Title
The "Iron Cage" of Division I Athletics and Football as Status Imperatives: Constraint and Change Among American Universities

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The “Iron Cage” of Division I Athletics and Football as Status Imperatives: Constraint and Change Among American Universities

A Dissertation submitted in partial satisfaction of the requirements for the degree of

Doctor of Philosophy

in

Education

by

Bart Lindy Fenex

March 2010

Dissertation Committee:
Dr. Steven Brint, Chairperson
Dr. Steven Bossert
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Committee Chairperson

University of California, Riverside
Acknowledgement

I would like to thank and acknowledge the support, input and feedback given to me by my committee members. Without their guidance and patience I would not have been able to complete this work. Dr. Brint was the first to express interest and enthusiasm in my topic, provided me with critical insights into theoretical perspectives and important nuances of the framework, as well as impetus to keep moving forward through the difficult periods; Dr. Hanneman provided me with kind and expert guidance on the design and methods of the key statistical analyses; Dr. Bossert gave me the original nudge to get started and pursue my research topic and pushed me to think deeper theoretically. I could not have completed this work without each of their contributions.

Dr. Daniel Jeske from the University of California Riverside Statistics Department provided me with indispensable guidance and assistance with the nuances of statistical methodology and his help was vital in the research design. And last but not least, my friend Kang Bok Lee worked tirelessly with me to develop the statistical analyses for this project. My thanks to all of you are unbounded!
Dedication

To Jesus Christ, my Lord and Savior; to my wife Melody who struggled with me through the years that this project required of us and whose patience and support never wavered; to my children, Brooke, Daniel, and Zachary who hopefully have learned from my example that education and learning are a continual journey, and to parents Guy (who watched me complete this from somewhere in heaven) and Wasako, you always reminded me I could accomplish whatever I set out to. I love you all dearly.
ABSTRACT OF THE DISSERTATION

The “Iron Cage” of Division I Athletics and Football as Status Imperatives: Constraint and Change Among American Universities

by

Bart Lindy Fenex

Doctor of Philosophy, Graduate Program in Education
University of California, Riverside, March 2010
Dr. Steven Brint, Chairperson

Throughout the history of American higher education sports have been closely identified with universities and campus life. Intercollegiate athletics occupies a peculiar space in the university; it is an institution within the universe of higher education. While extremely popular among many, there are charges that emphasis on college sports’ results in mission drift in the university through its inherent commercialization and professionalism, emphasis on entertainment for the masses rather than educational opportunities for students, persistently increasing costs, and the exploitation of athletes. Despite these challenges, some schools choose to amplify their commitment to athletics through upward movement in competitive level.

This project studies the phenomenon of movement in the NCAA divisional hierarchy by American universities and characteristics of institutions that chose to move. Incorporating elements of institutional and neo-institutional theory, this dissertation
analyzed whether upward movement within the NCAA hierarchy is common despite the challenges associated with it and also what characteristics distinguish institutions that move from those that do not. Using data supplied by the National Collegiate Athletic Association (NCAA) and the Integrated Post-Secondary Education Database (IPEDS), this work identified schools that moved upward in the NCAA divisional structure and analyzed the nature of these movements across divisions to provide a clear picture of this phenomenon over twenty seven years. Findings show that the population is mostly stable; movement is not common, and that upward movement is far more frequent than downward. Characteristics shown to influence a school to move include density of institutions within its geographic district, the number of male students enrolled, and whether or not the school fielded an independent men’s sports team at the Division I level. The data further indicate that two dominant models exist related to universities’ use of athletic programs: schools either “go Division I” or add football. While the concept of institutional isomorphism (DiMaggio and Powell, 1991) provides a primary lens for analysis, this study does not represent a direct application of institutional or neo-institutional theory but is grounded in institutional and neo-institutional theories of organizational change as modified by consideration of institutional and environmental characteristics.
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Introduction

Throughout the history of American higher education sports have been closely identified with universities and campus life. Intercollegiate athletics occupies a peculiar space in the university; it is an institution within the universe of higher education. While extremely popular among many, there are charges that emphasis on college sports results in mission drift in the university through its inherent commercialization and professionalism, emphasis on entertainment for the masses rather than educational opportunities for students, persistently increasing costs, and the exploitation of athletes. Despite these challenges, some schools choose to amplify their commitment to athletics through upward movement in competitive level.

This project studies the phenomenon of movement in the NCAA divisional hierarchy by American universities and characteristics of institutions that chose to move. Incorporating elements of institutional and neo-institutional theory, this dissertation analyzed whether upward movement within the NCAA hierarchy is common despite the challenges associated with it and also what characteristics distinguish institutions that move from those that do not. Using data supplied by the National Collegiate Athletic Association (NCAA) and the Integrated Post-Secondary Education Database (IPEDS), this work identified schools that moved upward in the NCAA divisional structure and analyzed the nature of these movements across divisions to provide a clear picture of this phenomenon over twenty seven years. Findings show that the population is mostly stable; movement is not common, and that upward movement is far more frequent than
downward. Characteristics shown to influence a school to move include density of institutions with in its geographic district, the number of male students enrolled, and whether or not the school fielded an independent men’s sports team at the Division I level... The data further indicate that two dominant models exist related to universities’ use of athletic programs: schools either “go Division I” or add football. While the concept of institutional isomorphism (DiMaggio and Powell, 1991) provides a primary lens for analysis, this study does not represent a direct application of institutional or neo-institutional theory but is grounded in institutional and neo-institutional theories of organizational change as modified by consideration of institutional and environmental characteristics.

Chapter 1 provides a contextual discussion of the goals of the university, introduces the topic and the research questions, and discusses the challenges associated with mission drift and upward movement. Chapter 2 discusses the theoretical framework of the study; Chapter 3 discusses the methodology, the nature of the data, and how it was collected and analyzed; Chapter 4 discusses the results (organized by research question) and Chapter 5 provides a discussion of the conclusions of the study, future research implications, and suggested modifications to existing theory.
CHAPTER 1: DYNAMICS OF THE COLLEGIATE ATHLETICS FIELD
This study is concerned with the phenomenon of movement within a structural hierarchy of competitive athletics by American universities. It specifically examines the types and nature of the movements that occur, the frequency of movement, and the characteristics of the particular universities that engage in this movement. The research questions that animate this study are:

1. Is upward movement in the NCAA hierarchy common despite the financial costs and the mission drift associated with it?

2. What are the characteristics of those schools that move upward?

This chapter provides a contextual discussion of the development of the modern American university and its goals as framed by the literature, the nature of some of the challenges associated with intensified commitment to higher levels of athletic competition, and identifies a paradox related to the seemingly non-rational nature of upward movement.

The American University

Universities have long been held to be prestigious institutions. Higher education is also a vital part of the national society and economy. Among other things universities and colleges produce an educated citizenry, develop cutting edge technologies and products, and create / expand the knowledge base. Modern cities and towns tout their credentials as “college towns” and prize the avant-garde culture associated with the distinction. Riesman (1958) aptly stated that for a community, possessing a college was a sign of progress as much a having a railway or a canal.
The modern American university is a multi-faceted institution. It is a community of varied enterprises; a “city of infinite variety” (Kerr, 1963:12) collected under a single banner, with the ability to evoke great pride in its accomplishments and yet at times in deep conflict with itself and its environment. The activities of the university today are diverse and far-reaching. While a vigorous debate continues in regard to the proper activities of the university and how they are conducted, most scholars (Veblen, 1918; Flexner, 1930; Ortega y Gasset, 1944; Newman, 1947; Kerr, 1963; Marginson & Considine, 2000; Duderstadt, 2000; Shulman & Bowen, 2001; Bowen & Bok, 2001; Bok, 2003; Bowen & Levin, 2003) are generally agreed upon the core components of the university mission as:

1. Scholarly inquiry and the creation of knowledge
2. Education and development of students’ intellectual potential, which includes preparation of individuals for leadership and success in life
3. Production of leaders, productive contributors to society.

These purposes have been expressed in diverse themes by scholars. Veblen (1918) saw the university in a narrow view: it was the pinnacle of the education system, a “seminary of learning” whose purpose was to equip students for further scholarly endeavors. In some respects he echoed the views expressed by Cardinal Newman, to whom universities were the protectors of all knowledge, inquiry and discovery. Both Veblen and Newman believed in inquiry for its own sake; Newman also believed that universities were responsible for providing a liberal education; the result of which should be the preparation of individuals for productive, constructive participation in society.
This view was also expressed by Ortega y Gasset in his speech series given at the University of Madrid in 1930, subsequently published as the volume “Mission of the University” (Ortega y Gasset, 1944).

The modern university described by Flexner evolved out of the German model of the mid 19th century, as scientific inquiry replaced moral philosophy and revolutions reshaped the western nations politically and socially. In contrast to the traditional sequestered institutions of the medieval past, universities to Flexner were woven into the social fabric of their given era. By the 1930’s Flexner observed that universities were central players in the social evolution of their times, effecting change and simultaneously affected by it. By his time the transition of the university into the “multiversity” described by Kerr (1963) was well underway.

Evolving out of the modern university, the multiversity of today is arguably on the cutting edge of societal evolution. The multiversity attained a new centrality as society realized a heightened recognition of the importance of higher education in economic, cultural, political and social development. With the acknowledgment of new knowledge as a primary engine of economic and social growth universities have been called upon to produce knowledge in greater quantities than ever before. Kerr (1963) expressed that with the knowledge production capacities of the university, “intellect had become an instrument of national purpose.” Increasingly the university is called upon to produce critical new knowledge for the solution of a variety of scientific and social problems as well as a highly trained workforce. While the university has continued to evolve over time as both progenitor of knowledge and the mechanism by which this knowledge is
imparted to future generations, what remains clear is that the mission and goals of the university have been historically been expressed as fundamentally academic and production oriented in nature. Within this framework the presence and role of collegiate athletic programs as a meaningful component of the university is particularly anomalous.

Regardless of whether one views athletics in the university as an incongruity, its presence is long-standing, real and not likely to disappear. In order to make sense of their role and importance as an element of the university one must conceive of athletic programs as marketing tools for the recruitment and retention of students, alumni and private donations. In this guise they become meaningful and to some extent understandable. Cast in this light, not only does their purpose become more clearly defined, but with the hierarchical value stratification present among the differing levels of competition, the desire to escalate the intensity placed on athletics also comes more clearly into focus.

Still, there is little evidence to support the position that athletics is intrinsic to the primary goals of the university. In fact, most of the extant literature is to the contrary: overall, athletes’ academic performance lags behind most other students and only in very few schools does athletics contribute anything besides liability to the school’s balance sheet. The latter is an important point given that athletics is generally treated as an auxiliary enterprise by most campuses. Auxiliary enterprises generally are not intended to be financially supported by the university, but instead are expected to pay their own way by generating enough revenue to at least cover their costs. This dissertation contributes to understanding a paradox of contemporary university life, namely, why activities that are
costly and outside the scope of the core mission of universities nevertheless are seen as valuable enough to pursue at higher levels of investment. There can be little doubt that the activities do not generate a return on investment for the great majority of institutions and instead generate substantial losses.

Despite its apparent disconnection from the university mission, athletics is generally understood to be a staple component of the American university. The centrality of athletics’ role can be personified in schools’ mascots; students and alumni often identify themselves as Trojans or Bruins (or whatever their particular school’s mascot is), keeping that piece of their university experience with them throughout their lives.

While the identity feature of collegiate sports is significant, athletics as a component of the school is also an important status factor by which schools are stratified. Just as cities use universities as status vehicles, universities use their sports programs in similar fashion. There are two important ways by which schools do this; firstly through the competitive level at which their athletic programs compete within the NCAA hierarchical structure and secondly by having football as a part of their sports offerings. The NCAA structure has three primary levels; Division I, II, and III (and within each level there are several sub-divisional levels) with Division I being the highest and the most prestigious. The status values infused each NCAA level (particularly Division I) and in the sport of football are important issues for universities.

With the advent and increasing prevalence in recent years of such measurement devices as the U.S. News and World Report university rankings, today’s schools have a heightened awareness of and focus on their market position in the universe of American
higher education. In this same vein, collegiate athletic programs have become an important measurement of a school’s reputation. This may be the reason why the NCAA experienced a surge in the number of schools requesting to make an upward movement in the divisional structure recently (also known as “going Division I”).

From 1979 to 2007 one hundred and seventy seven schools moved up in athletic divisional level, with forty five movements occurring since 2000. In addition, as of October of 2007 there were twenty schools currently in the middle of the reclassification process (Steinbach, 2007). The surge in schools attempting to make the move up to Division I prompted the NCAA to implement a four year moratorium on reclassifications in August 2007 in order to take some time to examine the phenomenon. In explaining the moratorium David Berst, NCAA Vice President for Division I stated, “Division I is seeing an increase in schools in the queue toward active membership. It just appeared time for us to stop, take a breath and consider what a Division I institution ought to look like” (Steinbach, 2007). It is this notion of “what a Division I school ought to look like” that is one of the drivers for this study.

The Financial Challenge of “Going D-I”

The data are clear on this point: regardless of the perceived benefit, the venture to elevate a school’s athletic program to the Division I “big time sports” level requires a substantial financial commitment. The resources necessary to produce collegiate athletics at the highest level are significant. In 2003 the NCAA published two reports; “Revenues and Expenses of Division I and Division II Intercollegiate Athletic Programs” and
“Revenues and Expenses of Division III Intercollegiate Athletic Programs”. These documents detailed not only the significant growth in spending on athletic programs from 1985 to 2003, and 1993 to 2003 respectively; the former also reported the average financial net operating results for Divisions I and II for this time period. These data are summarized and displayed in Table 1.

Table 1  

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Note: All figures are in constant dollars
Across all divisions, growth in both expenses and revenues increased by hundredfold percentages. Average net operating revenue resulted in annual deficits for all divisions except for the highest (these data were not reported for Division III). For Divisions I and II the percentage of growth in operating deficits over this time period is equally dramatic. At each successively higher level, the amount of institutional subsidy necessary to cover the operating deficit increases until one reaches the highest level. It is noteworthy however that from the DI-AA to the DI-A level (in 2003), mean operating expense more than triples from $7.5 million to $27.2 million. Similarly, between DII with football (the highest DII level) and DI-AAA (the lowest Division I level) mean operating expense more than doubles. These are dramatic increases which any school must consider given that revenue does not exceed expenses at any level of competition (without substantial institutional subsidies). Furthermore, the mean amount of institutional subsidy required progressively increases at each level until one reaches the highest level (Division I-A). While the mean amount of institutional subsidy drops from $3.4 million at the Division I-AA level to $2.8 million at the DI-A level, it remains a significant dollar amount.

The most recent data on this subject come from the NCAA report which examined Division I revenues and expenses from 2004-06. This report displayed that major college sport programs increased their operating budgets by over a third in that three year period. In addition it reported that only nineteen schools generated net revenue on operations in 2006 and only six institutions did so consistently over the previous five year period. In Division I-A (the highest level of competition), the average net operating deficit across all schools rose to $8.9 million annually since 2003. The report also concluded that in
Division I-A, the gap between financially successful schools and those reporting losses continues to widen (NCAA, 2008), indicating that for the losing schools, the pressure to keep up is increasing.

As the NCAA data clearly display, the costs of moving up in the competitive hierarchy are significant and the average financial net result is an ever escalating operational deficit. Additionally, Zimbalist (1999) and Shulman and Bowen (2000) report that newcomer schools to the “big time” Division I level do not thrive financially, which concurs with the NCAA data. Even well established universities with strong athletic traditions are not guaranteed to generate a financial surplus with their sports programs. In 1994-95, the University of Michigan flagship campus at Ann Arbor had what was by all accounts a successful year: several of their teams won national championships yet their athletic program budget reported at $4.3 million dollar deficit (Shulman and Bowen, 2000). Results such as these are a sobering reminder of the challenges associated with Division I athletic programs.

In addition to the financial challenges, many argue that there are negative “mission-drift” effects on the university related to intensified attention on athletics, including commercialization, admissions advantages for under-qualified athletes, and lower educational outcomes for athletes.
“Mission-Drift” Effects of “Big-Time” Division I Collegiate Sports

The Commercialization of Collegiate Athletics

Besides the financial issues related to elevating an athletic program to the Division I level, a growing body of research asserts that collegiate athletics, particularly the “revenue generating” sports of football and men’s basketball have become commercialized and professionalized to the point that they no longer function within the traditional sphere of the university. Disconnected from the university, they have become minor league systems for the National Football League and National Basketball Association respectively; in essence providing player development systems free of charge to these professional leagues. Some contend that there is no appreciable difference between these sports “products” produced at the professional or collegiate levels. It is in this highly commercialized, professionalized version (Division IA level) where “the only difference between professional and college athletics is one of degree” (Renick, 1974:545).

