D. A., & Hillman, N. W. (2013). State performance funding for higher education: Silver bullet or red herring. *WISCAPE Policy Brief*, 18.
- Toukoushian, K. R. (2001). Trends in revenues and expenditures for public and private higher education. In Paulsen, M. B., & Smart, J. C. (Eds), *The finance of higher education: Theory, research, policy, and practice* (pp. 11-39). Algora Publishing.
- Weeden, D. (2015). *Appropriation*. National Conference of State Legislatures. Retrieve from: https://courseware.ku.edu/bbcswebdav/pid-4919401-dt-content-rid-10713114_1/courses/4159-23313/NCSL%20Brief%20%28Appropriations%29.pdf
- Weeden, D. (2015). *Tuition Policy*. National Conference of State Legislatures. Retrieve from: https://courseware.ku.edu/bbcswebdav/pid-4919440-dt-content-rid-10713886_1/courses/4159-23313/NCSL%20Brief%20%28Tuiton%29.pdf