Strategic issues management and economic impact analysis: The case of Central State University

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ABSTRACT

In contrast to the dominant approach to strategy development by organizations, this paper conceptually examines the use of strategic issues management as a proactive adaptive strategy for influencing an organization's macro-environment to reduce environmental uncertainty, increase organizational legitimacy, and enhance accomplishment of organizational goals necessary for short-term performance and long-term survival. Economic impact analysis is presented as a robust tool for quantifying important results of an organization to provide information that can be used to beneficially influence key organizational stakeholders as part of an overall strategic issues management approach. Disruptive changes in the macro-environment of the higher education sector are used to provide context for a case study on the development of an economic impact analysis for Central State University in the southeastern United States. The methodology and results of the CSU economic impact analysis are presented. These results are discussed relative to how they can be used via stakeholder analysis and management initiatives to craft strategic interventions related to key stakeholders to beneficially shape the organization's environment. Limitations and future research directions are also discussed.

Keywords: Case Study, Economics, Economic Impact Analysis, Higher Education, Input-Output Analysis, Stakeholder Theory, Strategic Issues Management, Strategic Management

INTRODUCTION

In response to the views from the contingency theory of organizations, conventional approaches to strategic management focus on development of strategies that help organizations adapt to external macro-environmental changes so as to create competitive advantage to enhance prospects for organizational survival (Lawrence & Lorsch, 1969; Donaldson, 2001)). Typically these approaches involve assessment of opportunities and threats confronting the organization in different dimensions of its external environment and assessment of internal strengths and weaknesses in different functional areas of the organization to create the well-known SWOT matrix that juxtapositions these findings (Hitt, Ireland & Hoskissoh, 2013)). This matrix then becomes a primary input to corporate, business, and functional strategy development concerning what actions the organization might best take to achieve optimal alignment with its macro-environment. However, another useful approach to the strategy-making process is developing and implementing strategic actions to influence the organization's external environment to align the environment, or at least key elements of it, with the organization's goals through the process of strategic issues management (SIM). This approach involves a process of systematically identifying, analyzing, and responding to major events, trends, and/or developments confronting an organization to influence environmental factors or issues to benefit the organization and thereby attain competitive advantage for organizational performance and survival (Ansoff, 1980; Heath & Palenchar, 2009).

Institutions of higher education are facing a plethora of significant changes in their external environment that are posing an array of threats and opportunities that demand strategic responses. For example, economic adversity driven by the great recession of 2008 has reduced funding for higher education from government, donors, and families; while costs and tuition have continued to climb at multiples of the rate of inflation (Denneen & Dretler, 2012; Samuels, 2013). At the same time, stakeholder pressure to increase graduation rates, reduce or limit student debt levels, improve quality of learning, stay on the cutting edge of technology, among other demands, have all intensified this pressure, as has competition from a growing number of online competitors (Arum, 2011; Selingo, 2013). While institutions of higher education have undertaken many adaptive changes to cope with these demands, SIM provides another useful approach that can target mitigating and reshaping these environmental pressures to benefit an organization's sustainability. However, SIM requires tools that can be used to influence important stakeholder constituencies in the focal organization's external environment.

Economic impact analysis (EIA) is a well developed technique in economics that is a potentially useful tool for higher education institutions to use as a SIM intervention to influence stakeholders in their environment (Gigerich, 2013). Economic Impact Analysis is a methodology for examining the effect on the economy of a specified geographical area of an event, entity, program, project or other change in circumstances via various economic measures such as revenues, profits, wages, jobs and so forth, by examining changes in economic activity due to the event (Weisbrod & Weisbrod, 1997). For example, institutions of higher education can use EIA to develop detailed assessments of the current and future impact of these institutions on their local and state economies (Gigerich, 2013; Lane & Johnstone, 2012). This information has significant utility for influencing institutional stakeholders to advantage the organization and thereby influence the institution's macro-environment for its benefit.

This case research examines the use of EIA as a tool that institutions of higher education can use for SIM with key stakeholders. A methodology for accomplishing EIA is presented

along with a case study of its development at one university. Stakeholder analysis and intervention tactics along with other results are discussed. Conclusions concerning how EIA can most effectively be used for SIM purposes are provided as are implications for future research related to this topic.

BACKGROUND

This section provides background information for the case study and subsequent analysis. First, a brief overview of literature related to strategic adaptation, strategic issues management, and stakeholder management is reviewed to provide a conceptual framework. Next, key issues confronting higher education institutions are summarized to provide a practical context for the case study. Finally, the concept of EIA is reviewed in more depth and the specific methodology used in this case is explained.

Strategic Adaptation, Issues Management, and Stakeholder Management

Strategic adaptation is the process by which an organization aligns itself to its external environment (Lawrence & Dyer, 1983). The strategic behavior of organizations is shaped by the dual influences of the organization's environment and the organization's own internal capabilities (Ansoff, 1987; Hitt, Ireland & Hoskissoh, 2013). Organizations exhibit willful, adaptive behaviors in using their capabilities responding to environmental demands (Child, 1972; 1997; Oliver, 1991). Thus, environmental determinism and strategic choice are foundational to understanding and explaining organizational adaptation to change (Hrebniak & Joyce, 1985).