One factor that has driven these behaviors is the role of college sports as a major source of public entertainment in America. Forces exogenous to the university have transformed intercollegiate athletics from an extracurricular activity “of students, for students” into a commercial entertainment product of great monetary value. The influences of professionalization and commercialization have caused men’s basketball and football programs (and by extension, university athletic departments) to operate in ways increasingly independent of and disconnected from the university’s academic mission.
The pursuit of competitive advantage and the revenue associated with winning seasons have distorted institutional priorities (Sperber, 1990; Thelin, 1996; Zimbalist, 1999; Duderstadt, 2000; Sperber, 2000; Shulman & Bowen, 2001). Coaches have acknowledged that their function within the university has become divorced from education, and indeed from the university itself. In the words of former Auburn football coach Ralph “Shug” Jordan, “A coach should resign himself to the fact that he is no longer involved with the educational process, but with entertainment” (Sperber, 1990). Former men’s basketball coach Jim Valvano said, “We’re not really even part of the school anymore, anyway. I work for the North Carolina State Athletic Association…You think the chancellor is going to tell me what to do? Who to take into school or not to take into school? I doubt it!” (Sperber, 1990).

In today’s society successful collegiate coaches and players have become media celebrities. Their heightened profile among both the general public and university stakeholders have given them levels of influence and power that many regard as troublesome. Presiding over the flagship Ann Arbor campus of the University of Michigan during the career of legendary football coach Bo Schembechler, Duderstadt (2000) lamented about the fact that the coach had the ability to circumvent the president’s authority via direct appeals to the University Board of Trustees. On issues of university policy, the President’s power was frequently trumped by the coach’s personal connections with the trustees. The coach capitalized on the trustees’ desire to field winning teams.
In Duderstadt’s experience, issues of academic integrity and procedure were often at odds with issues of athletic competitive advantage. When a policy debate ensued at the trustee level, the result was often an interpretation that favored the athletic department interests and redefined or expanded notions of what the institutional mission of the campus was. This situation is further exemplified by a quote from Duffy Daugherty, Michigan State head football coach from 1954 to 1972 who said, “Sure, I believe in need-based financial aid. If I need a nose tackle, I get one!” (Sperber, 1990).

As the phenomenon of college sports evolved through the twentieth century, its identity as an important structural element of the American university has become reified. Perhaps due to the inherent nature of competition, athletic departments possess a unique culture characterized by an intensely competitive ethos which equates higher expenditures with greater success (i.e., “winning teams”) and an associated “win-at-all-costs” mentality (Beyer & Hannah, 2000). The result often manifests as an insatiable compulsion to spend every available dollar and to closely monitor competitors to make sure that one is not being overtaken or falling behind in any area. Within this mindset, any gimmick or device that a coach feels has the potential to provide a competitive advantage becomes justifiable on the grounds that the price of not winning is higher than the expense proposed. This has also fueled the rapid expansion of athletic expenditures in the university. Schools often feel compelled to “keep up with the Joneses” in everything from personnel (additional assistant coaches, marketing staff, recruiters and scouts) to training and practice facilities, expansive playing arenas, and special athlete-only...
residence halls, regardless of how expensive, out of balance or extravagant such things may appear to the rest of the campus.

It is primarily in the sports of football and men’s basketball, the so-called “revenue sports” where this model has been most visible. However, as this commercialized model of “big time” college sports has become ascendant, the tendency for all sports in the program to model themselves after these sports has also increased. One need only observe the relatively recent rise of women’s basketball to spectator sport status to see the ways in which that sport has adopted the commercialized model typical of football and men’s basketball. The women’s season has an identical format as the men’s and hosts an identical post season tournament to crown a national champion. Schools such as the University of Connecticut and the University of Tennessee Knoxville have built traditions as “powerhouses” of the sport with high profile and highly paid coaches. The national championship tournament for women’s basketball certainly does not yet match the popularity of the men’s game but it is nonetheless a media spectacle in the same genre; the difference being only in its’ order of magnitude.

The concept of college sport as a commercial revenue production activity began in part due to NCAA policy. As a part of its operating philosophy adopted in 1978, NCAA Bylaw 20.9 (g) expressed that a Division I member school should finance its athletics program as much as possible from revenues generated by the program itself. This policy may be conceived as the genesis and validation of the commercialized model of “big-time” collegiate sport; its language clearly expresses a belief that university athletic programs have the ability to generate revenue and that the exercise of this ability should
be a fundamental practice. It is noteworthy that former NCAA President Dr. Myles Brand made encouragement of athletic programs’ commercialization a prominent theme in his administration (Wolverton, 2008). Some would argue that such a position exacerbates the problem of mission-drift in the university often attributed to college sports. However, it may also signal the acknowledgement of the dire financial state of athletics in the university.

Details from the 2008 NCAA Revenues and Expenses of Division I Intercollegiate Athletics Programs Report support the need for additional income. The report shows that the proportion of institutionally provided support funds to the athletic department (not externally generated revenue) has trended upward (from 19% to 26% over the period studied) for Division I-A schools. For all other NCAA divisions the percent ranges from 76% to 80%. These data suggest that contrary to the popular belief that “athletics makes money”, collegiate athletics programs do not, nor have they ever really been expected to pay their own way as auxiliary enterprises.

It is noteworthy that the sports of football and men’s basketball are the only two sports that have consistently demonstrated the ability to generate significant amounts of income, and only at a very small percent of schools. For the vast majority of schools, revenue generated by their athletic programs does not cover the expenses incurred and most athletic programs require substantial subsidies from their schools. In a recent acknowledgement of the upward pressure on the costs of the activity, the NCAA Presidential Task Force on the Future of Division I Athletics reported in May 2006 that
“over the years, increased participation opportunities and escalating costs have created the need for new revenue streams” (NCAA, 2006).

Despite the need for additional revenue streams, the growth of the collegiate sports industry has been nothing short of phenomenal. The NCAA reported in 2005 that intercollegiate athletics as a component of the university has grown at a rate two to three times faster than the rest of the institution (NCAA, 2005). The latest NCAA study reveals that this pace has not abated; from 2004 to 2007 athletic operating budgets increased by an average annual rate of 11% while total university spending increased by only 5% (Sander, 2009).

Over time, athletic departments on large university campuses have consistently expanded in size and scope. This growth has been driven by the persistent commercialization of athletic programs at the Division I level. It would be premature to assume that this growth was equally distributed across all segments of athletic operations. In reality, the preponderance of the growth has occurred in the so-called “revenue sports” of football and men’s basketball. These sports are the primary emphasis organizationally for collegiate athletic departments due to their perceived ability to generate financial returns. This perception is a direct result of the sports media industry’s successful capture of collegiate sports and its development of football and basketball into a commercial entertainment enterprise of great economic value (to the media companies and the NCAA, not necessarily for the universities). To illustrate, in 2002 the media giant CBS paid $6.1 billion to acquire the broadcast rights to the NCAA national championship
men’s basketball tournament. This media spectacle, known as “March Madness” is the collegiate equivalent of the National Basketball Association playoffs and finals.

The Athletic Admissions Advantage

Producing educated, competent graduates who are prepared to be functional and productive members of society is widely held as an integral part of the university mission (Flexner, 1930; Ortega y Gasset, 1944; Newman, 1947). The ability to complete a college education program through to degree attainment is frequently cited as a prerequisite for university admission (Bowen & Bok, 1998; Shulman & Bowen, 2001). Although often criticized as elitist and discriminatory (Jencks & Phillips, 1998; Loury, 2002) SAT scores are a long-standing component of the college admissions process. While the quality of its predictive ability is not universally agreed upon, the test remains a primary indicator of students’ ability to progress towards and complete a college degree program. Because of this, SAT scores continue to play an important role in admissions decisions at most universities.

It is generally understood that prized college athletes enjoy an admissions advantage over the student at large, particularly in the sports of football and men’s basketball. Using data from the College and Beyond database 1989 cohort, Shulman and Bowen (2001) report that athletes overall are 48% more likely to gain admission to college than the student at large. At the same time, football and men’s basketball athletes at private universities competing at the Division 1A level have SAT scores 22% lower than students at large (1003 and 1154, respectively). Such a powerful admissions advantage
could not happen by accident: the primary explanation for this phenomenon is the enormous effect of the targeted recruitment of talented high school athletes by coaches. The fact that individuals with such (comparatively) low SAT scores are regularly admitted into the university reveals how the educational values and mission of the university can be relegated to the point of irrelevance by athletic departments and by other participating university personnel as well.

Often in order to secure the talents of highly sought after high school athletes, coaches engage in improper or at minimum highly questionable activities. Bowen and Levin (2003) reported the story of Dajuan Wagner, a high school basketball player from Camden, New Jersey already famous for a single game in which he scored 100 points. Mr. Wagner was successfully recruited to the University of Memphis by Coach John Calipari, but the acquisition of his services required that his father be hired as an assistant coach and also the provision of a basketball scholarship to his best friend and high school teammate Arthur Barclay. The rewards of Mr. Wagner’s presence for the university would prove to be short-lived however. After he led his collegiate team to a National Invitational Tournament berth in his one year at Memphis he subsequently announced his departure from college in order to participate in the National Basketball Association draft. It is difficult to conceive that Dajuan Wagner’s college experience provided him with a liberal education or did much in the way of the development of his intellectual potential. The success of the team during his year there was almost certainly characterized as a successful season for the basketball team and without doubt the school basked in the reflected glory.
Lower Educational Outcomes for Athletes

Shulman and Bowen (2001) reported that when they examined the predicted academic performance of the 1989 cohort of high profile athletes at Ivy League colleges as compared to their classmates of similar socio-economic backgrounds, entering SAT scores and subject of college major, these athletes displayed a performance gap of -10.8 percentile points. These results signify that the typical football and men’s basketball player “rank in class” was 10.8 percentile points lower than that of the student at large who came from a similar family background, scored comparably on the SAT, and majored in the same field. In addition, 72% of male high profile sports athletes had grade point averages which ranked in the bottom one-third of their class; illustrating a strikingly increasing trend for this population with the 1951 and 1976 cohorts; for those years the figure was 38% and 60% respectively. By comparison, for the cohort labeled “students at large” the figures by year display an opposite, decreasing trend, going from 43% to 38% to 36% for the successive data years (p. 63).

Looking forward at academic outcomes as measured by graduation rates, the NCAA reported that for the academic year 1997-98, the graduation rate for football players at the Division 1A level was 55%. For men’s basketball players the rate was even lower at 44%. This compares to a graduation rate of the general student population of 60% (www.NCAA.org). These data indicate that (for reasons that are still under debate) the academic performance of high profile sports athletes falls below what would (and some might say what should) be expected of them.
Some assert that these educational outcomes are the result of a collegiate athletic culture in conflict with and deeply disconnected from the traditional educational values of the university (Sperber, 1990; Thelin, 1996; Zimbalist, 1999; Duderstadt, 2000; Sperber, 2000). Included in this are coaches who recruit athletes that are academically under-prepared or outright unqualified for the rigors of a university educational program and the intense pressure placed on athletes to perform athletically more so than academically. The fact that athletic scholarships are awarded by coaches on a year to year basis provides little security for athletes; they are often forced to make this unpleasant choice: devote time to their studies and authentically pursue intellectual scholarly development or perfect their athletic skills in order to maintain their athletic scholarship. An “A” performance on the playing field and “C” performance in the classroom most likely assures an athlete a return to school for another year while the reverse would likely mean the loss of their athletic scholarship. Placed into such a context it is not difficult to understand the direction an athlete would be motivated towards. With such a Faustian choice presented to its progeny, the institution of big-time college sports does them a disservice and reinforces the question of whether “student-athletes” are in actuaty students or athletes. Former Indiana University and professional NBA basketball player Isiah Thomas expressed it this way: “When you go to college, you’re not a student-athlete but an athlete-student. Your main purpose is not to be an Einstein but a ballplayer, to generate some money, put people in the stands. Eight or ten hours of your day are filled with basketball, football. The rest of your time, you’ve got to motivate yourself to make sure you get something back” (Sperber, 1990).
Duderstadt (2000) succinctly summarized the present day state of intercollegiate sports this way; “Big-time college athletics has little to do with the nature or objectives of the contemporary university. Instead it is a commercial venture, aimed primarily at providing public entertainment for those beyond the campus and at generating rewards for those who stage it. The public, driven by sports media and commercial interests, seeks from our universities entertainment through football and basketball, staged at a commercial level in every way comparable to professional leagues - except with the fiction that this can be provided through the use of young, ‘amateur’, athletes who also happen to be college students” (p.11).

The NCAA has a long standing tradition of insisting that its athletes are students first and athletes second and has consistently defended the conceptualization of athletic participation as an educational value. Interestingly, the NCAA’s own athletes see their plight differently; according to an NCAA survey of 21,000 athletes, the majority of them viewed their role as athletes more than as students (Wolverton, 2008). On top of the time spent in the classroom, football players at major universities reported spending an average of 44.8 hours per week in their sport related activities (Wolverton, 2008).

This particular strand of the literature is often criticized as work done by “athlete-hating” academics. The notion of the book worm professor exasperated by the “dumb jocks” in his or her classroom is often conjured and used as a detractor to the issues critically presented. The passion of those who defend such practices within college sports suggests that the tradition of athletics and its place in the university is deeply institutionalized. The benefits to the school and athlete characteristically associated with
collegiate sport are frequently true by definition rather than discovery which serve to reify its legitimacy.

A Paradox:

Change behavior of schools in regard to their athletic programs is not common, however the data indicate that escalation of intensity of attention and athletic expense (as opposed to de-escalation) is the norm. Due to the significantly increased costs and the associated net financial deficits, from an organizational analysis perspective this phenomenon warrants further examination. The NCAA financial data provide clear evidence that upward movement in the competitive structure is an increasingly expensive proposition at each successive level. Upward movement does not guarantee an operating surplus; in fact, the data explicitly demonstrate that as a university ascends in the hierarchy, it should expect to spend progressively higher amounts to subsidize its athletic program.

Part of the explanation for the higher costs is structural; at the Division I-A level NCAA rules place a heavy financial burden on their members. Schools at this level must sponsor a minimum of fourteen sports teams and provide minimum financial aid inducements to athletes. Football (the most expensive sports team to field) is also a requirement, and the school must own or have access to a stadium that seats a minimum of 30,000 spectators and must average at least 15,000 fans in attendance at home games (Zimbalist, 1999). By way of comparison, Division II schools need only sponsor a minimum of ten sports; they may provide financial aid if they choose but are not required
to; in fact there are maximum financial aid levels they may not exceed. Division III schools must also sponsor a minimum of ten sports however they may not provide financial aid inducement to their athletes. A fuller description of the differences between the NCAA Divisional levels is included in Appendix A.

In the most recent year for which data are available (2003), the amount of institutional subsidy at the Division I levels (I-A, I-AA and I-AAA) averaged $3.1 million, compared to the average subsidy of $1.3 million at the Division II level. Even the increases in average revenue are not enough to offset the additional expense of a D-I program; the average deficit at the D-I level being $2.6 million versus an average deficit of $1.45 million at the D-II level (the operating deficit representing the amount of institutional subsidy).

It is noteworthy that the self-sufficiency clause was recently amended in August 2008, possibly as a reaction to these data as well as the upward spike in the number of schools which sought to elevate to Division I status in the first few years of the 21st century. The new language simply asks the institution to ensure that it maintains institutional control over all funds supporting athletics. This revision is significant because it eliminates any reference to the proposition that athletic programs should be self supporting or strive to generate their own revenue. The removal of this reference to revenue generation could be interpreted as a tacit acknowledgement of the evidence that most schools will not cover their athletic expenses but instead will be required to spend in ever greater amounts to support their athletic programs if they choose to elevate to the D-I level. This is perhaps an act of honesty on the part of the NCAA. It begs the question
then of why some schools would elect to either raise their athletic competitive level when
the net result of such action would not contribute to the school’s overall financial health,
or elect to not drop an expensive sport such as football. Daniel Fulks, accounting
professor and faculty athletics representative for Transylvania State University and the
co-author of an NCAA funded study which examined collegiate athletic finances put it
this way, “Most of these schools are not being honest about their reasons for
reclassifying…the president and the trustees will try to make it at least appear as though
it’s going to be profitable. We haven’t found that to be true. There are still fewer than two
dozen schools in the country that are showing a profit on athletics. One of those is in I-
AA. More often than not the motivation is a matter of ego” (Steinbach, 2007).