Environmental determinism draws on biological evolution theory to argue that forces in the entities' external environment selects those that best fit environmental demands and deselect, to the point of extinction, those entities that are poor fits (Hannan & Freeman, 1977; 1984; 1989). Given the primacy accorded environmental influences, entities have the options of either adapting to environmental demands by learning new capabilities, acquiring new features, enacting new behaviors, developing new processes, or evolving other characteristics to align with environmental demands, or exerting their influence on the environment to adapt it to favor the entities existing characteristics and capabilities (Singh & Lumsden, 1990). Entities face constraints on their adaptive capacity, both for changing their own characteristics and capabilities and influencing the environment in sufficient time to achieve alignment to survive (Amburgey & Rao, 1996). Organizations may use either or both of these adaptive strategies.

Strategic choice theory (Childs, 1972) has been offered to explain how organizations achieve alignment with their environment. Strategic choice has been defined as the process whereby power elites in organizations make strategic decisions about courses of action for the organization (Child, 1997). This theory focuses on the ability of an organization to make strategic decisions about how it will position itself relative to its environment or seek to change its environment in order to accomplish its goals given its internal capabilities, competencies, and resources (Shortell & Kaluzny, 1994).

Strategic issues are developments, tends or events that have the potential to affect an organization's ability to accomplish its goals and thus influence its fitness to survive (Ansoff, 1980; Oomens & van den Bosch, 1999). Strategic issues management (SIM) is a proactive process of systematically identifying, analyzing, and responding to major events, trends, developments, and other strategic contingencies confronting an organization to influence the

organization's external environment that have the potential to affect accomplishment of organizational objectives (Dutton & Jackson, 1987; Heath & Palenchar, 2009) and so more effectively to align its environment with organizational goals (Dutton & Ottensmeyer, 1987). Strategic issues management is a strategy that organizational power-elites/leaders can use to seek favorable change in an organization's environment as well as internal adaptive change (Ansoff, 1980; Heath & Palenchar, 2009). Strategic issue management helps organizations to reduce uncertainty by better: perceiving, analyzing, and responding to strategic issues, and managing resource dependencies and accountability pressures from organizational stakeholders (Dutton & Ottensmeyer, 1987). This process involves securing flows of resource inputs to the organization and documenting the satisfaction of important organizational stakeholders; then using these resources to achieve goals desired by the stakeholders in order to attain, retain and enhance their support of organizational legitimacy and survival (Freeman, 2010; Carol & Buchholtz, 2012). Thus, key organizational stakeholders are the primary targets of SIM issue responses via personal contacts, structured communications, lobbying, and other influence conduits to proactively alter strategic issues to gain greater control of critical resources in the organization's environment (Pfeffer & Salancik, 1978; Heath & Palenchar, 2009; Larson & Larson, 2012).

Organizational stakeholders are instrumental in determining the legitimacy, performance, and ultimate survival of an organization, and so are the primary targets of SIM activities. Freeman (2010) defined stakeholders as any person or group who can affect or is affected by the conduct of an organization. This can broadly include people (e.g., employees, board members, donors, customers, local community, government, society as a whole), the (e.g., ecological activists, government), in addition to profits (e.g., bondholders, stockholders, creditors) (Carol & Buchholtz, 2012). In this conception, an organization's environment is viewed as composed of an array of constituencies that make demands on the organization for different and often conflicting performance outcomes, and simultaneously place constraints on the flexibility of the organization to respond (Weiss, 2009). The stakeholder concept is a way of strategically focusing organizational and managerial attention in order to proactively cope with these demands. This concept offers a framework for relating each of these constituency groups to the organization through use of stakeholder management tools of environmental scanning, stakeholder mapping, and stakeholder transaction processing in creating an organization's stakeholder management capability (Carol & Buchholtz, 2012; Larson & Larson, 2012). By using these tools, management can steer the organization in a particular strategic direction by formulating generic strategies (e.g., offensive, defensive, holding, rule-changing) for addressing the concerns of multiple groups of stakeholders and by crafting specific influence strategies for key stakeholders (Heath & Palenchar, 2009). When stakeholder concerns become the focus of strategic attention, typical functional disciplines within an organizational hierarchy can see their strategic importance and consequent power redefined, which can lead to significant organizational changes, such as a traditional public relations department morphing into a greatly empowered public affairs function (Freeman, et al., 2010). In addition, the role of top management increasingly focuses on balancing stakeholder interests in an environment that requires co-mingling public and private issues to ideally optimize all of the competing stakeholder claims. These claims inevitably lead to top management becoming much more externally focused and proactive in strategic choices and interventions (Oomens & van den Bosch, 1999). Strategic intervention requires fully understanding environmental shifts and having tools available to respond to these changes in an organization's environmental domain.

Higher Education Environment

A plethora of macro-environmental forces have coalesced to disrupt higher education in the United States (U.S.) sufficient to threaten the viability of as many as a third of its incumbent institutions (Denneen & Selingo, 2012; Christensen & Eyring, 2011). The economic recession of 2008 and suppressed economic activity in ensuring years has led to high levels of unemployment, reductions in tax receipts, diminished endowments and donations, and the increasing inability of families to fund higher education (Selingo, 2013). While there have been some recent improvements, the fiscal situation of a number of schools, particularly liberal arts colleges, are dire - leading to some predictions that the demand for higher education may have reached its zenith and faces a significant decline in the future (Alexander, 2014). For example, undergraduate and graduate enrollment in colleges and universities has declined in recent years despite growth in the U.S. total population. In addition, there is a demographic decline in the number of children and teens that that portends a long term decline in enrollments. Family median income has continued a long trend of stagnation decreasing the ability of families to fund higher education. Undoubtedly this has contributed to the ballooning of U.S. student debt to approach $30,000 per loan carrier and surpass one trillion dollars in aggregate, far beyond any historical benchmarks (Alexander, 2014). In addition, a seriously depressed job market and the inability to discharge student loan debt in bankruptcy have combined to paint a picture of college graduates having to delay major life decisions (e.g., marriage, family, home-buying) and so increasing downward pressure on demand for higher education (Selingo, 2013). The outlook is also problematic because the costs of higher education have been increasing at well above overall inflation rates for a prolonged period. Cost drivers include increasing numbers of first generation, lower income students, increases in support for physical and learning disabled students, increased investment in campus facilities and amenities, upgrading technology, research labs, increasing health care and pension costs, growing numbers of administrative personnel, and (some would argue) sports teams and facilities, among other cost drivers (Samuels, 2013). All of these factors suggest that the fundamental higher education value proposition in the U.S. of the superior earnings of college and university graduates versus the cost incurred to acquire this education, including both the direct cost of schooling and the indirect cost of forgone earnings during college years, is deteriorating significantly (Hacker & Dreifus, 2013).

While colleges and universities have to continue pursuing tactical strategies to both cut cost and grow revenues in accord with traditional strategic management approaches, SIM offers a supplemental paradigm for coping with macro-environmental trends in higher education. By analyzing stakeholder interests and crafting engagement strategies, higher education institutions can potentially shape their macro-environment more to their advantage. An example and methodology for how this can be done is provided in the balance of this paper. Economic development is used as the strategic issue in this example because it is a unique characteristic, competence, and capability of most colleges and universities and has the potential to positively influence a wide range of important stakeholders (Wildavsky, 2011). Through economic development activities higher education institutions can significantly impact their local, regional, and state economies in terms of the economic activity they can generate (Lane & Johnstone, 2012; Gigerich, 2013). Capturing this benefit quantitatively and packaging it effectively to communicate to key stakeholders can provide potent leverage for influencing them. Economic

Impact Analysis (EIA) is a well developed tool that can be used to develop strategically valuable information for influencing stakeholders.

Economic Impact Analysis

Economic Impact Analysis is a methodology for examining the effect on the economy of a specified geographical area of an event, entity, program, project or other change in circumstances via various economic measures such as revenues, profits, wages, jobs and so forth by comparing the change in economic activity due to the event or entity (Weisbrod & Weisbrod, 2012). Economic impact analysis is useful for sound investment decisions, project evaluations, and program support in the public and private sectors of the economy. The degree to which a program or a project can contribute to economic welfare, the number of jobs that can be created, and the overall impact on economic growth and development of a region is of prime concern to public authorities (Shaffer & Wright, 2010). This is equally important to the private sector and business communities that directly or indirectly benefit from the economic impacts that are generated.

Colleges and universities have enormous economic and social impacts on the regions and communities in which they are located (Lane & Johnstone, 2012). Stakeholders and residents often have little awareness of the importance of higher education institutions in their daily lives. However, impact studies have demonstrated the strategic role that well-resourced universities have on their regional economies (Shaffer, Teaman, & Wright, 2011). Universities impact their communities through their direct expenditures on operations, capital outlays, new construction, and so forth. These expenditures, in turn, generate additional indirect and induced spending in the local economy. The amount of total income and the total number of jobs that will be created in the local economy as a result of the university spending effects can be in multiples of the initial direct impacts (Weisbrod & Weisbrod, 1997).

Because universities are being viewed as major contributors to local economic development, and since higher education, in general, requires both public and private sector support, a systematic analysis of the economic impacts of university and other educational programs and projects on affected regions is a useful tool for influencing key public and private stakeholders of these organizations and thereby beneficially shaping their macro-environment. Hence, increasingly more campuses are assessing the economic impact they have on their local community, region, and state (Lane & Johnstone, 2012). While many impact studies focus on earnings and employment impacts of a university and its students on the impacted region, some studies have included the impacts generated by visitors and retirees among other direct impacts. In addition, some studies look beyond these direct impacts to indirect benefits such as research and development spending, creation of business incubators, new entrepreneurial ventures and spinoffs, and support of nonprofit organizations among other positive externalities (Gigerich, 2013).

The majority of economic impact studies follow a standard format for the analysis. For example, in the case of higher education, these studies typically include university expenditures, and student and visitor spending in the area to estimate economic impacts in terms of purchases, earnings, and jobs for the impacted area (Shaffer, Teaman, & Wright, 2011). The selection of impacted regions, depends on the size and the geographic location of the targeted university, and varies from a single metropolitan area to a county, a selected number of counties, or an entire state. Most universities, both large and small, assess their economic impact on the county or the state in which they are located (Shaffer & Wright, 2010). In estimating the economic impacts of

a university, expenditure data from the university, its students, and its visitors is required. The university expenditure data is commonly available from university sources. However, spending by students or visitors is not readily available. Some impact studies have conducted a survey of students and visitors to determine their expenditure patterns and others have used some estimated measure of these expenditures.