Elevating a college’s athletic program is a classic situation where socially constructed
values lead to institutionalized solutions. These “solutions” become taken for granted and
diffused throughout the organizational sector. In their 2005 report commissioned by the
NCAA (and with data supplied by the NCAA), Orszag and Orszag (2005) tested multiple
hypotheses which examined the strength of some of the “classic” arguments proffered by
university administrators, athletic personnel and university trustees as justification for
increased spending on athletic programs. Several examples of classic institutionalized
arguments in favor of increasing spending on and commitment to big time collegiate
athletics are:

1. Increased spending on athletics increases athletic winning percentage.
2. Increased winning percentages results in increased revenue.
3. Increased operating expenditures on big-time sports (men’s basketball and football affects (increases) operating expenditures on other sports.

4. Increased operating expenditures on athletics affect alumni giving.

The results of their study concluded that none of these arguments could be supported by the data. It is significant to that these are among the primary arguments offered by advocates of “going Division I” (Shulman and Bowen, 2001).

Despite this evidence, some schools nevertheless elect to elevate. The data display clear evidence of an upward bias in movement; this trend suggests a common aspiration of schools to elevate as opposed to de-escalate their athletic programs and expenditures. The act of a school elevating its athletic program, particularly to one of the Division I levels appears to present a paradox of sorts. The evidence is clear that such action requires a high financial commitment from the school, yet this commitment comes without a demonstrated ability to recover the increased costs, in fact the data display that a school can expect its athletic program to require ever greater institutional subsidy amounts. In addition, there is much anecdotal evidence which indicates that the Division I environment involves additional challenges to schools related to “mission drift” in the university. The paradox is that despite these phenomena, the data display that there has been a recent increase in the number of schools that wish to elevate their competitive status. Given the extant literature on the many negative effects of the commercialized model, this is an important phenomenon worthy of investigation.
CHAPTER 2: THEORETICAL FRAMEWORK
Status and Stratification in Higher Education

The universe of higher education institutions is large, diverse and highly stratified in terms of prestige levels (Brint, Riddle and Hanneman, 2006). In an environment steeped in status and stratification markers, universities exist in a marketplace and are necessarily in competition with one another for survival resources (Bok, 2003; Brewer, Gates & Goldman, 2002). Each school has a position relative to other schools that defines its location in the status hierarchy. In this competitive environment schools possess a particular set of institutional and environmental characteristics by which its status position is measured. Each school must make decisions related to the strategies it will employ in order to be competitive and successful in its marketplaces. The term *status* is important in this context because it refers to one’s position within some hierarchical ordering (Podolny, 2005). In this study, the NCAA structure is viewed as a *status hierarchy*, with greater status accorded to each ascending level. In addition, within the three primary divisions are sub-divisions where the sport of football is the factor which differentiates the highest level within each division. In this we observe that structurally, any move upward represents advancement in the status hierarchy; one may achieve additional status within the division level through the addition of football or one may advance within the overall structure by moving upward to a higher division level.

In the case of university status, there appear to be pressures on universities to move up in the NCAA’s competitive hierarchy despite the documented high increase in costs, the unproven financial benefits and the problems of mission drift that have been associated with the highly commercialized form of college sports. A school’s athletic program is an
important component in the overall universe of higher education status factors with cachet “built in” to the higher competitive levels within both the sub-divisional strata and in the primary division levels. Upward change in athletic program competitive level and the addition of football could be strategies that schools use to attempt to enhance institutional status as well as to demonstrate conformity to legitimated, dominant models of organization. Of the schools in this study that elected to move, the preponderance either added football as a sport or elevated their division level despite the significant expenses involved in doing so. This organizational behavior is indicative of the normatively imbued value of the Division I level and the sport of football. In describing Oakland University of Michigan’s move to Division I, Greg Kampe, men’s basketball coach said, “A lot of the people who were against the move saw the publicity that we got and what it did for this school. You can’t put a dollar figure on that” (Steinbach, 2007). In their examination of the cultural importance of athletics programs within the universe of American higher education, Beyer and Hannah (2000) noted that “relatively few schools felt they could survive or prosper as academic institutions if they abolished or downgraded their intercollegiate athletics programs” (p. 107), reinforcing the position that athletics is strongly regarded as a status factor in higher education. This suggests that college athletic programs are a status vehicle that schools use to enhance prestige levels. This observation is important given that the literature indicates that the goals of higher education are scholarly inquiry and the creation of knowledge, development of students’ intellectual potential as preparation for success in life, and the production of leaders and productive contributors to society. (Veblen, 1918; Flexner, 1930; Ortega y Gasset, 1944;
Newman, 1947; Kerr, 1963; Marginson & Considine, 2000; Duderstadt, 2000; Shulman & Bowen, 2001; Bowen & Bok, 2001; Bok, 2003; Bowen & Levin, 2003). How well schools accomplish these goals is often difficult for potential consumers to measure. While information on metrics such as time to graduation, graduation rates, and research faculty on staff are easily obtained, important aspects like *quality* are difficult to measure with accuracy. Because students as potential customers must often evaluate the quality of a school by *inferring* it from a school’s relative status in the field, schools could be driven to attain status through the incorporation of prestige factors missing from their current inventory.

It is clear that universities exist in a marketplace and are in competition with other universities for a variety of resources including students, research grants, and federal and state funding. They must remain or become viable in the marketplace by seeking ways to differentiate themselves from their competitors and be seen as an attractive option. J. Douglas Toma, associate professor of higher education at the University of Georgia found that “a common aspiration” for schools was “to reach the next level of status hierarchy in American higher education”; also that there was “a rather generic set of strategies” schools used to elevate institutional prestige. This set included attracting more accomplished students, improving campus amenities such as housing and fitness centers, and using athletics to better position themselves (Schmidt, 2008). Brewer, Gates and Goldman (2000) expressed that sports are one of three *prestige generators* for universities; the other two being *student quality* and *research*. Regarding sports they write, “Competitive sports teams can also bring prestige”, “successful sports teams
generate name recognition for the school which may spill over into other areas such as
the market for student enrollment, public fiscal support and private giving” (p.32). It is
noteworthy that the authors assert that *successful* sports teams bring prestige but they do
not mention the consequences of *unsuccessful* teams. This is a problematic distinction for
schools since success in sports cannot be guaranteed. Competitive sports are subject to so
many variables outside the control of schools, coaches and even players such that
banking on a successful return is by definition a risky venture. In addition, any local
community’s appetite for competitive sports is subject to the vagaries of fan interest and
appetite which may wax and wane in unpredictable ways. However, the incorporation of
additional prestige elements such as Division I athletics or football could be considered
calculated tactics to achieve or enhance prestige levels in the marketplace. The prevailing
view in regard to universities’ use of their athletic programs is that to simply compete at
the Division I level is by itself an attainment of higher prestige and status for a school.
This is similar in nature to having a medical school or star research faculty on the
campus. Greg Kampe, men’s basketball coach at Oakland University in Michigan states,
“Our University didn’t make the jump to Division I to become an athletic powerhouse; it
made the move to enhance its standing in the marketplace. The university wanted to
become a player” (Steinbach, 2007). Bill Carr of Carr Sports Associates (which assisted
the University of Central Florida in the strategic planning for its move to Division I)
stated, “Many schools feel like they need to compete at the highest possible level
athletically in order to give their institution the greatest visibility” (Steinbach, 2007). This
University-Division I relationship suggests a clear analog to Riesman’s (1958) city-
university relationship; each is a sign of “arrival” in a respective status hierarchy.

One additional consideration in the pursuit of status through Division I status or football is the prestige associated with a school’s ability to be identified with an institutional peer group. It is well known that NCAA members are also members of regional conferences; the PAC-10, Big 10, Big East, Southeast, and Atlantic Coast Conferences are examples. These conferences are representative of their constituent universities; members are regarded as peers both athletically as well as in an overall reputational sense. As members of the PAC-10, both the University of Washington and the University of California Berkeley are considered alike in some basic regard; in the public mind they are institutional peers even though they are decidedly different in many ways. As peers within the conference membership, these schools may collectively raise the potential consumers’ expectations about the quality of the school. Podolny (1999) expresses that “expectations about quality also derive from affiliations that market actors develop through their exchange relations…as market actors enter into exchanges with other actors, they often become identified with one another” (p.564).

Theoretical Perspectives on Change in Universities

Universities are social institutions and as such are subject to constant change over time. However, change is often constrained and limited in highly institutionalized fields such as higher education. I review the institutional and neo-institutional perspectives and how each addresses the matters of constraint on organizational action.
The Institutional Perspective

The institutional perspective is distinctly different from rational-actor and classical organization theory explanations of organizational change. Where these theories emphasize the technical, rational and functional dimensions of the behavior of organizations (functions determine structure and structures are understood by an analysis of their functions), the institutional perspective looks at the complex relationships related to the cultural, political and social environments both within and external to them. In the institutional perspective the external environment is critically important in understanding organizational behavior. Perrow (1972) expresses that the institutional school, “almost alone among those we have considered, has taken the environment seriously and tried to understand the organization’s relationship to it” (p.176). Scott (1991) states that “Perhaps the single most important contribution of institutional theorists to the study of organizations is their reconceptualization of the environments of organizations” (p.165). In his study of school-based management Ogawa (1994) affirms that “institutional theory begins with the external environment of organizations, rather than with the organizations themselves.” (p. 521). Perrow (1972) succinctly summarizes the Old Institutionalism thusly; “The explanation for organizational behavior is not primarily in the formal structure of the organization, the announcements of goals and purposes, the output of goods and services. It lies largely in the myriad subterranean processes” which include “dependencies on outside groups and constituencies” and “the striving for prestige” (p.159). As the financial data have documented, the financial drain on the school associated with elevating the athletic program is significant which suggests that such
behavior is not related to the enhancement of technical efficiency or productivity, therefore alternative explanations are necessary.

One important premise of institutional theory relevant to this dissertation is that peer institutions are important elements of the external environment of an organization and status levels among organizations in the field are closely monitored. When organizations are faced with problems of uncertainty or ambiguity, modeling peer organizations (Cyert and March, 1963) that are perceived as having higher status is one method by which a problem may be solved that does not have a precise technical solution. Because status is an uncertain outcome, the methods by which it is acquired are poorly understood; modeling of target organizations may be both viable and involve minimal effort (Cyert and March, 1963, March and Olsen, 1976).

The Neo-Institutional Perspective

From the neo-institutional perspective, organizational change in highly institutionalized environments results in a decreasing variety of forms and increasing homogeneity of organizational forms (DiMaggio and Powell, 1983). Change that does occur is explained as organizations’ seeking to resemble the most prestigious institutions in the field. Organizational action is not necessarily driven by technical requirements or pursuit of efficiency and productivity but rather to demonstrate ritual conformity with socially constructed, pre-legitimated norms and expectations (Meyer and Rowan, 1977). The fulfillment of these expectations creates a myth of legitimacy for the organization. In this context, Division I college sports and football programs appear to be valued in a way
that goes beyond standard concepts of rationality or technical requirements. The documented financial deficits associated with going Division I suggest that technical efficiency is not a primary concern for those schools that elect to elevate athletic competitive level.

Following Cyert and March (1963), DiMaggio and Powell (1991) observed that “uncertainty is also a powerful force that encourages imitation” and that “when goals are ambiguous, or when the environment creates symbolic uncertainty, organizations may model themselves on other organizations” (p.69). This is at the heart of the concept of isomorphism. DiMaggio and Powell (1983) developed a model of organizational behavior that attributes organizational change to isomorphism; organizations within highly institutionalized fields under similar environmental conditions will come to resemble one another through conformity to dominant organizational forms. This may be achieved through the incorporation of organizational forms or components which have been normatively sanctioned and which have diffused through the institutional field. They identified three processes by which such isomorphism occurs: coercive, mimetic, and normative. DiMaggio (1986) argues that “For most organizations, the salient environment is composed of a specific set of other organizations, often identifiably members of the same organizational field” (p.337).

Hawley (1968) proposed this principle of isomorphism: “Units subjected to the same environmental conditions or to environmental conditions as mediated through a given key unit, acquire a similar form of organizations. They must submit to standard terms of communication and to standard procedures in consequence of which they develop similar
internal arrangements within limits imposed by their respective sizes.” (p.334). In the case of NCAA members, the association imposes certain common environmental conditions to all other members; the given key unit is the NCAA.

Although not generally considered an institutional theorist, Riesman (1958) discerned that there were commonly accepted institutional forms and norms that were subjectively important to higher education institutions. He stated that “universities serve as models for one another as academic fashions spread” (p. 11). He called this the problem of “institutional homogenization”, and lamented the way that universities “came to resemble large corporations or government agencies” (p. 11) with decreasing variety of forms. He is absolutely certain that “colleges and universities do model themselves upon each other, and the question remains: which other? All one has to do is read catalogues to realize the extent to this isomorphism.” (p. 25).

The strength of both the institutional and neo-institutional schools is their attention to an incorporation of the environment; however their strength is not hegemonic. Kraatz and Zajac (1996) strongly challenged the neo-institutionalism propositions of isomorphism and the irrelevance of the local environment on organizational change in higher education. In their study of liberal arts colleges they observed “a clear increase in the mean number of professional programs over time” (p.832) which reflected changes driven by local environmental demands and provided evidence of increasing heterogeneity rather than homogeneity. Neo-institutional theory would not have predicted these changes and would instead have labeled them as illegitimate, yet they occurred regardless.
Overall, the institutional and neo-institutional perspectives reject the rationalistic explanations of organizational behavior characteristic of the functionalist tradition, where pursuit of efficiency and the rational-actor model of decision-making processes determine organizational direction. Instead, they emphasize that organizational action is not purely the result of rational choices made by individual rational actors but rather that practices and structures within organizational sectors become institutionalized and therefore are critical factors which must be accounted for in the analysis of organizational action. In this context, institutionalized elements are “taken for granted”; they undermine the view of organizational behavior as rational and instead characterize it as unreflective. Particular institutionalized elements may have status values “built-in”, making them easily chosen as status enhancers. For universities seeking additional prestige, the incorporation of high status value institutionalized components may provide an unreflective solution to perceived status deficiency problem.¹

¹ It should be noted however that institutional theory is not without critics. While acknowledging that institutional theory exposes some of the most glaring weaknesses in classical organization theory, Mitchell (1992) identifies two important limitations of its explanatory ability. Firstly, institutional theory places too much emphasis on cultural context and symbolic meanings for explaining organizational behavior while at the same time relegating technical rationality to a minor or background role. Secondly, institutional theory does not provide an account for how symbolic ideas are grounded in a concrete reality structure; essentially it fails to explain how the meanings for the symbols are created in the first place. In Mitchell’s view, the ability to link the symbolic with the rational and grounding them both in a human action system would overcome these limitations. Perrow (1972) points out that one important shortcoming of the institutional school is that it “fails to come to terms with the possibility of viewing organizations as tools in the hands of their makers” (p.7). His argument is to some extent a basis for Mitchell’s. Perrow’s articulation questions the origin of the values that drive organizational goal orientation and subsequent action. One could argue that the goals and actions of all organizations find their source in their leaders rather than from the external environment as institutional theory asserts. Brint and Karabel (1991) provide an illustration of Perrow’s insight in their examination of community colleges. Resentful of their institutions’ lack of prestige as the lowest level in the higher education hierarchy, community college leaders pursued a strategy of vocationalization in the 1970’s. The strategy was designed to relocate junior colleges to the top of the category of occupational training organizations. Despite resistance from students and parents for increased vocational curriculum in community colleges, leaders of these organizations remained undeterred and committed to the project. Kraatz and Zajac (1996) analyzed longitudinal data from over 600 liberal arts colleges over a 16 year period and discovered surprisingly little evidence to support the new institutionalism. The colleges in their sample changed in ways that were not predicted by neo-institutional theory, suggesting that “traditional adaptation-based explanations” (p. 812) of organizational change may have been underestimated.
Constraints on Change

The field of education “is often cited as an example of a highly institutionalized organizational field” (Kraatz and Zajac, 1996:813). Once an organizational field is established, change becomes tightly constrained with only a limited number of options viewed as legitimate. In a highly structurated and institutionalized environment certain courses of action are precluded; organizational actors have constructed around themselves “an environment that constrains their ability to change further in later years” (DiMaggio and Powell, 1983:148). From the neo-institutional perspective these limits on change lead to increasing conformity and homogeneity within the field. As common problems are faced by members of an organizational field, normatively constructed common solutions are generated and reified. These solutions become institutions themselves; described as “programmed actions” by Berger and Luckmann (1967) and “chronologically repeated activity sequences” to Jepperson (1991); activated as common responses to similar situations. Jepperson (1991) states that “when analysts refer to institutions as taken-for-granted…they are suggesting that institutions are those standardized activity sequences that have taken for granted rationales, that is, in sociological parlance, some common social “account” of their existence and purpose” (p.147). The limited number of pre-legitimated solutions to problems leads to organizational inertia (DiMaggio and Powell, 1991). Schools that want to make changes related to their athletic programs are faced with few options; modeling dominant organizational forms is one way a school can conform without risking or sacrificing legitimacy. Given the tightly constrained limitations on the types of change possible and
the highly institutionalized nature of the field of higher education, neo-institutional theory would predict that changes would be infrequent and uncommon.
CHAPTER 3: METHODS
Description of the Data

While the body of literature on collegiate athletics is expansive, among the most studied areas are the empirical effects of winning records on student quality, numbers of student applications, and alumni giving. Most of these studies examined 10 year periods (Tucker and Amato, 1993; Bremmer and Kesselring, 1993); only Mixon (1995) examined a longer period (15 years). This study is the first of its kind to examine data on change movements within the NCAA membership; the author was not able to locate any previous studies that have attended to this area. In addition, the number of years examined (27) is an important aspect of the study providing a longitudinal perspective on the phenomenon of change in athletic competitive level among NCAA members. For this reason, this study may be considered path breaking and will hopefully stir interest in future inquiry along this course.