While there are several methodologies that can be used for EIA, most impact studies use an input-output model (Weisbrod & Weisbrond, 1997). Systematic analysis of economic impacts must take into account the inter-industry relationships within regions, because these relationships determine how regional economies will be affected by project and program changes. The most popular input-output models are the RIMS II (Regional Input-Output Modeling System) model of the Bureau of Economic Analysis (BEA) and the IMPLAN (Impact Analysis for Planning) model of the U.S. Department of Agriculture (Rickman & Schwer, 1995). The RIMS and IMPLAN models primarily differ in their methods of estimating inter-industrial relationships and in data sources used. Input-output models quantify relationships between industries. They model the distribution of jobs and wages associated with an industry's purchases and sales. These models account for the existing regional suppliers to the extent to which local or regional sales can be satisfied by local or regional suppliers. RIMS was developed in the 1970s in order to estimate regional input-output multipliers. These multipliers reflect the direct and indirect impact of project and program expenditures on output, earnings, and employment in a region. An enhancement of RIMS was completed in the 1980s, known as RIMS II, which was based on the work of Garnick (1970) and Drake (1976) and updated periodically (Rickman & Schwer, 1995).

The following section provides a case study application of the development of an economic impact analysis for one university. While names, locations and other identifying information have been disguised for confidentiality, all data and results are actual. This example demonstrates the methodology and the useful information it can generate for influencing key stakeholders as part of an SIM strategy.

APPLICATION: THE CASE OF CENTRAL STATE UNIVERSITY

The objective of this case study is to assess the economic impact of Central State University (CSU) on Holmes County in a southeastern state in the United States. In undertaking this study, five years of data were obtained from the University, independent research was conducted, and the multiple impacts of the University were estimated using other publically available data sources. In doing so, University revenue, employment, spending, and student expenditures were examined to create an overall assessment of CSU's economic impact on its home county. The RIMS II model was used for estimating economic impacts based on Department of Commerce annual input-output accounts for the study period (Bureau of Economic Analysis, 2014).

Background

Central State University is located at the geographic center of a southeastern state in the town of Centerville, some 35 miles south of the largest metropolitan area in the state. Centerville had a population of approximately 4800 people during the study period. CSU was part of the public college and university system in its state. The University was established at the turn of the twentieth century as an industrial training school and by the 1920's evolved to become a four-year liberal arts college, primarily known for its highly regarded teacher training program.

In the late 1960's university status was attained as the state's only public, liberal arts university with four colleges that were (in order of size) the: College of Arts and Sciences, College of Fine Arts, College of Education, and College of Business. Students could choose from 37 degree programs and 75 majors while enjoying a student/faculty ratio of seventeen to one. Central State University enrolled approximately 2500 undergraduates and 500 graduate students and employed nearly 350 faculty, staff and student workers during the time of this study. University students came from all counties in the state, as well as 37 other states and several foreign countries.

Central State University played an important role in Holmes County where it is located. It is the county's only four-year higher education institution. Holmes County is located just south of the largest metro area in the state. It was the fastest growing county in the state at the time of the study, the sixth largest of the state's counties, and projected to grow to the fourth largest by 2025. The county had the highest median annual income in the state, higher than the national average, and was considered one of the best places to live in the state. Table 1 in the Appendix highlights some key measures of economic activity drawn from U.S. Census Bureau data for Holmes County during the study period.

Scope and Methods

In this study, economic impact was a measured response to the question: What would be the economic consequences in a region in the absence of an entity or a program? A comprehensive economic impact assessment of a college or a university is, however, difficult to measure or quantify. Most university impact studies focus on quantifying the direct and indirect tangible economic and fiscal impacts upon the state and local economies in which the university is located. The economic impacts are limited to employment, earnings, output (sales), and fiscal impact that result from direct university and student spending. As CSU is a public higher education institution, a significant amount of its funding comes from state sources. In addition, a majority of CSU students come from neighboring counties in the state. Only five percent of the students come from other states; hence, the economic impacts of CSU can reasonably be assessed related to Holmes County.

Most data used in the study were limited to the Holmes County area for the five year study period. Financial data were obtained from the Business Office of the University, including information on revenue, expenses, payroll, vendors, faculty, staff, and student workers. Information on student enrollments, faculty and student zip codes, and residency status were obtained from the CSU Office of Institutional Research, Planning, and Assessment. Other information was obtained from the U.S. Bureau of Economic Analysis, the U.S. Bureau of Labor Statistics, the State Tax Commission, the U.S. Census Bureau, the U.S. Department of Commerce, the State Regional Planning Commission, and STATS Indiana IBRC. The RIMS II modeling system was used to calculate the multiplier effects of CSU spending in the area (Bureau of Economic Analysis, 2014).

CSU Revenues

Central State University is a major contributor to the local Holmes County economy. The amount of revenue that the University collects from outside of Holmes County is an important yard-stick in determining its economic impact. The larger the share of income from outside the county, the more it benefits the local economy. Some 88% of total CSU revenue originated from

outside of Holmes County with only 12% from within the county. This outside revenue came from state government, federal government, private gifts, tuition and fees, and a portion of auxiliary income generated by the University for goods and services that were provided to students from outside Holmes County.