The data for this study are compiled from two public information sources. The first source is the NCAA membership rosters for a 27 year period (1978-79 through 2006-07) which were provided by the NCAA Library. These rosters were a rich source, supplying data which included all member institution names, geographic district, state, division level, subdivision level, and status on fielding an independent Division I sport (for Division II and Division III members) and changes in athletic competitive level. Every movement in athletic competitive level by each institution in each year was recorded through a thorough year after year comparison and coded as an upward or downward change in athletic competitive level.
Data from this source was collected over the six month period of November 2007 through April 2008.

The federal Department of Education maintains the Integrated Post Secondary Education Data System (IPEDS) located on the World Wide Web at http://nces.ed.gov/ipeds/. This is another rich data source which is comprised of annual surveys conducted by the National Center of Education Statistics (NCES). Information is collected from every university, vocational or technical school that participates in federal student financial aid programs. This source the data on the variables grand total enrollment, men’s enrollment, women’s enrollment, end of year endowment, and institutional control.

In each year every school was matched to its IPEDS six digit identifier code. This created a set of spreadsheets which listed every NCAA member institution and the data on the variables included in the NCAA membership rosters for every year from 1978-79 through 2006-07. A parallel set of lists of the IPEDS six digit identifier codes was then created for each year, each list representing the NCAA membership institutions in each given year. These lists of codes were then input one by one into the IPEDS tools to collect that source’s data. These data were then merged into the existing NCAA data files to create the dataset for this study.²

² It may occur to the reader that the Equity in Athletics Disclosure Act (EADA) website was not employed as a data source for this study. While this public data source is a common dataset often used in the examination of collegiate athletics, there were important reasons why it as not utilized for this study. The EADA website provides only two to three of the most recent years for its most important data (such as university athletic finances) which does not allow for comprehensive analysis. In addition, the financial data which are available from the EADA display that the overwhelming majority of schools run their athletic departments as break-even enterprises, meaning that their expenditures equal revenues in any given year. These data are incongruent with the NCAA’s own commissioned report (2005) which led the author to have substantive concerns about the reliability of the EADA financial data. Perhaps most problematic, the EADA revenue data are aggregated and do not distinguish between multiple revenue sources such as boosters, ticket sales, merchandise or institutional subsidy; this makes it impossible to know the amount of institutional subsidy each
The first analysis performed was the use of descriptive statistics; this analysis was conducted on all 27 years of the data to determine patterns and trends related to structural organizational change, particularly changes in athletic competitive level. This analysis provides a “big picture” or macro view of changes in athletic competitive level across the NCAA membership.

The second analysis conducted was a cumulative odds, ordered logistic regression technique which examined data from the years 1984-85, 1986-87, 1988-89, 1989-90, 1990-91, 1991-92, 1992-93, 1993-94, 1995-96, 1996-97, 1999-00, and 2000-01. While this limited range of years provides a truncated snapshot of the overall picture of organizational change in universities’ athletic programs limited to that time period, it still provided important information related to the effects of specific covariates on the probability that a school would change its competitive level. These twelve years were selected because this range contained the fewest empty cells of data. Additionally, these years contained a total of 167 instances of change in athletic competitive level by institutions; a high proportion of the total overall number of changers (42.9%). Additional studies that examine the years prior or subsequent to would likely help add to the overall understanding of this phenomenon.

athletic program receives from its university. In addition, expenses related to facilities operation and maintenance are not differentiated.

Another important consideration in assessing the reliability of the EADA data is that the figures are self-reported by each university without verification by a referee. Under such conditions it is not unreasonable to assume that each school would likely report their data in the most favorable light.
The NCAA Membership

The NCAA is the primary governing body which oversees and promotes collegiate sport in the United States. Its membership is comprised of public, private not-for-profit, and private religiously affiliated colleges and universities. There are three distinct levels in its structural hierarchy; Division I, Division II and Division III. For the purposes of this study, the levels are further delineated to account for the presence or absence of football in the athletic department of each school (see Table 2). Because football is the sport which fields the largest roster (the NCAA Division 1 roster limit for scholarships is 85, there are some schools that carry even higher numbers using non-scholarship players) it is an important characteristic of a school’s portfolio of athletic teams. There is no comparable other sport in collegiate athletics. For this reason it is important to distinguish if a school does or does not field a football team.

Table 2

<table>
<thead>
<tr>
<th>Division Level</th>
<th>Sub-Division Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division 1</td>
<td>1</td>
<td>Football Bowl Series (formerly Division 1-A)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Football Championship Series (formerly Division 1-AA)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Division 1 but plays football at Division 2 level*</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Division 1 but plays football at Division 3 level*</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Division 1 without football (formerly Division 1-AAA)</td>
</tr>
<tr>
<td>Division 2</td>
<td>6</td>
<td>Division 2 with football</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Division 2 but plays football at Division 3 level*</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Division 2 without football</td>
</tr>
<tr>
<td>Division 3</td>
<td>9</td>
<td>Division 3 with football</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Division 3 without football</td>
</tr>
</tbody>
</table>

* These sub-divisions were dropped via NCAA policy change after 1992-93
There are substantially different policy environments at each division level. Among the most important differences are the mandatory minimum numbers of teams required to be fielded, mandatory minimum inducement levels (athletic scholarships), and mandatory facility seating requirements for the so-called “revenue sports” of football and men’s basketball. Also, to field a Division I-A football team the school must have a stadium that seats 15,000 fans and be able to demonstrate that it sells out at least half of its home contests. By contrast, neither Division II nor III require that any inducements be provided to athletes. Clearly operating a Division I collegiate athletic program is a costly endeavor.

Characteristics Related to Athletically Mobile Institutions

The study examines not only whether movement upward in the athletic hierarchy is common, as predicted by neo-institutional theory, but also assesses the influence of particular characteristics of institutions and their environments on the probability that a school will alter its intensity of commitment to its sports program. Brint, Riddle and Hanneman (2006) express that it should “be possible to identify institutions that are ready for change by their underlying structural characteristics” (p.247). Brint, et al, (2006) introduced reference sets “as tools for understanding structure, identity, and aspiration” (p.229) in American universities. Measuring the differences between the current and aspiration reference sets of university presidents in hierarchical prestige structures, they were able to identify major locations of discontent. Their analysis showed that only the presidents of highly selective liberal arts colleges and major research universities were
content with their locations. This study hopes to build upon this line of inquiry and determine whether certain characteristics of universities act as “signals” related to the probability of a given school’s movement in the NCAA competitive structure.

The developmental approach in organizational ecology assumes that “organizations change structurally over time and that the form of the change is shaped by structural pressures and constraints” (Carroll, 1984:73). Structural pressures and constraints arise from external sources such as the environment and dependency on externally derived resources as well as from internally generated pressures such as size and technology (Bidwell and Kasarda, 1984). Similar to contingency theory, this approach views organizational change as adaptation based. Because a vigorous debate continues as to the degree of emphasis to be placed on internal versus external determinants of structure (Carroll, 1984) the dissertation examines a combination of both types of factors. There is an abundance of potential meaningful variables to examine, therefore the question is: what characteristics are important to consider for this type of study? The following is a discussion of the factors that this dissertation examined and important theoretical underpinnings for their selection and analysis. These characteristics were deemed important in the analysis in order to provide a meaningful examination of both institutional and environmental characteristics that might be influential in the probability that a school would elevate athletic level or add football.
Description and Operationalization of the Variables

Environmental Characteristic: Population Density

Part of the environment of an organization is the geographic area within which it resides; the significant others to which the organization must attend are often other organizations that share its’ environment. The concept of density-dependence has been used to explain issues of births, deaths and competition between organizations (Hannan and Freeman, 1987). Population density has also been found to be a predictor of increased competition (Hannan and Freeman, 1987; Tucker, Singh, Meinhard, and House, 1988). Tucker, et al, (1988) express that competition between organizations “…as a controlling factor is governed by the density of the population controlled…competition intensifies as the size of the population increases, resulting in reduced fitness on the part of some population members in relation to others” (p.128). It is expected that a discernible competition effect would manifest in higher population density districts; greater density is predicted to generate a more competitive environment which could exert stronger pressures on organizations to adopt higher status organizational forms as a signal of conformity to normative status elements. Schools in higher density districts would be expected to be more likely to adopt dominant organizational forms compared to lower density districts. Examining growth rates of organizational populations Hannan and Freeman state; “Density serves as surrogate for the difficult to observe features of the material and social environment that affect the rates, particularly competition and legitimacy. Increasing density implies depletion of resources and increasing competition for the scarce remaining resources.” (p.19). It is expected that schools in a proximal
region would be in competition with one another for resources; therefore regional density is an important covariate in this study. According to density-dependency theory, this factor predicts that higher within district density levels would result in a greater tendency to elevate athletic level in order for the school to become more competitive in the region for the resources of students and giving.

Because the NCAA membership is segmented into geographic regions of contiguous states, it is not surprising that the density of schools within the regions followed the general population density patterns in the United States. Higher density of institutions would be expected to generate higher pressures to elevate athletic status, either as a demonstration of conformity or as a means of differentiation from the pack. Districts are assigned by the NCAA and are clusters of contiguous states: District 1 includes the New England states, District 2 includes the coastal Atlantic and southern states and District 3 includes the north mid-western states, etc. Density of institutions in districts is higher in the eastern seaboard states and generally lessens with westward movement. A density variable was created to test the effects of different population densities of schools within districts on the probability of a school changing its athletic status. This variable looked at the number of competitor schools in each district and this information led to the creation of a three level variable coded thusly; 1 (High Density) = 200 or more schools in the district, 2 (Mid Density) = 100 to 199 schools in the district, and 3 (Low Density) = fewer than 100 schools in the district. Table 3 displays the proportions of all schools and changer schools within each of the eight districts.
These data display that the proportions to changer schools in general conform to the distribution of all schools across districts with the exception of districts 4 and 6. District 4 has substantially lower proportion of changers while District 6 has a substantially higher proportion of changers.
Institutional Characteristics:

Total Student Enrollment and School Wealth

This study also examines a set of institutional level factors that are considered potentially important in influencing change behavior in universities. Brint, Riddle, and Hanneman (2006) persuasively argued that certain institutional characteristics can be influential in pre-conditioning an organization to change. They reported that structural strength in enrollments and school wealth are particularly important in predisposing factors in university presidents’ decisions to act on upward mobility aspirations. Among university presidents, those labeled as *strivers* (those with upward mobility aspirations) resided in relatively advantaged circumstances; specifically from schools with larger enrollments and operating budgets. Brewer, Gates & Goldman (2002) concur, they described the importance of resources in mobility aspirations and identified the four key revenue markets as student enrollments, research funding, public fiscal support and private giving. Higher aspirations may be facilitated by greater resource levels and students are an important resource to college campuses in the tuition and fees that they pay; depending on tuition levels greater enrollments suggest greater financial resources available to fund enhancements.

Because larger schools tend to populate the Division I ranks and smaller schools tend to cluster in Division III, changes in a school’s enrollment may condition it to alter its NCAA divisional status. Enrollment size is of interest to this study due to the distinctly different mean enrollment values between the divisional levels. From a neo-institutional perspective, if a school experiences growth or retrenchment to the point that
it no longer resembles its’ divisional or sub-divisional peers, tenets of *mimetic isomorphism* (DiMaggio and Powell, 1991) would suggest that the school may be expected to alter its competitive level as a display of normative conformity. Table 4 displays the mean enrollment sizes of all schools and changer schools at each level of competition and the standard deviations.

<table>
<thead>
<tr>
<th>Sub-division</th>
<th>Mean Enrollment All Schools</th>
<th>SD All Schools</th>
<th>Mean Enrollment Changers</th>
<th>SD Changer Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division I-A</td>
<td>23208</td>
<td>10495.555</td>
<td>17821</td>
<td>17319.166</td>
</tr>
<tr>
<td>Division I-AA</td>
<td>10292</td>
<td>6913.272</td>
<td>15289</td>
<td>8897.546</td>
</tr>
<tr>
<td>Division I-AAA</td>
<td>9241</td>
<td>7208.771</td>
<td>8401</td>
<td>8704.737</td>
</tr>
<tr>
<td>Division II</td>
<td>5651</td>
<td>4751.363</td>
<td>9431</td>
<td>7608.505</td>
</tr>
<tr>
<td>Division II – no football</td>
<td>4889</td>
<td>4553.878</td>
<td>5313</td>
<td>3760.781</td>
</tr>
<tr>
<td>Division III</td>
<td>3270</td>
<td>3052.066</td>
<td>11915</td>
<td>12669.361</td>
</tr>
<tr>
<td>Division III – no football</td>
<td>3451</td>
<td>4116.926</td>
<td>5284</td>
<td>6462.937</td>
</tr>
</tbody>
</table>

These observations indicate that it is the larger schools in Divisions I-AA, II and III that are more likely to move up.

Similarly, greater endowment levels suggest greater resource levels and are suggestive of a particular wealth level for the school. Following these, this study examines student enrollment size and school wealth as conditioning factors. Because endowment values are an indicator of overall support from a variety of sources, it is suggested that this is a meaningful wealth indicator. Table 5 displays the mean endowment values and standard deviation for all schools and for changer schools.
Table 5

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Schools</td>
<td>80,900,000</td>
<td>272,000,000</td>
</tr>
<tr>
<td>Changer Schools</td>
<td>39,260,837</td>
<td>55,442,773</td>
</tr>
</tbody>
</table>

This table displays that mean endowment values for *changer* schools are substantially lower (51.5%) than the mean endowment value for all schools.

Both enrollment and endowment are coded as continuous variables in the regression analysis.

Total Male and Total Female Enrollment

The importance of the founding period in the life of an organization was first argued by Stinchcombe (1965). Although the informal sports contests between college students are difficult to detail with accuracy, what has been well recorded is the first American intercollegiate competition. Most contemporary scholars believe that this first collegiate sport contest was the crew event where the Harvard team defeated Yale on August 3rd, 1852 (Smith, 1988). This event occurred in an era when sports were considered essential to developing a sense of manhood (Camp, 1893). While sports have come to be more open to women in the decades since the passage of Title IX, there remains a perception that sport is generally a male oriented enterprise, particularly the sport of football which has no true female counterpart. In his examination of female football players, Packard (2009) discussed the deeply institutionalized gender norms these subjects had to overcome, describing the sport of football as traditionally dominated by men and synonymous with masculinity. Sports fandom is not a gender-neutral activity.
(Borer, 2009) and the world of sports is ideologically a male dominated enterprise (Messner, 2007). Crawford and Gosling (2004:481) assert that “the long-established masculine culture that surrounds many male mass spectator sports…may restrict access to these sports for many women”. This suggests that the proportion of males in the student population may be an important conditioning factor, particularly related to the sport of football; hence it is examined in this study. Greater or growing proportions of males may indicate increasing levels of masculinity in the internal environment of the campus which might signal an increasing probability that the school would add football or escalate athletic competitive level. As a corollary, a growing proportion of females in the student population would be expected to have a dampening effect on adding football or “going D-I”.