As indicated in Table 2 in the Appendix, state appropriations and other state funds combined was the largest share of total CSU revenues (36%), all of which is considered to be revenue originating from outside of the region. In the absence of CSU these funds would have been appropriated elsewhere in the state. Tuition and fees was the second largest share of CSU revenues (29%). Based on University data, approximately 70% of the students at CSU came from outside Holmes County. These students paid tuition and fees, purchased goods and services, such as housing, food services, books and supplies, and so forth, such that their expenses were considered revenue from outside of the region. However, the percentage of tuition and fees originating from outside of the region was a conservative estimate. It can be argued that all tuition and fees should have been included as out of the region, because in the absence of the University, these expenditures would have been spent either elsewhere in the state or out of the state altogether.

Federal funds accounted for approximately 24% of total revenue and auxiliary income accounted for 10% of total revenue. Auxiliary income included housing services provided by the University, the University conference center, bookstore, ticket sales, and so forth. Seventy-six percent of the auxiliary income originated from outside of the University. Other sources of income in part consisted of investment income, library, and traffic fines. A percentage of this income should have also been considered from outside of the area. Not enough data were available to estimate the relative percentage. However, the share of other sources of income was, only 1% of total revenue.

CSU Spending

There were 343 faculty, staff, and students on the payroll of Central State University. Approximately 67 percent of faculty and staff and 76 percent of students resided in Holmes County based on University data. Accordingly, of the $20 million of CSU expenditures on wages and salaries during the study period, nearly $14 million was paid to Holmes County households.

Central State University spent a total of about $47 million on goods and services and wages and salaries of faculty, staff, and student workers. Given the residency of faculty, staff, students, and vendors, about 60 percent of these expenses occurred in the Holmes County area. The University also spent an annual average of nearly $2 million on construction and major renovations. The construction and renovation expenditures represented a fifteen-year average of expenditures for new construction and renovation. The latest major construction project was the Student Activity Center, which was completed during the study period at a cost of about $11 million. However, the reported university expenditures do not include this one-time construction expense.

As indicated in Table 3 in the Appendix, the majority of University expenditures, close to 74%, were concentrated in the Holmes County area according to CSU records. Based on Table 2, only 36% of the total revenue, about $17 million, came from state appropriations and other state funds, whereas CSU spending in the local area was more than $36 million. This means that the University made a net direct contribution of about $19 million to Holmes County. So, by way of

comparison, for every one dollar of revenue from state appropriations and other state funds, the University spent approximately $2.11 in Holmes County.

Total CSU expenditures in the state were approximately $49 million. Based on $17 million dollars of state appropriations and other state funds, the net contribution of CSU to the state was about $32 million. On the other hand, for every one dollar equivalent of state appropriations and other state funds, the University spent $2.48 in the state during the study period.

Student Expenditures

In addition to direct spending by the University, CSU students fueled the economy through their spending on goods and services. Student's residency status, their commuting distance from home, and their spending habits could be used to determine their average monthly expenditures. Expenditures by students were estimated based on a Bureau of Labor Statistics (BLS) survey of college aged students (Jeffrey, 2001). These estimates were reduced to represent a conservative, low cost-of-living expense in Centerville, in line with the estimates that were published by CSU's Office of Institutional Research, Planning, and Assessment. The BLS report was selected because the reported expenses were more comprehensive and they were broken down into categories more suitable for an impact study.

Table 4 in the Appendix indicates the students' residence status and their average spending. These expenditures were adjusted for inflation to reflect prices during the study period. The estimates in Table 4 do not include tuition and fees or the room and board services provided by CSU for on-campus residents because those amounts would have already been included as a CSU revenue source. Hence, the average annual spending by each Holmes resident student was $5,139

Table 5 in the Appendix shows itemized average spending by students. The difference between off-campus or resident students and on-campus students is that it was assumed that students who resided on campus included the costs for room and board in their University fees. It was assumed that students who lived with their parents did not have to pay for housing in this study.

Impacts of CSU Spending

The economic impacts of the University and its students in Holmes County were a multiple of their initial or direct spending. This is because the dollars spent by the University were spent again by the faculty, staff, students, employees, and local businesses that received those dollars. For example, CSU employees spent their wages and salaries on goods and services from local businesses. Local businesses, in turn, purchased their own goods and services and hired employees in the local economy. These employees in turn, spent their wages and salaries on local goods and services. The economic multipliers in this study represent total purchases, earnings, or jobs that would be generated in the local economy as a result of successive rounds of spending by households and businesses in the local economy.

Using the RIMS II model, the direct, indirect, and induced economic impacts were estimated for the Holmes County area. Table 6 in the Appendix shows direct, indirect, and induced sales, earnings and jobs that were generated in Holmes County, as a result of the CSU non-construction and construction expenditures in the county. Table 6 shows that total CSU

expenditures of about $48.9 million resulted in $45.2 million of induced sales, in addition to $36.1 million of direct purchases in Holmes County. The total direct, indirect, and induced sales in Holmes County amounted to nearly $81.5 million.

The University's expenditures included a total of $19.9 million in earnings paid to households, which resulted in $13.5 million of indirect and induced earnings in Holmes County, in addition to $13.6 million of direct wages and salaries paid to county residents. The total direct, indirect, and induced earnings paid to Holmes County residents amounted to more that $27 million.

The University directly employed a total of 343 faculty, staff, and students, which resulted in 235 new indirect and induced jobs, in addition to 229 faculty and staff that were directly employed from the Holmes area. The direct, indirect, and induced jobs generated in Holmes County amounted to a total of 464 jobs.