As a counterpoint to the presence of additional male students and their potential influence, this study also examined the presence of female students and the possible effect that changes in this population might have on change behavior. If increasing levels of male students are predicted to have a positive effect on the probability that a school would amplify the intensity of its commitment to sports, the opposite may be expected to occur with increasing numbers of females. To normalize the data, these factors are coded as the log transformations of the total enrollments for male and female students enrolled at the school respectively.

Tables 6 and 7 display the mean values and standard deviations for Total Male and Total Female Enrollment all schools and changer schools, respectively.
It is noteworthy that these data display that *changer* schools tend to have both larger mean total male populations and smaller mean total female populations than the general universe of schools. In addition, the standard deviation of total male enrollment at *changer* schools is much lower than at all schools (401 to 4497, respectively) indicating that it is smaller schools with comparatively larger total male enrollments that are more likely to change. Also, examining mean female enrollments, *changer* schools have slightly lower total mean female populations compared to all schools (3879 to 4566, respectively).

**Independent Division I Sports Team**

The NCAA permits member schools to field a single men’s or women’s sports team at the Division I level while the remainder of the program competes at a lower level. This is an important institutional characteristic because it must be acquired by the school through an application process; it is neither arbitrary nor effortless. The schools that have this characteristic have made a concerted effort to attain this standing. The neo-
institutional tenet of mimetic isomorphism expects that organizations will gravitate towards homogeneity of forms through the adoption of dominant organizational forms (DiMaggio and Powell, 1983). While controversy exists as to its appropriateness in the academy, Division I collegiate sports continue to be the most prestigious level of collegiate sports (Sperber, 1990, Duderstadt, 2000; Sperber, 2000; Shulman & Bowen, 2001) and could be considered the height of athletic status aspirations for many universities. Having made a partial commitment by fielding a single Division I sport, neo-institutional theory expresses that homogeneity of organizational forms suggests that the school would complete the transformation to the full Division I level.

These covariates are separate categorical variables; a “1” indicated that the school fielded an independent men’s Division I team while a “0” indicated that they did not. Similarly, a “1” indicated that the school fielded an independent women’s Division I team while a “0” indicated that they did not. Table 8 displays the proportions of these covariates in the sample.

Table 8

<table>
<thead>
<tr>
<th>Independent Division-I Team</th>
<th>Proportion of Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men’s Team</td>
<td>329/5467 (0.0602)</td>
</tr>
<tr>
<td>Women’s Team</td>
<td>94/5467 (0.0172)</td>
</tr>
</tbody>
</table>

Control Variable: Institutional Control

Each school has a categorical position as public, private or private-religious affiliation which was coded as a control variable. It is assumed that this characteristic
would not change and is therefore held constant over time and minimizing any effect on the outcome. However, implications on this variable as a conditioning factor are also merited; 54.2 percent of the sample of changer institutions were public schools and 31.1 percent were private religiously affiliated schools. The remaining 13.8 percent were private, non-religiously affiliated schools. The trends for the schools that did not change essentially displayed similar proportions; public schools being 43.5 percent with private-religious and private-non religious schools at 33.9 and 22.5 percent, respectively. Table 9 displays these trends.

Table 9

<table>
<thead>
<tr>
<th>School Type</th>
<th>Percent of All Schools</th>
<th>Percent of Changer Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>43.5</td>
<td>54.2</td>
</tr>
<tr>
<td>Private, religiously affiliated</td>
<td>33.9</td>
<td>31.1</td>
</tr>
<tr>
<td>Private</td>
<td>22.5</td>
<td>13.8</td>
</tr>
</tbody>
</table>

This covariate was coded as a categorical variable with three levels; 1 = public school, 2 = private, non-religiously affiliated school and 3 = private, religiously affiliated school. This table displays that public schools are much more likely to be changers and private-religious and private schools much less likely to be.

These covariates formed the basis for a series of hypotheses in which effects of both the institutional and environmental factors on the probability of a school changing its athletic level.
Hypotheses

Research Question #1 – Is upward movement in the athletic hierarchy common, in spite of the costs and mission drift associated with upward movement?

H₁: Schools will not be likely to change in the highly institutionalized organizational field of higher education.

H₂: Instances of change will conform to dominant organizational models in the field.

Hypotheses 1 and 2 correspond to neo-institutional tenets regarding constraints on organizational change. In highly institutionalized fields only certain courses of action are legitimated, many other are precluded, resulting in organizational inertia. Change that does occur will generally trend towards homogeneity of forms and conformity through the adoption of dominant organizational forms (DiMaggio and Powell, 1983, Meyer and Rowan, 1977, Scott, 1987). In line with this perspective, I expect that the total number of changers would be small. In addition, given the importance of status in the universe of higher education, I also expect that most schools that elect to change would move upward.

Research Question #2 – What are the characteristics of institutions that move up in the athletic hierarchy?

H₃: Schools in districts of higher population densities will be more likely to add football or elevate their competitive level.
H₄: Schools with greater wealth positions will be more likely to add football or elevate their competitive level.

H₅: Schools with greater total enrollment relative to their peer institutions will be more likely to add football or elevate their competitive level.

H₆: Schools with greater total of male enrollment will be more likely to add football or elevate their competitive level.

H₇: Schools with lower total female enrollments will be less likely to add football or elevate their competitive level.

H₈: Schools that field an independent Division I men’s sport will have a higher probability of adding football or elevating their competitive level.

H₉: Schools that field an independent Division I women’s sport will have a higher probability of adding football or elevating their competitive level.

Methods of Analysis

The data are analyzed using both descriptive statistics and an ordinal multinomial logistic regression procedure. Descriptive statistics described the basic features of the data and revealed the important patterns and trends. These patterns identified the nature of the types of change movements that occurred as well as some of the limits on changes within this population.

The cumulative odds, ordered logistic regression assessed the explanatory power of the specific covariates on the probability that a school would change its athletic competitive level. The logistic regression procedure views each level of the dependent
variable as a separate population; in this project the response variable is the probability of each school’s location in the NCAA divisional level for any given year. Observations are stratified by their status in the first year of each pair of years, and the probability that a case will be in each of the other categories relative to remaining in its origin category are analyzed using the cumulative odds ordered logit procedure. This procedure assures that the predicted probabilities sum to unity (one). Independent covariates are entered to determine if they affect the probabilities of transitions from the origin status to each of the other statuses. The cumulative odds ordered logit is a discrete choice model. For this type of model, the available choice set must meet these requirements:

1. The set must include all possibilities or alternatives. This condition stipulates that the choice must necessarily be from one of the options within the set.
   i. In the first logistic regression model (the “divisional level” analysis) the options are Division I, Division II and Division III.
   ii. In the second logistic regression model (the “sub-divisional level” analysis) the options are Sub-divisions 1 through 10.

2. The choice among alternatives is mutually exclusive such that the choice of one option means the elimination of all other choice possibilities within the set.

3. There must be a finite number of response variable alternatives within the set.
The data are pooled cross-sections (where each cross-section is a pair of adjacent years) and time-series; or, as they are sometimes called incomplete panel data. Fixed effects of institution and year are used to adjust for non-independence of cross-sections, and non-independence of the multiple observations of the same institution. Because the values of each covariate change from year to year, the model also adjusts from year to year which accounts for any pooling effect in the data.

Logistic regression is useful when the goal is binary [to predict whether an event occurs \( p(Y=1) \) or does not occur \( p(Y=0) \)]. In this model the response is limited to values ranging between 0 and 1, therefore the linear regression technique is clearly not appropriate. In the binary logit model, the predicted \( Y \) (which is a function of the probability of event occurrence or non-occurrence) is not linearly related to \( X \) (as in straight-line regression), but rather sigmoidally related to \( X \); it stipulates that values of \( Y \) may not fall below 0 or above 1 (Lee, 1992). Logistic regression linearizes the dependent by transforming it into a logit variable (which is the log of the odds of the dependent variable occurring or not occurring) and applies maximum likelihood estimation.

A cumulative logit is created which assesses the contribution of each covariate in the model; the regression coefficients correspond to multiple regression weights. The cumulative odds ordered logit model is particularly suitable for the analysis of ordinal response data (Lee, 1992) which is the case in this study. Logistic regression does not assume homoscedasticity or linearity in relationship between the predictors and the dependent, nor does it require normal distribution in the variables. It does require that all observations be independent; control variables are used to control for non-independence
of observations in the sample. The procedure produces a classification table which
assesses the predictive success of the model by displaying the significance of the
coefficients, the standard error, and the odds-ratios associated with each covariate.

Two separate analyses were conducted with respect to the “divisional” and “sub-
divisional” levels. Because in this study the response variable is a finite set of alternatives
(Y=1, 2, 3 for the “divisional” analysis and Y=1, 2, 3, 4, 5, 6, 7, 8, 9, 10 for the “sub-
divisional” analysis) the cumulative logit model is appropriately employed. The logit
model is:

\[
\text{Logit } \{ P (Y_{ij} > s \mid X_{ij}, \zeta_j) \} = \zeta_j - \mu_s + \gamma_1 \upsilon_{ij1} + \gamma_2 \upsilon_{ij2} + \beta_1 x_{ij1} + \ldots + \beta_b x_{ijb} \\
i = 1, \ldots, \text{year} \\
j = 1, \ldots, J, \text{ university} \\
s = 1, \ldots, S-1 (S = 3), \text{division} \\
\zeta_j = \sim N (0, \Psi)
\]

The cumulative logit equations for the divisional analysis are:

For Division s = 1 (Division I)

\[
\log_e \left( \frac{\theta_{ij1}}{\theta_{ij2} + \theta_{ij3}} \right) = \mu_1 + \gamma_1 \upsilon_{ij1} + \gamma_2 \upsilon_{ij2} + \beta_1 x_{ij1} + \ldots + \beta_b x_{ijb}
\]

For Division s = 2 (Division II)

\[
\log_e \left( \frac{\theta_{ij1} + \theta_{ij2}}{\theta_{ij3}} \right) = \mu_2 + \gamma_1 \upsilon_{ij1} + \gamma_2 \upsilon_{ij2} + \beta_1 x_{ij1} + \ldots + \beta_b x_{ijb}
\]
Division III is the reference category for the analysis.

Hence, the probability of being in Division I =

\[ \theta_{ij1} = \frac{e^{\mu_1 + \zeta_j + \gamma_1 v_{ij1} + \gamma_2 v_{ij2} + \beta_1 x_{ij1} + \ldots + \beta_b x_{ijb}}}{1 + e^{\mu_1 + \zeta_j + \gamma_1 v_{ij1} + \gamma_2 v_{ij2} + \beta_1 x_{ij1} + \ldots + \beta_b x_{ijb}}} \]

The probability of being in Division II =

\[ \theta_{ij2} = \frac{e^{\mu_2 + \zeta_j + \gamma_1 v_{ij1} + \gamma_2 v_{ij2} + \beta_1 x_{ij1} + \ldots + \beta_b x_{ijb}} - e^{\mu_1 + \zeta_j + \gamma_1 v_{ij1} + \gamma_2 v_{ij2} + \beta_1 x_{ij1} + \ldots + \beta_b x_{ijb}}}{(1 + e^{\mu_1 + \zeta_j + \gamma_1 v_{ij1} + \gamma_2 v_{ij2} + \beta_1 x_{ij1} + \ldots + \beta_b x_{ijb}) (1 + e^{\mu_2 + \zeta_j + \gamma_1 v_{ij1} + \gamma_2 v_{ij2} + \beta_1 x_{ij1} + \ldots + \beta_b x_{ijb}})} \]

The probability of being in Division III =

\[ \theta_{ij3} = \frac{1}{1 + e^{\mu_2 + \zeta_j + \gamma_1 v_{ij1} + \gamma_2 v_{ij2} + \beta_1 x_{ij1} + \ldots + \beta_b x_{ijb}}} \]

In the “divisional” model Division III is the reference category. This technique simultaneously calculates the predicted probabilities of outcome categories Division I and Division II relative to Division III. The model compares the coefficients of the covariates based on the probabilities of being in each division.

1. Logit coefficients:
   a. \( \mu_s \)
      i. Represents the y-intercept for Division S, where S=1, 2. So, \( \mu_1 \) represents the y-intercept for Division 1, and \( \mu_2 \) represents the y-intercept for Division 2. There is no \( \mu_3 \) because Division 3 is the reference category.
   b. \( \zeta_j \)
      i. Represents a “Random Effect Variable” which is predicted from the data. It represents a unique value for each school which orders the school relative to all other schools in the sample. It is conceptually similar to the error residual in standard multiple
regression and it represents the best linear predictor which optimizes the model fit for its respective school.

c. $\gamma_s$
   i. Represents the coefficient for the lagged variable

d. $\nu_{ij}$
   i. Represents the lagged variable for $i^{th}$ year, $j^{th}$ university where $S=1, 2.$

e. $\beta_1 x_{ij}$ represents each Coefficient and Covariate 1, etc.

Table 10

<table>
<thead>
<tr>
<th>Year (i)</th>
<th>University (j)</th>
<th>Division (Y_{ij})</th>
<th>Response Category (Corresponds to current year)</th>
<th>Lagged Variable (Corresponds to previous year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>$Y_{ij1}$ $Y_{ij2}$ $Y_{ij3}$</td>
<td>$v_{ij1}$ $v_{ij2}$</td>
</tr>
<tr>
<td>1984</td>
<td>1</td>
<td>1</td>
<td>1 0 0</td>
<td>- -</td>
</tr>
<tr>
<td>1985</td>
<td>1</td>
<td>1</td>
<td>1 0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>1986</td>
<td>1</td>
<td>2</td>
<td>0 1 0</td>
<td>0 0</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>1985</td>
<td>601</td>
<td>2</td>
<td>0 1 0</td>
<td>- -</td>
</tr>
<tr>
<td>1986</td>
<td>601</td>
<td>3</td>
<td>0 0 0</td>
<td>1 0</td>
</tr>
<tr>
<td>1987</td>
<td>601</td>
<td>2</td>
<td>0 1 0</td>
<td>0 1</td>
</tr>
</tbody>
</table>

As displayed in the fifth column (lagged variable):

$(v_{ij1}, v_{ij2}) = (0, 0)$ represents that the $j^{th}$ university was in Division I when $i-1^{th}$ year

$(v_{ij1}, v_{ij2}) = (1, 0)$ represents that the $j^{th}$ university was in Division II when $i-1^{th}$ year

$(v_{ij1}, v_{ij2}) = (0, 1)$ represents that the $j^{th}$ university was in Division III when $i-1^{th}$ year
Table 11

<table>
<thead>
<tr>
<th>Year (i)</th>
<th>Univ (j)</th>
<th>Div (Y_{ij})</th>
<th>Response Category (Corresponds to current year)</th>
<th>Lagged Variable (Corresponds to previous year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Y_{ij1} Y_{ij2} Y_{ij3} ... Y_{ij9} Y_{ij10}</td>
<td>v_{ij1} v_{ij2} v_{ij3} ... v_{ij9} v_{ij10}</td>
</tr>
<tr>
<td>1984</td>
<td>1</td>
<td>1</td>
<td>1 0 0 0 ... 0 0</td>
<td>- - - ... - -</td>
</tr>
<tr>
<td>1985</td>
<td>1</td>
<td>1</td>
<td>1 0 0 0 ... 0 0</td>
<td>1 0 0 ... 0 0</td>
</tr>
<tr>
<td>1986</td>
<td>1</td>
<td>2</td>
<td>0 1 0 0 ... 0 0</td>
<td>1 0 0 ... 0 0</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>1985</td>
<td>601</td>
<td>9</td>
<td>0 0 0 0 ... 1 0</td>
<td>- - - ... 1 0</td>
</tr>
<tr>
<td>1986</td>
<td>601</td>
<td>10</td>
<td>0 0 0 0 ... 0 1</td>
<td>0 0 0 ... 0 1</td>
</tr>
<tr>
<td>1987</td>
<td>601</td>
<td>10</td>
<td>0 0 0 0 ... 0 1</td>
<td>0 0 0 ... 0 1</td>
</tr>
</tbody>
</table>

The lagged variable coding is a longer series in this model; as displayed in the fifth column:

(v_{ij1} = 1) represents that the j_{th} university was in Sub-division 1 when i-1^{th} year

(v_{ij2} = 1) represents that the j_{th} university was in Sub-division 2 when i-1^{th} year

(v_{ij3} = 1) represents that the j_{th} university was in Sub-division 3 when i-1^{th} year

(v_{ij4} = 1) represents that the j_{th} university was in Sub-division 4 when i-1^{th} year

(v_{ij5} = 1) represents that the j_{th} university was in Sub-division 5 when i-1^{th} year

(v_{ij6} = 1) represents that the j_{th} university was in Sub-division 6 when i-1^{th} year

(v_{ij7} = 1) represents that the j_{th} university was in Sub-division 7 when i-1^{th} year

(v_{ij8} = 1) represents that the j_{th} university was in Sub-division 8 when i-1^{th} year

(v_{ij9} = 1) represents that the j_{th} university was in Sub-division 9 when i-1^{th} year

(v_{ij10} = 1) represents that the j_{th} university was in Sub-division 10 when i-1^{th} year
The results on the analyses are discussed in detail in the following Chapter 4 – Findings. Results on hypotheses 1 and 2 are discussed in terms of the descriptive statistics of the data. Results on hypotheses 3 through 9 are discussed as the results of the cumulative odds, ordered logistic regression procedure.
CHAPTER 4: FINDINGS
The findings of the analysis are discussed in two parts. The first part of the discussion is focused on the overall population dynamics of the NCAA membership related to the important trends in the data, particularly concerning areas of growth, the types and frequencies of the changes that were observed, and the overall levels of stability and change in the field. The second part is focused on the institutional and environmental characteristics that differentiated those institutions that chose to move up in the athletic hierarchy from those that did not.

### Stability vs. Change in the Organizational Field

This study examines the phenomenon of movement of NCAA schools related to their athletic competitive level. The frequency and types of movement are an important part of the data. Table 12 displays the details of all movements at the sub-divisional level; the blue area indicates upward movements and the yellow, downward movements.

#### Table 12

<table>
<thead>
<tr>
<th>Movement Detail (1978-79 to 2006-07)</th>
<th>Upward</th>
<th>Downward</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 2</td>
<td>40</td>
<td></td>
<td>45</td>
</tr>
<tr>
<td>2 to 1</td>
<td>24</td>
<td>15</td>
<td>39</td>
</tr>
<tr>
<td>3 to 1</td>
<td>13</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>4 to 1</td>
<td>21</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>5 to 1</td>
<td>11</td>
<td>8</td>
<td>31</td>
</tr>
<tr>
<td>6 to 1</td>
<td>26</td>
<td>17</td>
<td>43</td>
</tr>
<tr>
<td>7 to 1</td>
<td>26</td>
<td>17</td>
<td>43</td>
</tr>
<tr>
<td>8 to 1</td>
<td>25</td>
<td>11</td>
<td>36</td>
</tr>
<tr>
<td>9 to 1</td>
<td>15</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>10 to 1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>274</td>
<td>115</td>
<td>389</td>
</tr>
</tbody>
</table>
This table displays the origin - destination information for the movements / changes in competitive level. The subdivision level which experienced the greatest growth as a “destination” was Subdivision 2 (Division I-AA); 111 out of 389 movements (29%) were to this level with 51 movements (13%) each to the Division I-AAA (DI without football) and the Division III with football levels, respectively; 213 movements (55%) were either to or within the Division I level; 104 movements (27%) were either to or within the Division II level; and 72 movements (19%) were either to or within the Division III level. While these data do not differentiate between movements upward or downward, clearly the volume of movement displays an upward bias towards elevating to a higher competitive level or adding football.

It is notable that status hierarchies appear to exist within each of the NCAA Division levels (D-I, D-II, and D-III); these hierarchies are primarily related to the presence or absence of football. Among all changer schools, 301 out of 389 movements (77 percent) involved the sport of football. Among these “changer” schools, the sport of football was particularly advantaged in the sense that only fourteen percent of schools with this sport elected to drop it, while 30 percent of the “changer” schools added it. Another 15 percent lowered their football level but did not eliminate it, and 41 percent elevated it. The specific details of the within division movement related to football are as follows:

1. At the Division III level only six schools dropped the sport while 45 added it.
2. At the Division II level, 42 schools added or elevated football while 14 dropped or lowered it.
3. At the Division I level, 84 movements either added or elevated football while 42 movements lowered football and 24 eliminated it.

This suggests that there are hierarchically dominant organizational forms within the strata of the NCAA divisional levels and that the sport of football represents a dominant component of organizational structure; schools without it desire to add it and those with it are reluctant to discard it. More than twice as often schools enhance football rather than eliminate it; when a school does not move out of its primary division, it generally aspires to add football within its division level. These data reinforce the importance that universities place on the sport of football in their conformity to and conceptualization of legitimate organizational models within all divisional levels.

It is noteworthy that of the downward movements of schools at the Division I strata (sub-division levels 1 – 5); 66 of 70 (90%) elected to not drop out of the division; mobility from Division I tended to remain within the stratum. These data suggest that the Division I competitive level represents a symbolic status / legitimacy threshold below which these schools did not wish to fall. Aggregated to the division level the point is made even more sharply; Table 13 reveals how the volume of movement is reduced when viewed from the division level rather than subdivision level.

| Movement Detail Aggregated to the Division Level (1978-79 to 2006-07) |
|---------------------------|---------------------|---------------------|
|                           | Upward  | Downward | Totals  |
| 1 to 2                   | 0       | 2        | 2       |
| 2 to 1                   | 34      | 17       | 51      |
| 3 to 1                   | 42      | 0        | 42      |
| Totals:                  | 76      | 19       | 95      |
The volume of movement declines dramatically when viewed from the division level; only 95 of 389 movements (24%) occurred across division levels. Even at this level however, the upward bias is still present with 76 of 95 movements upward (80%) compared to 19 of 95 (21%) movements downward. The upward bias is strong across all levels.

As a proportion of overall change in the universe of institutions, changers are few. Figure 1 displays the year by year comparison of the “changers” compared to the “non-changers”. It is clear that “changers” make up a small proportion of all schools in any given year.

Figure 2 further illustrates this point as changer schools never exceed seven percent of the overall population in any given year. This provides additional support for the observation that
changing athletic competitive level is not a common action; for those schools that undertake this action it is a major undertaking. This table also displays that the longer term trend appears to show that the pace of change has diminished over time. This is noteworthy in that it is somewhat unexpected. The NCAA enacted a moratorium on schools changing level in 2005; however this was a reaction to the spike in reclassifications in the 2001-02 and 2002-03.

Figure 2

![Proportion of Changers By Year](image)

Also noteworthy is institutions’ treatment of the sport of football. Figure 3 displays the numbers of movements related to change in status with regard to football programs for all “changers” from 1978-79 to 2006-07.
Only 14 percent of the movements involved dropping football and only 15 percent of the movements lowered the competitive level of the football program, while seventy one percent of the movements either added or elevated the competitive level of the football program. These data suggest that the sport of football is another prestige / legitimacy factor which schools pay attention to. It is also noteworthy that football is the most expensive of sports for a school to operate due to the large number of players (Division I-A schools generally carry a roster of 85 players; by far the largest in collegiate sports), the large coaching staff it requires (compared to other sports), the necessary game and practice facilities, equipment costs and travel costs.

These observations support the first two hypotheses:

H₁: Schools will not be likely to change in the highly institutionalized organizational field of higher education.

H₂: Instances of change will conform to dominant organizational models in the field.
As expected, the instances of change are few as a percent of the total size of the population; with a *changers* sample size of N=389. Between 1978 and 2006, 389 changes in competitive level occurred among NCAA member schools for an average of just over fourteen *changers* per year. Over the 27-year study period the mean NCAA population was 881 members. This calculates to a mere .0147 of all schools in the membership annually that changed athletic competitive level. The rate of change in years ranged from 6.8% (.0679) of the population in 1982-83 to less than 1% (.0039) of the population in 2003-04. Thus, in no case did yearly change involve more than 6.8% of all institutions.

Figure 4

![Number of Schools Which Changed Competitive Status By Year](image)
As displayed in Figure 4, there are three important “peaks” in the data trend line; 1982-83, 1993-94 and 1999 through 2004. In 1979, the NCAA realigned the divisions establishing what was then called the Division 1-AA level (now known as the Football Championship Subdivision). Shortly following this realignment, all of the Ivy League schools as well as others took this opportunity to de-escalate their focus on their sports programs (or at least on football).

The next peak reflects another major policy change in NCAA history; after the year 1992-93 the NCAA eliminated three sub-divisional levels specifically related to the level of football competition. After this year NCAA member schools no longer had the option to play football at a lower divisional level than their main athletic program. This policy change eliminated three of the ten sub-divisional levels in the NCAA competitive structure:

1. Sub-division 3 = Division I overall while playing football at the Division II level
2. Sub-division 4 = Division I overall while playing football at the Division III level
3. Sub-division 7 = Division II overall while playing football at the Division III level

Faced with the choice to elevate their football programs or lower the overall competitive level of their entire athletic program, of the 39 schools in these sub-divisions, 38 chose to elevate their football programs rather than de-escalate their entire athletic program. This meant that Division I schools playing football at the Division II or III levels chose to elevate football to the Division I-AA (Football Championship Sub-division level) and Division II schools playing football at the Division III level brought their football programs up to the Division II level. Only one school (Santa Clara University of California) dropped its football program and no schools lowered their overall competitive division level. This observation
suggests the importance of both football and Division I status as features of the athletic program for colleges.

The reason for the policy change seems apparent; there were only 39 schools out of 860 (less than 5%) that resided in these subdivisions at the year of the change. From an organizational efficiency perspective, the need to maintain additional governance structures for such a small subset of the overall membership would seem to be costly and inefficient. This policy change provides additional support for the neo-institutional tenet of decreasing variety of organizational forms.

The last peak in the trend line (1999-2004) defined a period of generalized upward movement; schools were moving up although not specifically to the Division I level. Of the 57 movements during this period, 48 were upward. Of those 48 movements, 43 added or elevated football further reinforcing the notion of the importance of football as a core element of the athletic program. Although there was no major policy change during this last peak period, one did follow it: in 2007 the NCAA declared a four year moratorium on school reclassifications in order to study the phenomenon (Steinbach, 2007).

These results further suggest that stability rather than change is most common in this population. These findings support the neo-institutional proposition that change in highly institutionalized fields is constrained; once the organizational field and dominant organizational forms become established, change is relatively rare (Zucker, 1978). Changes that do occur would be expected to conform to existing dominant models (DiMaggio and Powell, 1983, Meyer and Rowan, 1977).
The findings reveal that the changes that did occur trended toward conformity with dominant models of organization; specifically upward movement towards Division I or the addition of football. Although movement is rare, the patterns in the movements reveal important characteristics about the types of movement that do occur. Of the total movements, 274 were upward movements and 115 were downward, a more than two to one ratio or 70.4 percent of all movements. Thus, nearly 300 schools elevated their athletic competitive level despite the economic costs and mission challenges such actions presents to their institutions. Kraatz and Zajac (1996) expressed the following neo-institutional proposition; “In a highly institutionalized organizational field, organizations are not likely to change in ways contrary to the demands of the institutional environment” (p. 814). The data suggest that schools behavior in regard to change of competitive level indicates a reluctance to leave the Division I level once there, as well an unwillingness to drop entirely or lower the competitive level of the football program. These elements suggest that a tightly proscribed environment exists in the university related to the use and treatment of athletics programs. This also suggests that there is a limited menu of normatively legitimated options that schools select from in regard to changes in athletic competitive status. The two preferred choices are clearly to elevate rather than lower competitive status overall and to add or elevate the competitive level of football despite the pursuant additional costs associated with these choices. In addition, retention of Division I status also appears to be important. For those Division I schools that chose to move downward, the vast majority elected to not drop out of the strata into Division II, but only to drop to the lowest subdivision within Division I.
Review of the data panel indicated that two dominant models exist related to universities’ use of athletic programs: movement by schools is generally either to move upward or “go Division I” or to add football. While the concept of institutional isomorphism (DiMaggio & Powell, 1983) provides an important lens for analysis, this study does not represent a direct extension or application of neo-institutional theory. Instead, this study examines whether movement or change in competitive level is conditioned by the institution’s current location in the NCAA competitive level hierarchy and other institutional and environmental level characteristics. Movements within the NCAA structure and between models may also be indicative of differential strategies employed by schools to attend to their unique, local circumstances as well.

Characteristics of Athletically Mobile Universities

A cumulative odds, ordered logistic regression analysis was conducted to test the effects of changes in each of the covariates on the probability of which NCAA level the school resides in year over year. The first analysis looked at the effects of the covariates at the primary NCAA “Division” levels (I, II, and III). These levels are aggregate since each Division level has several “sub-divisional” levels within it. Differences at the sub-divisional levels are primarily related to the intensity of the level of competition that the school engages in (years prior to 1992-93) and whether a school fields a football team or not.

Results of the analyses suggest that certain of the covariates tested may influence the probability of which division level a school will reside in year over year within the NCAA’s hierarchical structure. Comparing the results of each model using the Akaike Information
Criterion, the results of the best fitting model are displayed in Table 15. The AIC statistic measures the goodness of the model fit taking into account the number of parameters estimated in achieving the best fit. The calculation levies “penalties” as the number of parameters rises hence in effect it searches for the most parsimonious model possible. Lower values of the AIC statistic are indicative of the preferred model or in other words, the model with the fewest parameters estimated which correspondingly provides an adequate fit to the data (Everitt, 1998). Due to multicollinearity with “Total Male Enrollment”, “Grand Total Enrollment” was dropped. Covariate selection using the likelihood ratio test indicated that “Total Male Enrollment”, “End of Year Endowment Level”, and “Independent Division I Men’s Team” comprised the most parsimonious model, with Likelihood Ratio Test (LRT) statistics of 8.74, 7.97 and 3.67 respectively. Table 14 displays the central tendencies (mean and standard deviation for continuous, proportion for categorical) and LRT statistic for each of these covariates. A large likelihood ratio (greater than 10) indicates a strong effect while a small likelihood ratio (less than 1) indicates little to no effect of the covariate (McGee, 2002).

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Proportion</th>
<th>LRT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grand Total Male Enrollment</td>
<td>4082.7</td>
<td>4497.3</td>
<td></td>
<td>8.74</td>
</tr>
<tr>
<td>End of Year Endowment Value</td>
<td>$8.09 \times 10^7$</td>
<td>$2.72 \times 10^8$</td>
<td></td>
<td>7.97</td>
</tr>
<tr>
<td>Independent Men’s D-I Team</td>
<td></td>
<td></td>
<td>$329/5467 (0.06)$</td>
<td>3.67</td>
</tr>
</tbody>
</table>

Results of the logistic regression analyses on hypotheses 3-9 are displayed in Tables 15 and 16.

Hypothesis 3 states that schools residing in districts with higher population densities will be more likely to make a change in their NCAA divisional / sub-divisional status. Districts
with the lowest density levels (<100) displayed the lowest probability of movement with a coefficient of -1.344 which is significant at the $p<.01$ level and odds ratio of 0.260. Districts with the next higher density level (100-199 members) displayed a slightly higher probability of change, with a coefficient of -1.250 which is significant at the $p<.1$ level and odds ratio of 0.286. Both odds ratios are less than 1 which means that each unit increase in density (controlling for other variables) reduces the odds that an institution will move up to the next level of competition. The odds ratio for the lowest density districts is slightly lower than the odds ratio for the next highest density level districts, which indicates slightly greater odds that institutions in the next higher density districts will move up.

Hypothesis 4 states that schools with greater total enrollment will be more likely to add football or elevate their competitive level. Larger enrollments are seen as an important resource for schools in regard to the support and funding of more intense athletic programs. Due to multicollinearity with “Total Male Enrollment”, the covariate “Grand Total Enrollment” was dropped from the model, hence this hypothesis is not supportable in this study. Given the data which showed that changer schools tended to be the larger schools within their sub-divisional strata, it is somewhat surprising that total enrollment was not a significant factor. It is possible that the effects of multicollinearity with “Total Male Enrollment” confounded any effect of “Total Enrollment”, causing this result.