Impacts of Students Spending

In addition to Central State University's purchasing and payroll expenditures, communities in the Holmes County benefited from spending by the University students. Table 7 in the Appendix shows that students living on campus or in Holmes County spent about $11.7 million in purchasing goods and services. While it is not possible to directly trace where this spending occurred, it is reasonable to assume that it was heavily concentrated in the City of Centerville in particular and Holmes County in general. As a result, Holmes County student expenditures were slightly overstated. In the meantime, spending by students who commuted to the University from outside Holmes was not included in the Holmes County expenditures by students. In this regard, student spending in Holmes County was understated.

The itemized student expenditures are measured in purchase prices and need to be converted into purchases in producer's prices. Input-output commodity composition of final uses from the *Survey of Current Business* (Commerce, 2014) can be used to convert expenditures in purchasing prices into expenditures in producer's prices. To do so, itemized expenditures should also be translated into a commodity description as in the "Input-output commodity composition of final uses" table (Commerce, 2014). It is assumed that students fulfilled their demand for food, entertainment, and other activities near their campuses. Table 7 also shows these related results.

The total direct, indirect, and induced effects of CSU student spending are summarized in Table 8 in the Appendix. According to Table 8, total direct, indirect, and induced CSU student spending in Holmes County exceeded $18 million. This spending resulted in an additional $3.4 million in earned wages and 168 new jobs in Holmes County.

Combined Effects

Table 9 in the Appendix exhibits combined economic impacts of the University and its students on Holmes County in terms of sales, wages, and jobs. This table shows that the University and its students spent a total of $60.6 million, of which about $20 million was paid to households associated with 343 faculty, staff, and student workers. The University generated, directly and indirectly, nearly $100 million in regional sales, and $30.5 million worth of wages and salaries paid to Holmes county residents. CSU generated a total of 632 new local jobs, of which 403 jobs (64%) were indirect and induced employment in Holmes County.

Fiscal Impacts

As can be discerned from Table 9 in the Appendix, CSU and its students generated close to $100 million in sales and more than $30.5 million in wages and salaries in Holmes County alone. Based on the applicable tax table, the lowest federal tax rate was 10 percent and the highest rate was 35 percent during the study period. This yields an average federal tax rate of 22.5 percent. At that rate, the total federal income tax impact of CSU amounted to more than $6.8 million.

Based on income tax brackets in the state tax tables, it was estimated the average state income tax to be at 5%. Accordingly, total state tax revenues generated for the state, as a result of the existence of CSU, exceeded $1.5 million dollars in income taxes and close to $4 million in sales taxes, for a total of $5.5 million in state taxes altogether.

Based on a general tax rate of one percent in Holmes County, CSU yielded an estimated amount of $1 million for the Holmes area. At an average general tax rate of 3% for most local communities such as the City of Centerville, the University yielded about $3 million dollars in local tax revenue there. As a result, CSU fiscal impacts yielded a total of about $4 million in Holmes area local taxes.

The above tax estimates are conservative as they are limited to the generated sales and income taxes for only the Holmes area. They do not reflect other revenues to local and state government, such as higher property taxes, traffic fees, and so forth. Neither do the estimates reflect the secondary and indirect tax revenue contributions to federal, state, and local government. For example, higher education leads to higher incomes for Holmes County residents, which in turn leads to higher tax revenues for government.

DISCUSSION

Economic impact studies can enhance an institution's bargaining position with local and state officials and other key stakeholders in obtaining additional public and private assistance, retaining and building its legitimacy, and otherwise achieving its strategic objectives to enhance its ability to survive and thrive. Thus, economic impact studies are a valuable tool for SIM strategies with key stakeholders. From the preceding economic impact analysis for CSU, the following results can be particularly useful for influencing key public and private stakeholders of the University:

- Central State University is a major economic force and an important educational institution in the Centerville-Holmes County area. During the study period, CSU had total revenue of about $47 million, of which about $17 million (37%) came from state funds and $11 million (24%) from federal funds. Twenty-nine percent ($13.6 million) of the University's total revenue came from tuition and fees, and the remaining 10 percent was from other miscellaneous sources.

- Approximately $36.1 million (73.8%) of CSU spending stayed within Holmes County. On the other hand, for every dollar in revenue the University received from state appropriations and other state funds, it spent $2.11 in Holmes County and $2.86 in the state. In comparison to federal funds, the University spent $3.26 in the Holmes area and $4.42 in the state for every dollar in revenue it received from the federal government.

- CSU was also an important source of employment in Holmes County. The University employed 343 faculty, staff, and students and paid approximately $20 million dollars in wages and salaries, of which nearly 60% or $13.5 million was paid to the residents of Holmes County.

- An average of about $28.9 million was spent by CSU on goods, services, and construction. Of this amount about $15.6 million (54%) was addressed to vendors in Holmes County and the remainder of $28.9 million was paid to vendors outside Holmes County, but within its state.

- CSU students also made an important contribution to the local economy. Approximately 76% of some 3,061 CSU students, including on-campus residents, lived in the Holmes County area. Nearly 50% of the students lived on campus or in the City of Centerville. The remainder lived in neighboring counties. CSU students spent an estimated sum of about $11.7 million on goods and services in Holmes County.

- In terms of multiplier effects, direct spending by the University and its students not only generated millions of dollars of additional spending and earnings, but also induced creation of hundreds of additional non-university jobs and thereby induced additional wages and sales in Holmes County.