Hypothesis 5 states that there will be a significant positive correlation between a higher number of male students and an upward movement in NCAA divisional / sub-divisional status. Collegiate sports were founded in an era where males dominated as a proportion of students and sports are traditionally a male dominated enterprise (Messner, 2007); the
implication being that increases in male students at a college could have the effect of altering the campus environment in such a way as to make increased emphasis on athletics probable. Results of the regression support this hypothesis; the coefficient value of 2.027 displays significance at the $p < .05$ level with an odds ratio of 7.591. These results indicate that (controlling for other factors), for each one unit increase in the logarithm of Total Male Enrollment, the probability that the school will elevate its’ athletic competitive level increases by a multiplicative factor of 7.591. The odds ratio for this variable is greater than 1 which means that for each unit increase in total male enrollment increases the odds that the institution will move up in competitive level, in the case of this variable by a factor of 7.591.

Hypothesis 6 states that schools with greater total female enrollment will be less likely to add football or elevate their competitive level; with an LRT statistic of 0.21 and $p$-value of 0.6468, the covariate “Grand Total Female Enrollment” did not improve the model and hence was dropped. As a result, we concluded that this hypothesis is not supported in the analysis. Clearly in this case, female enrollment did not have an appreciable effect on the model in the same way that male enrollment did. These results may suggest that effects of male students have a stronger influence upon a campus culture that results in greater support for an amplification or intensification of an athletic program. This would be congruent with the notion that athletics and sports in general have been (and perhaps continue to be) a male-dominated activity (Messner, 2007).

Hypothesis 7 states that schools with greater wealth conditions will be more likely to elevate their NCAA divisional / sub-divisional status. School wealth is an important characteristic related to change in institutions of higher education (Brint, et al, 2006).
Wealthier schools would be expected to possess the greater resources necessary to afford the financial commitment necessary to elevate their athletic programs. Results on this covariate were surprising; the findings did not support the hypothesis. It was expected that greater wealth would indicate an increased ability to afford a move to Division I however this was not the case. These results suggest that wealth is not a prerequisite for elevating athletic level.

What is surprising is that given the evidence of the significant increase in expenses associated with upward movement in the NCAA hierarchy, school wealth is not a consequential factor; the coefficient was not significant although it did indicate a negative correlation between school wealth and upward movement. The odds ratio of .904 indicates that each unit increase of this variable reduces the odds that the school will move up in competitive level. Because more and more higher education exists within a market economy the drive for additional sources of revenue often motivates schools to “invest” in athletic programs as a vehicle tailored to this purpose (Bok, 2003; Washburn, 2005). However, viewing additional resource allocation into athletics as an “investment” is perhaps a misguided strategy given the NCAA’s own data which reveal that the “return” on the “investment” is a consistent and ever-increasing shortfall as the school ascends the NCAA hierarchical structure. Consider the case of the University of Michigan in the year 1998-99. In this particular year, the school experienced what would by all accounts have to be considered a very successful year; the football team was co-champions of the Big Ten Conference, their men’s gymnastics team won the national championship and several other teams ventured deep into post-season play. Yet in spite of this the athletics department experienced a shortfall of $3.8 million that year (Shulman and Bowen, 2001). Similarly,
Turner, Meserve and Bowen (2001) investigated the effects of changes in winning percentages in football on the giving behavior and discovered that increases in football success had no effect on general giving rates at the highest level schools (NCAA Division IA) and only a modest increase in giving at the lowest levels schools (Division III). Moreover, the increases in giving rates were mostly limited to former athletes at the lower division level. What these results may suggest is that schools which have higher wealth levels as measured by the size of their endowment funds do not feel compelled to “gamble” or perhaps “invest” in an escalation of their athletic programs to seek a potential investment return. This is an important revelation. As noted in the literature, a strong normative mythology exists which asserts that “athletics makes money” (Orszag and Orszag, 2005) and it suggests that those schools with lower wealth levels may be more likely to act on this mistaken belief and use their athletics programs as vehicles to bring in additional revenues. Phrased oppositely, one might say that schools with higher wealth levels are less likely than their poorer peers to stake their financial fortunes on an expanded emphasis on athletics. Because the expense of elevating a collegiate athletic program is significant (NCAA, 2005; Orszag and Orszag, 2005) the risk of such an investment is high and can have dramatic negative financial consequences for the school.

Hypothesis 8 states that schools fielding an independent Division I men’s team will be more likely to elevate the remainder of their sports program in NCAA divisional / sub-divisional status. The incorporation of the independent Division I sport may be interpreted as an indicator of the school’s preliminary commitment to isomorphism through the adoption of a limited version of dominant model (Division I). This would be expected to signal future
aspirations to complete the transition. The analysis of men’s sports for this covariate was significant with a regression coefficient of -1.952 and significance at \( p < .05 \). The odds ratio of 0.141 is less than one. An odds-ratio at this level indicates that each unit increase in this variable significantly reduces the odds that the school will move up. These results however do not support the hypothesis but rather indicate that schools with this institutional characteristic are less likely to complete the full transition to Division I; they display a greater probability of not fulfilling the transition. This is an important and surprising discovery. These results suggest that the experience of having a single men’s sport at the Division I level allows the school to sample the new peer group from a “safe distance” without the full commitment, allowing the school to evaluate the possible benefits of completing the full transition in advance. One interpretation of these results is that these schools’ taste of the “big time” does not confirm the mythology of the benefits and prestige normatively ascribed to the Division I level, hence they can make a more informed decision when choosing whether to complete or not complete the transition armed with the knowledge the experience provided.

Hypothesis 9 states that schools fielding an independent Division I women’s team will be more likely to elevate the remainder of their sports program in NCAA divisional / sub-divisional status; with an LRT statistic of 0.335 and \( p \)-value of 0.5627, this covariate was dropped from the model, hence this hypothesis is not supported in the analysis. This result may be considered in a similar manner as the results related to “Total Male Enrollment” and “Total Female Enrollment”. As with those covariates, the effect of the \textit{male} variable displayed an effect on the model, whereas the effect of the \textit{female} variable did not. This again
suggests that sports and athletics may be a territory that continues to be a male-oriented arena.

Table 15  Summary of Logistic Regression Analysis Predicting NCAA Divisional Level

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE</th>
<th>Wald Statistic</th>
<th>Odds ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Male Enroll (log transform)</td>
<td>2.027**</td>
<td>0.410</td>
<td>25.603</td>
<td>7.591</td>
</tr>
<tr>
<td>Independent D-I Men’s Sport (0,1)</td>
<td>-1.952**</td>
<td>0.800</td>
<td>5.953</td>
<td>0.141</td>
</tr>
<tr>
<td>End of year endowment (x100000)</td>
<td>-0.100</td>
<td>0.134</td>
<td>0.640</td>
<td>0.904</td>
</tr>
<tr>
<td>Mid Density (100-199)</td>
<td>-1.250*</td>
<td>0.703</td>
<td>3.160</td>
<td>0.286</td>
</tr>
<tr>
<td>Low Density (under 100)</td>
<td>-1.344*</td>
<td>0.642</td>
<td>4.368</td>
<td>0.260</td>
</tr>
<tr>
<td>Constant1</td>
<td>20.858**</td>
<td>4.157</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant2</td>
<td>34.68**</td>
<td>5.553</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIC</td>
<td>247.703</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .1, ** p < .05, *** p < .01

The second analysis was conducted which increased the levels of the response variable from the three primary NCAA Division levels to the ten NCAA sub-divisional levels. The results of this analysis are displayed in Table 16. Similar to the analysis of the primary divisional level, male enrollment is also a significant predictor of a school’s upward movement, although not as strongly with a regression coefficient of .216 and significance at $p < .01$ (compared to the coefficient 2.027 and $p < .05$). This confirms the results on this covariate with the first analysis, suggesting merit to the importance of this covariate.

The covariate “multi-division in a single men’s sport” was not significant with the coefficient of -0.173; however the negative coefficient remains present, confirming and adding strength to that finding of the divisional level analysis.

The district density covariate similarly retains the negative coefficients that are present in the division level analysis; and again the coefficient values are not significant. However, this
does suggest that there is merit in the results and indicating that schools in lower density
district have a lower probability that they will change their athletic status.

It appears that the effects of these important covariates are amplified at the divisional
level and diluted at the sub-divisional level. This suggests that the increase of levels in the
sub-divisional analysis may cut the data too finely. Additionally, it was clear that the
majority of overall movements occurred between the sub-divisional levels and the number of
movements was reduced dramatically when aggregated to the divisional level. This suggests
that the precursors of movement are more visible when they occur between the more macro
divisional levels as opposed to the more micro sub-divisional levels. This also suggests that
the act of a school changing division levels is of greater magnitude and consequence when
compared to the act of a school changing sub-division levels yet remaining in the same
overall division. This observation provides support for the notion that “going Division I” or
elevating divisional level is perhaps a bigger undertaking than simply adding football to the
athletic program. This would seem reasonable since the policy environments between the
division levels are where the major organizational differentiations occur; adding football is a
simpler act in the sense that the overall athletic program (and concomitant policy
environment) does not change for the school, whereas moving up in division level involves a
move to a substantially different policy environment.
Table 16  Summary of Logistic Regression Analysis Predicting NCAA Sub-divisional Level

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE</th>
<th>Wald Statistic</th>
<th>Odds ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Male Enroll (log transform)</td>
<td>.216*</td>
<td>0.134</td>
<td>5.712</td>
<td>1.241</td>
</tr>
<tr>
<td>Independent D-I Men’s Sport (0,1)</td>
<td>-0.173</td>
<td>0.397</td>
<td>0.313</td>
<td>0.841</td>
</tr>
<tr>
<td>End of year endowment (x100000)</td>
<td>0.087</td>
<td>0.062</td>
<td>1.392</td>
<td>1.09</td>
</tr>
<tr>
<td>Mid Density (100-199)</td>
<td>-0.039</td>
<td>0.275</td>
<td>0.656</td>
<td>0.961</td>
</tr>
<tr>
<td>Low Density (under 100)</td>
<td>-0.031</td>
<td>0.286</td>
<td>0.864</td>
<td>0.969</td>
</tr>
<tr>
<td>Constant1</td>
<td>7.324***</td>
<td>1.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant2</td>
<td>19.17***</td>
<td>2.261</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant3</td>
<td>28.346***</td>
<td>2.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant4</td>
<td>31.328***</td>
<td>2.661</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant5</td>
<td>38.32***</td>
<td>2.755</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant6</td>
<td>45.164***</td>
<td>2.906</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant7</td>
<td>49.264***</td>
<td>2.972</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant8</td>
<td>51.926***</td>
<td>3.018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant9</td>
<td>60.747***</td>
<td>3.188</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AIC</td>
<td>870.296</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p<.01, ** p < .05, *** p < .01

The results of the descriptive statistics revealed clear patterns in the data which are very helpful in understanding the types of movements that occur in university athletic programs. It is clear that change in athletic level is not common as indicated by the small number of changes that occurred over the period studied. The strong upward bias in movements reflects that universities place great value on the Division I level of competition and the sport of football. In addition, the fact that few schools vacated the Division I level even when they moved downward further supports this finding.

The cumulative odds, ordered logistic regression revealed that several of the covariates were influential on the probability of a school making a change in its athletic competitive level. Noteworthy covariates included total male enrollment, endowment level, independent Division I men’s sports team, and density of schools in the district. The differences between the divisional level analysis and the sub-divisional analysis displayed that the effects of these
covariates were much less at the sub-divisional level which may be an indication that the sub-divisional analysis cut the data too finely. Conclusions on these findings and implications for future research and theory follow in Chapter 5.
CHAPTER 5: CONCLUSIONS AND IMPLICATIONS
Major Findings

The purpose of this study is to analyze the types of changes that occur related to universities’ uses of their athletic programs, as well as to understand particular characteristics of universities that may be influential in predicting the probability that a school is preconditioned to change its athletic competitive level. This project also fills an important void in the literature on collegiate athletics as one of the initial studies to apply a lens rooted in neo-institutional theory to provide an explanation for what is viewed by some as controversial organizational behavior by universities. This is significant since Kraatz and Zajac (1996) assert “the ‘new institutionalism’ has emerged as a dominant theory of organization-environment relations” (p. 812) and others have affirmed the considerable impact that this tradition has had on the study and understanding of organizational behavior (DiMaggio and Powell, 1991; Davis and Powell, 1992). The work in the body of literature on this field has primarily focused on the empirical effects of athletic programs on the university with an implicit assumption that the behavior of universities and colleges in regard to their treatment of athletic programs is functional – rational (see Orszag and Orszag, 2005; Turner, Meserve and Bowen, 2003). This study hopes to help establish the new institutionalism as an important lens with which to study organizational change in universities related to their athletic programs.

The study tested two hypotheses which tested neo-institutional propositions of constraints on organizational change and six hypotheses which tested specific institutional and environmental characteristics which were expected to predispose universities towards organizational change. It extends the literature on collegiate sports through the examination
of the types of organizational changes that occur in university athletic program and the assessment of the influence of specific institutional and environment level factors on the probability of these changes occurring. This study is the first to address this question this way. This question of change related to universities’ use of their athletic programs is contemporary and as yet no literature exists on the topic. The ramifications of such change are important, so much so that the NCAA voluntarily instituted a moratorium on such change in 2005. A detailed examination and inventory of the instances and the types of change that have occurred over the past three decades is a major contribution of this study.

Among the most important findings of this study are firstly that movements related to athletic programs are quite uncommon or rare and secondly that movements which do occur display a very strong upward bias. A general understanding holds that Division I athletics are perceived as the most prestigious level of collegiate competition, and that football is also a status factor for those colleges that have it. This study confirms that both Division I athletic programs and the sport of football are important elements of organizational structure to American universities, so much so that these two organizational forms should be considered dominant based on the trends in the types of movements that occurred. The strong upward movement and addition of football biases in the types of changes observed suggest that athletic programs contain important status elements for schools, and that schools understand that there are dominant models of organization in the field related to these components of athletics organization. Yet in spite of the importance of these components, movement related to athletic programs overall is not rampant among universities, in fact quite the opposite; stability is much more common. It is a major finding of this study that change in the field of
collegiate sports is relatively rare. As would be predicted within tenets of neo-institutional theory, the data reveal that stability in athletic location in the NCAA hierarchy is the rule and that change is uncommon. The instances of changers over a twenty seven year period were few relative to non-changers; the preponderance of schools in this population did not exhibit change over time. The changes that did occur strongly trended towards two directions: moving up in the NCAA hierarchy or adding football. This finding gives credence to the conclusion that these should be interpreted as dominant organizational forms within this population. Of the changes that did occur, 301 out of the 389 (or 77 percent) involved the sport of football. Additionally, this sport was particularly advantaged; only 29 percent of changer schools lowered their level of or dropped their football programs compared to the 71 percent of changer schools that either elevated their football level or added the sport.

The results of this study confirm two important neo-institutional tenets of organizational change: first, change is both limited and constrained by elements of the environment (DiMaggio and Powell, 1991) and second, that changes that do occur would be isomorphic transitions to dominant organizational models (DiMaggio and Powell, 1983). The data are clear that some of the schools in the population displayed movement and that those that did generally elevated their athletic programs or added football; they represented a small percent of the overall population. This result suggests that there may be particular conditioning factors that predispose certain schools to respond in the ways described. A discussion of the conditioning factors found to be important follows.

The essence of masculinity as normatively imbued in the enterprise of sports is also suggested by this study. Schools with higher proportions of male enrollments compared with
their female enrollments were significantly more likely to elevate their athletic programs. This may indicate that male students contribute a growing influence on the environment of a school that leads to or supports greater emphasis on sports in general. This finding supports the notions of male domination in the world of sports (Crawford and Gosling, 2004; Messner, 2007; Borer, 2009).

The characteristic of a school fielding a single Division I men’s sports team significantly reduced the probability that a school would fully elevate its sports program. This finding is quite unexpected; the concept of institutional isomorphism would predict that schools which have taken a first step towards elevating their program would be more likely to complete the transition. That the full transition is not completed, and in fact is actually less likely to occur suggests that those schools which have experienced a small “taste” of the effects of Division I athletics on their schools do not choose to complete the transition. One interpretation of this phenomenon is that the negative effects of the commercialized model of collegiate sports may be experienced by the school even with only a single sport competing at the Division I level. The negative effects associated with commercialized collegiate athletics are well documented and often highly visible locally and nationally. Exposure to such negative effects may have a conditioning effect on the school; the experience may serve to discourage the school from making the full transition. An alternate explanation is that the experience allows the school to make a more informed decision related to making the full transition; perhaps the positive effects generally associated with higher levels of athletic competition are not realized by the school leading it to assess the benefits of making the full transition more judiciously.
Although not statistically significant, the regression model displayed a negative effect of school endowment value on the probability of change in both analyses. Essentially, those schools with higher endowment levels and hence, stronger overall financial standing were less likely to elevate their programs than those with weaker financial positions. This is another unexpected finding. Greater financial strength would be predicted to positively condition a school to make a play for Division I status; this would be expected due to the significant additional expenses required to make the upward movement. For this covariate to be negatively correlated suggests that some schools in poorer financial positions may subscribe to the positive normative myths related to collegiate athletics; such as that it makes money for the school through increased student applicants, alumni and private giving and higher levels of media exposure (see Orszag and Orszag, 2005) and may pursue Division I sports as a vehicle to improve their school’s financial bottom line.

As expected, higher density in the population of schools within each district was found to be influential in predicting the probability of movement by schools. The effect was significant at the divisional level but not at the sub-divisional level. This effect supports aspects of density dependency theory which correlates higher density populations with increased competitive pressures; competitive pressures for resources would be expected to influence schools to move up to position themselves as viable players in the game, so to speak, which this finding confirms.

Finally, the preponderance of schools that did change tended to be either public schools or private religious affiliated schools at 54.2 percent and 31.1 percent, respectively. Private non-religious schools displayed the fewest instances of change. This suggests that private
non-religious schools have the most stable identities and as such do not find it necessary to utilize their athletic programs to further or enhance institutional identity or status. This further suggests that public schools and private religious schools have less “built in” prestige and as such they are more likely to view sports as a prestige factor and to use them as a status vehicle.

Limitations of the Study

This project was limited to schools which are (or were) members of the NCAA during the years studied. While the NCAA is the most visible and the highest profile governance organization for collegiate athletics, it is not the only one. The National Association of Intercollegiate Athletics (NAIA) is another organization in the same field although its membership largely consists of smaller private religiously affiliated colleges and universities. The study also did not look at junior colleges which are an additional subset of higher education institutions that typically have athletic programs. Junior colleges are governed by the National Junior College Athletic Association (NJCAA); an organization which has several hundred members and a divisional structure very similar to the NCAA.

While the exclusion of schools from these organizations reduced the population of the study examined, it also served to more clearly define and focus the sample. Because the NCAA is the dominant organization and leader in collegiate athletics governance it seemed the most appropriate organization from which to select members for the study.

Another critical aspect of the NCAA membership is that in addition to its divisional structure it is also subdivided into conferences. The NCAA conference structure segments
member institutions into smaller units of (generally) eight to twelve schools. Although conferences typically link members within geographic zones, the reach of a conference may include schools from non-contiguous states. What is also important to understand about the NCAA conference structure is that each individual conference membership is limited to schools that compete at the same divisional or sub-divisional level. In other words, a single conference will only have members from a single divisional or sub-divisional level. For example, the PAC-10 Conference membership is comprised of only Division I-A teams; while the Big West Conference membership is limited to Division I-AAA teams (for a discussion of the specific differences in divisions, please see Appendix A). The boundaries of these conferences overlap (as is typical if one examines the national collegiate athletic conference landscape) therefore both have member schools from the state of California.

While conference affiliation is not an essential criterion for NCAA membership, the conference structure provides its member schools with a set of consistent competitors each season. This association (or perhaps correctly called a peer network) of consistent competitors provides stability to its members year over year and also lends itself to the winnowing process of champion selection; the winners of each conference typically proceed into postseason play against the winners of other conferences. While a school may still join the NCAA as an independent member (no conference affiliation), instances of this are rare. Because each conference is also nested within the NCAA divisional structure, its absence from this analysis is unproblematic. Every conference is associated with a single specific level in the NCAA divisional / sub-divisional hierarchy; therefore any movement (and the
One important limitation of this study was that data on year over year athletic expenditures by schools was unobtainable. These data are not readily available and are in fact very difficult to acquire. Perhaps due to personal experience, Thelin (1996) asserts that these data are among the mostly closely guarded of all secrets by university athletic departments. Schools may be unwilling to divulge detailed information on athletic expenditures for a variety of reasons; they may not want their competitors to know the details related to which areas resources are being focused for fear of losing a competitive advantage or perhaps they simply do not wish to divulge the true picture of their finances in order to not reveal the extent of their university subsidy or financial deficits.

Implications for future research

As previously mentioned, longitudinal data on the finances of collegiate athletics would provide additional opportunities for deeper and richer analyses of these programs and facilitate further insight into how athletic department finances affect organizational changes related to athletics. The compilation of such a database would be time intensive and the ability to obtain the data is questionable given the paucity of current availability.

Other significant challenges related to this data collection are the untangling of the athletic department’s finances from the remainder of the university. The intermingling of athletic department finances with other parts of the university is often complex; the physical facilities maintenance unit frequently provides the utilities, maintenance and custodial
services for athletic facilities and often absorbs these costs within that department (Zimbalist, 1999). Other direct and indirect costs such as debt service, capital improvements, and salaries are frequently covered by other departments making it particularly difficult to unravel these expenses in a detailed and clear fashion (Zimbalist, 1999; Sperber, 2000; Knight Foundation, 2001; Shulman and Bowen, 2001). Moreover, Zimbalist (1999) additionally detailed athletic departments’ propensity to transfer recruitment costs to the admissions department, sports facility construction and maintenance costs to the physical plant, and costs of scholarships to the financial aid department.

The difficulty of clarity in the financial accounting of collegiate athletics departments is not news; at the Knight Foundation Commission on Intercollegiate Athletics in fall of 2004 a panel of experts testified and declared that “determining how much colleges really spend on sports may be impossible” (Suggs, 2004). The panelists unanimously agreed that due to the “idiosyncratic and opaque methods” by which each college measured athletic expenditures, a uniform method of comparison between institutions was “unachievable” (Suggs, 2004).

In addition to these challenges, probably the most difficult item to account for is the activity of athletic department boosters. These individuals tend to be members of the local business community who use university athletics as a business development vehicle for their personal interests and entertainment. Boosters regularly provide resources and / or gifts to athletes and athletic departments that are often “unreportable” because their provision violates NCAA and university policies (Sperber, 1990; Thelin, 1996; Sack & Staurowsky, 1998). Some examples include “make-work” jobs for athletes, automobiles, and even plain
cash. These kinds of gifts are necessarily kept clandestine as their discovery would likely result in sanctions against the school by the NCAA.

These examples illustrate the challenges associated with the collection of authentic athletic financial data and unfortunately suggest that this research extension may not be achievable.

While this study has opened up some important windows into the types of change that occur related to university athletic programs, it serves as a potential launching point for even deeper studies. Another potentially rich strand of research would involve a series of ethnographic case studies of changer schools from multiple levels of the NCAA divisional / sub-divisional strata. Because the data reveal that changer schools exist across all levels of the NCAA structure, it suggests that there are meaningful characteristics that influence change among this population and that these characteristics may be different at each strata of the NCAA structural hierarchy. Are the characteristics which influence change at the Division III level different from the characteristics that influence change at other divisional or sub-divisional levels? Examinations of the unique circumstances of each individual changer school at the times at and leading up to the moment of the change decisions could provide a much more thorough and detailed understanding of the effects of specific conditions in each school’s internal and local environment on the change movement decision and the type of change undertaken. Qualitative interviews with campus leaders, administrators, faculty and possibly students could shed light on the culture, attitude, and general mind-set of the campus and the overall conversations related to the role or profile of the athletic program at that university. Important questions are related to the perceived value
of the athletic program to the overall university, and the perceived or expected benefits that the change in athletic levels would deliver. The details of these conversations in the period of time leading up to the change could reveal important information about the decision to undertake the change. Due to the nature of the data, this macro level study is not capable of generating this important level of understanding.

Implications for Theory

The results of this study provide support for two important neo-institutional tenets of organizational change; firstly, change in organizations is highly constrained and secondly, change that does occur conforms to dominant models of organization within the field. The small number of changers in the population and the limited types of change that occurred confirm these aspects of theory.

While the statistical analysis was not significant, the density dependency notion that higher population density leads to a more competitive environment was also supported; schools in higher density districts were slightly more likely to engage in movement.

Through the examination of organizational and environmental level characteristics, this study was also concerned with discovering those variables that provide impetus for organizational change without consideration of the role of campus leadership. It is clear that this is an important additional strand that deserves inquiry. Because “going D-I” may be thought of as prestige seeking behavior on the part of universities (Bok, 2003. Brewer, et al, 2002), campus leaders’ perceptions of the institutional status and prestige of their universities (i.e., university rankings / ratings) is meaningful to analyze. Campus leaders such as
chancellors and presidents are important actors that possess the ability to influence organizational direction and strategic choices. Acting in their leadership roles, it seems reasonable to believe that university presidents might exercise some of the extensive powers at their command to move their respective institutions in the directions which they desire, such as taking their athletic program to the Division I level. Brint, Riddle and Hanneman (2006) created a strong template for the examination of levels of discontent among university leaders through an analysis of the institutions that each leader selected as current reference and future aspiration sets. They discovered that only those located at research universities and highly selective liberal arts colleges reported contentment with their institution’s location in the prestige hierarchy of the universe of higher education and that university presidents at certain categories of schools were more likely to have mobility aspirations. It is likely that mobility aspirations among university presidents play a role in the probability of a school “going D-I”. Such a measurement of presidents’ aspirations related to movement in athletic level would be expected to be quite revealing and informative. It would also present an opportunity to refine elements of institutional and neo-institutional theory and test Perrow’s argument that organizations may be appropriately considered as tools to be used by their leaders. A study which married the components of leadership aspiration with institutional and environmental characteristics would likely provide a fuller and more robust picture of this phenomenon.
Organizational Mobility

This study represents only a beginning point from which to launch further analyses of organizational change involving universities’ uses of their athletic departments. One contribution of this project is that it has provided support for the Old Institutionalism and Neo-institutional theory as a helpful framework for understanding. The theoretical framework used in this study was reasonably successful in the interpretation of the change behaviors observed suggesting that its use may prove to be fruitful for future research.

Both the institutional and neo-institutional theories of organization are primarily focused on analysis of the effects of the external environment of and on organizations. This concentration may leave undiscovered and unstudied aspects related to the effects of institutional level characteristics of organizations.

This study has also opened up a conversation for a potential new line of theory; organizational mobility theory. The results of this study suggest that characteristics of organizations at both environmental and institutional levels may have important implications or effects on organizational change behavior. As revealed, elements of organizations such as the makeup of its population, the density of the local population of competitors, and organizational wealth levels may have significant effects on behavior related to organizational change. There are likely many additional factors not examined in the project that could be found to be similarly influential.

Both the institutional and neo-institutional perspectives view organizations as influenced by their internal and external environments, a seminal notion of organizational mobility holds that organizations are influenced to move or change in certain ways that are in part driven by
both aspects of their environments and their own institutional characteristics. Parameters of mobility are expected to be set by the given organizational field, and congruent with the neo-institutional perspective, likely to be constrained. Prestige and status levels within an organizational field are critical elements of organizational mobility; congruent with the results of this study it is presumed that organizations generally strive to be upwardly mobile.

There are important questions to answer for this fledgling notion to become true theory however. For example; this study indicated that schools with higher wealth levels were less likely to change their athletic competitive status. Interpretation of this behavior could be that higher wealth schools already reside at the highest levels of the athletic structure and therefore do not need to change. Another important explanation may be that their wealth is invested in other high status components (such as medical schools, law schools, high status research faculty, etc.) such that it is unnecessary to also invest in amplification of their athletic programs. This suggests that there may be multiple status hierarchies within which American universities can reside, either simultaneously or separately. Some schools may desire membership in the prestigious Association of American Universities (AAU) and focus their efforts and resources on building up the graduate education and research components of their schools. For many schools and for any of a number of reasons, AAU membership may status not be within the realm of the possible; such schools may choose to pursue other status markers, such as NCAA Division I membership.

The notion of organizational mobility extends beyond neo-institutional notions of mimetic isomorphism driven by uncertainty (DiMaggio and Powell, 1991). Rather, it suggests that organizations pursue goals that may be driven by organizational aspirations,
institutional and environmental level characteristics and perhaps also desired or existing peer networks; these goals manifest in the form of changes in organizational structure. Further research into this area could result in the mining of a potentially rich theoretical territory.
References:


Appendix A – Description of NCAA Division and Sub-division Levels

The multi-division structure was established in 1973 at the NCAA’s first Special Convention, held at the Hyatt Regency Hotel in Chicago Illinois August 6 and 7. One of the primary agenda items for this convention was the proposal to divide the membership into three divisions (I, II, and III) for both competitive and legislative purposes. Prior to this re-organization the NCAA membership was divided into two categories labeled “University” and “College” which were roughly equivalent to Division I and Divisions II and III, respectively. It was in this same convention which created the multi-division classification system that the NCAA developed the policy which permitted schools which reside in Divisions II and III to have a single men’s or women’s sport compete at the Division I level.

The NCAA makes available on their website (www.NCAA.org) a document titled, “What’s the difference between Divisions I, II and III?” The document offers a concise synopsis of the major variations between the categories dated February 1, 2007. The following is the text of this document at copied directly from the NCAA’s website:
What's the difference between Divisions I, II and III?

Division I

Division I member institutions have to sponsor at least seven sports for men and seven for women (or six for men and eight for women) with two team sports for each gender. Each playing season has to be represented by each gender as well. There are contest and participant minimums for each sport, as well as scheduling criteria. For sports other than football and basketball, Division I schools must play 100 percent of the minimum number of contests against Division I opponents -- anything over the minimum number of games has to be 50 percent Division I. Men's and women's basketball teams have to play all but two games against Division I teams; for men, they must play one-third of all their contests in the home arena. Schools that have football are classified as Football Bowl Subdivision (formerly Division I-A) or NCAA Football Championship Subdivision (formerly Division I-AA). Football Bowl Subdivision schools are usually fairly elaborate programs. Football Bowl Subdivision teams have to meet minimum attendance requirements (average 15,000 people in actual or paid attendance per home game), which must be met once in a rolling two-year period. NCAA Football Championship Subdivision teams do not need to meet minimum attendance requirements. Division I schools must meet minimum financial aid awards for their athletics program, and there are maximum financial aid awards for each sport that a Division I school cannot exceed.

Division II

Division II institutions have to sponsor at least five sports for men and five for women, (or four for men and six for women), with two team sports for each gender, and each playing season represented by each gender. There are contest and participant minimums for each sport, as well as scheduling criteria -- football and men's and women's basketball teams must play at least 50 percent of their games against Division II or Football Bowl Subdivision (formerly Division I-A) or Football Championship Subdivision (formerly Division I-AA) opponents. For sports other than football and basketball there are no scheduling requirements. There are not attendance requirements for football, or arena game requirements for basketball. There are maximum financial aid awards for each sport that a Division II school must not exceed. Division II teams usually feature a number of local or in-state student-athletes. Many Division II student-athletes pay for school through a combination of scholarship money, grants, student loans and employment earnings. Division II athletics programs are financed in the institution's budget like other academic departments on campus. Traditional rivalries with regional institutions dominate schedules of many Division II athletics programs.

Division III

Division III institutions have to sponsor at least five sports for men and five for women, with two team sports for each gender, and each playing season represented by each gender. There are
minimum contest and participant minimums for each sport. Division III athletics features student-athletes who receive no financial aid related to their athletic ability and athletic departments are staffed and funded like any other department in the university. Division III athletics departments place special importance on the impact of athletics on the participants rather than on the spectators. The student-athlete's experience is of paramount concern. Division III athletics encourages participation by maximizing the number and variety of athletics opportunities available to students, placing primary emphasis on regional in-season and conference competition.

February 1, 2007
Appendix B – NCAA Geographical Districts

District 1: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

District 2: Delaware, New Jersey, New York, Pennsylvania, Puerto Rico, West Virginia

District 3: Alabama, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Virginia

District 4: Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin

District 5: Iowa, Kansas, Missouri, Nebraska, North Dakota, Oklahoma, South Dakota

District 6: Arkansas, New Mexico, Texas

District 7: Arizona, Colorado, Idaho, Montana, Utah, Wyoming

District 8: Alaska, California, Hawaii, Nevada, Oregon, Washington