- Using the RIMS II multiplier model, CSU direct total spending of $49 million, directly and indirectly, generated a total of $81 million worth of sales in Holmes County of which $36 million was indirect and induced spending, in addition to an estimated amount of more than $45 million of direct university spending. The spending impacts included approximately $28 million worth of direct and indirect earnings, and 464 direct and indirect jobs in Holmes County.

- Of the 3,061 students enrolled, 2,317 students resided in Holmes County. These students spent a total of approximately $11.7 million on goods, services, and housing in the Holmes County area. Using multipliers from the RIMS II model, direct spending of about $11.7 million by CSU students generated additional indirect and induced sales of $6.4 million, resulting in a total impact of more than $18 million of spending in Holmes County. Total spending effects generated a sum of $3.4 million in additional earnings and 168 new jobs in the area.

- In terms of combined effects, CSU and its students directly spent an estimated total of $61 million, of which $48 million, including about $13.6 million in earnings, were directly paid to the residents of the Holmes area. The University also directly hired 343 faculty, staff, and students, of which 292 resided in the Holmes area.

- Thus, directly and indirectly, CSU and its students combined, generated total sales of nearly $100 million, $30.5 million in earnings, along with 632 jobs in Holmes County. For every one dollar that the University received in state appropriations and state funds, it

generated, directly and indirectly, $5.80 worth of taxable sales, and $1.78 in taxable earnings in the Holmes County area alone.

- Additionally, the $99.5 million worth of taxable sales and $30.5 million worth of taxable income generated by the University in the area, in turn, generated approximately $8.4 million worth of state and local taxes. Moreover, spending by CSU and its students yielded an estimated $6.9 million in federal income taxes.

- The above economic impacts do not include a one-time charge of nearly $11.9 million for the construction of a Student Activity Center during the study period. However, construction of the student activity center directly and indirectly generated $19.9 million of sales, $3.8 million of earnings, and 130 new jobs in the Holmes area. As a result, the overall impact of the University and its students amounted to $116.1 million of economic activity, $33.7 million of earnings, and 741 jobs in the area. Accounting for the construction of the student activity center, the total fiscal impacts of the University and its students would increase to $10.7 million of state sales and income taxes, as well as, $7.4 million of federal income tax.

These impacts could now be used to advance CSU interests with key University stakeholders through stakeholder analysis and management interventions. Stakeholder analysis is concerned with identifying all persons, groups, and other entities that have an interest in an organization's affects or that can affect an organization, and then determining how to favorably influence the stakeholder's actions to benefit the organization (Weiss, 2009; Caroll & Buchholtz, 2012). Many times this process is part of an organization's strategic management subsystem drawing on risk management, change management, and strategic planning skills. Typical external stakeholders include government officials and regulators, partners, alliance members, some board members, creditors, professional organizations, suppliers, customers, media, community representatives, advocacy groups and activists, even competitors, and, in the case of higher education - donors, alumni, and accrediting agencies - among many others possible stakeholders, depending on the particular organization and its context. (There are also a number of internal stakeholders of any organization that need to be considered, such as: employees, managers, unions, volunteers, and so forth, depending on the organization.). Next, stakeholders need to be assessed by gathering pertinent information concerning interests in and/or concerns about the organization, stakeholder power (e.g., political, social, financial), influence networks, commitment and so forth, relative to the organization and its actions. Stakeholders can then be classified into categories for which management strategies can be formulated concerning how intimately and actively the organization needs to engage each stakeholder category (Weiss, 2009; Carrol & Buchholtz, 2012). For example, one popular framework uses a four-by-four matrix to classify stakeholders as to whether they are high or low on the dimensions of "interest" in the organization and its activities and the stakeholder's "power" to advance or retard the organization's welfare, resulting in four categories and alternative management strategies for each issue, as follows (Larson & Larson, 2012): (a) Marginal Low Interest/Low Power stakeholders that just need to be monitored; (b) Low Interest/High Power stakeholders that need to be kept satisfied; (c) High Interest/Low Power stakeholders that need to be kept informed; and (d) High Interest/High Power stakeholders that need to be proactively engaged. Next, varying stakeholder engagement and management strategies are needed for each of these groups and,

indeed, each stakeholder within each group potentially. Some stakeholders will need frequent engagement and active involvement; whereas others may only need nominal engagement depending on their interest/power profile. Engagement strategies, in this example, would then use results from the EIA for CSU, to craft various strategic initiatives – communications missives, meetings, tours and demonstrations, advertising, social media, public forums, liaison/advisory committees, individual briefings, editorials, advocacy positions, lobbying, donations, philanthropy, corporate social responsibility initiatives, and other proactive interventions - with targeted stakeholder groups to use their influence to shape the organization's environment and thereby benefit the organization (Larson & Larson, 2012).

CONCLUSION

In contrast to the predominate contingency theory approach to adaptive strategy, this paper conceptually examined the use of strategic issues management as a proactive adaptive strategy for shaping an organization's macro-environment to reduce environmental uncertainty, increase its legitimacy, and enhance accomplishment of its goals necessary for short-term performance and long-term survival. Economic impact analysis was presented as a robust tool for quantifying the economic impact of an organization to provide information that can be used to beneficially influence key organizational stakeholders as part of an overall strategic issues management approach. Disruptive changes in the macro-environment of the higher education sector were used to provide context for a case study on the development of an economic impact analysis for Central State University in the southeastern U.S. The methodology and results for the CSU economic impact analysis were presented. These results can be used via stakeholder analysis and management methods to craft strategic interventions with targeted key stakeholders of the University to beneficially influence the organization's environment. This example only focused on salient economic impacts flowing from the University. Obviously other positive externalities could be captured in terms of human and social capital development, knowledge accumulation and diffusion, civil society development, cultural enhancement, and many other benefits that could be useful in influencing particular key stakeholders as part of an issues management strategy. Also, the methods and approach in this paper could be used in many other economic and social sectors beyond the higher education context used here for illustration.

There a number of potential future directions for research related to this topic. First, examination of other organizational impacts, besides economic, and other contexts beyond higher education, merit review. Second, more detailed study of strategic issues management interventions, their relative utility, and how these are enacted to influence specific stakeholder constituencies, are needed related to the results of EIA impacts. Next, a number of other questions and propositions suggest themselves for further investigation, such as: (a) what is the relationship of the magnitude of organizational impact to the salience of stakeholder influence; (b) what is the role of size and intensity of stakeholder networks in strategic issues management; (c) how does the size of the organization affect strategic influence; (d) what is the role of organizational competitors in stakeholder influence dynamics; (e) what is the role of geographic scope (e.g., local, regional, state, national, international) of an organization’s impact; (d) how can strategic issues management be best integrated with other strategic planning methods. Without question there are many other useful directions for this line of research that can beneficially aid organizational adaptation and performance.

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APPENDIX

Table 1
Holmes County Economic Growth for Five Year Study Period

	Year 1	Year 5	**Growth Rate %**
Population	143,294	165,677	**16**
Civilian Labor Force	84,720	89,425	**6**
Employment	82,240	86,563	**5**
Per Capita Income	**27,176**	**34,697**	**28**

Table 2
Central State University Sources of Revenue for Five Year Study Period

Source	**Total Revenue**	**Revenue from Outside Holmes County**	**Percent from Outside Holmes County**
State Appropriation	15,275,466	15,275,466	100%
Other State Funds	1,864,971	1,864,971	100%
Federal Funds	11,068,163	11,068,163	100%
Tuition & Fees	13,607,554	9,525,288	70%
Auxiliary	4,548,863	3,472,507	76%
Other Sources	642,942	0	0%
Total	**47,007,959**	**41,206,395**	**88%**

Table 3
Central State University Spending for Five Year Study Period

Source	**Total spending**	**Spending within Holmes County**	**Percent within Holmes County**
Wages and salaries	19,971,361	13,586,112	68.0
Goods and services	26,998,558	20,576,798	76.2
Non-construction spending	46,969,919	34,162,911	72.7
Construction and Renovation	1,968,542	1,968,542	100
Total Spending	**48,938,462**	**36,131,453**	**73.8**

Table 4
Estimated Student Expenditures for Five Year Study Period

Category	Students	Percent of total Students	Average Expenses	Total Expenditure
On Campus Resident	954	31%	$4,120	$3,930 ,480
Off-Campus Residents	445	15%	$9,428	$4,195,460
Other Holmes Residents	918	30%	$4,120	$3,782,160
Non-Holmes commuters	744	24%	0	0
Total	**3061**	**100%**	**$5,139**	**$11,908,100**

Table 5
Distribution of student expenditures

Category	Annual	On-campus	Off-campus/resident
Food and Entertainment	$2,899	$777	$2,899
Housing	$3,186	n.a.	$3,186
Transportation	$1,341	$1,341	$1,341
Personal Expenses	$805	$805	$805
Health and Insurance	$453	$453	$453
Other Miscellaneous	$744	$744	$744
Total	**$9,428**	**$4,120**	**$9,428**

Table 6
Economic Impacts of Central State University Non-construction and Construction Expenditure (Holmes County)

Category	Purchases	Earnings	Employment
Total Direct	$48,938,462	$19,971,361	343
Spending in Holmes	$36,131,453	$13,586,112	229
Induced Effects	$45,272,752	$13,536,139	235
Total Regional Effects	**$81,404,205**	**$27,122,252**	**464**
Effective Multiplier	**1.66**	**1.36**	**1.35**

Table 7
Student Purchases, CSU

Industry	Purchases (purchasers' prices)	Purchases (producers' prices)
Amusements	17,99,764	1,763,769
Automotive repair and service	1,039,149	10,37,279
Furniture and fixture	199,578	103,780
Health services	128,555	128,555
Housing: Hotels and lodging	1,218,041	1,218,041
Insurance carriers	824,892	824,892
Retail	6,437,965	6,376,805
Eating and drinking places	259,245	259,245
Total	**$11,907,189**	**$11,712,366**

Table 8
Central State University Student Expenditures -Indirect and Induced Spending

Direct Purchases	**11,712,366**
Indirect and induced spending	**6,405,195**
Total spending	**18,117,561**
Indirect and induced household earnings	**3,387,404**
Indirect and induced jobs	**168**

Table 9
Economic Impacts of Central State University and its Students (Holmes County)

Category	Purchases	Earnings	Employment
Total Direct	$ 60,650,827	$19,971,361	**343**
Holmes County	$47,843,818.67	$13,586,112	**229**
Induced Effects	$51,677,947.28	$16,923,543	**403**
Total Regional Effects	**$99,521,766**	**$30,509,655**	**632**
Effective Multiplier	**1.64**	**1.53**	**1.84**