Economics Group



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The Economics of College Football: Season II

College Football Has Come a Long Way Since 1869

With fall rapidly approaching, the opening kickoff to the 2019 season is upon us. The action begins with two special "Week Zero" matchups, as the University of Miami and the University of Florida square off in Orlando and Arizona travels to Honolulu to take on Hawaii. Most teams begin play the following week on August 31, although there will be 24 Football Ball Subdivision (FBS) matchups on the Thursday and Friday leading up to the traditional Week One kickoff Saturday. We will preview a selected matchup each week, including a brief history of the teams on the gridiron, as well as an analysis and forecast of the respective economies of each school's state and hometown.

College football is back.

This season marks the 150th anniversary of college football, which had its genesis in a November 6, 1869 matchup between Princeton and Rutgers, where the play resembled something closer to a mix of tackle soccer and rugby than modern day football. In the early days, the game was dominated by elite private universities in the Northeast, with Columbia, Yale and Stevens Institute of Technology soon joining the action. A meeting in New York City in 1873 attempted to standardize and codify the rules of the game, marking the first step towards the modern day NCAA. Walter Camp—considered one of fathers of American football—was the driving force behind several innovations, including the 11-man roster, line of scrimmage and snap from center to quarterback.

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College football soon expanded geographically, mirroring the economic development and industrialization unfolding at the turn of the century across the United States. In the Midwest, Michigan, the University of Chicago, Northwestern and Minnesota all started programs while the game eventually spread out West, with Southern Cal playing St. Vincent's in 1889. The game quickly spread to the South, where in 1895 it is believed that the first forward pass occurred in a game between Georgia and North Carolina. Concern about on-field fatalities got the White House involved, with President Teddy Roosevelt insisting on higher safety standards. The Intercollegiate Athletic Association, the predecessor to the NCAA, was formed as a result in 1906.

Figure 1

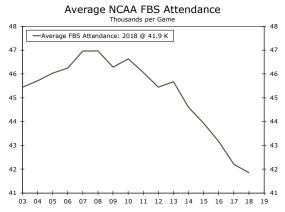
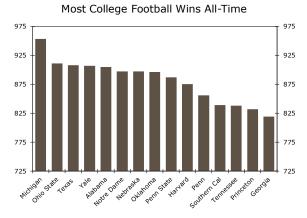


Figure 2



Source: NCAA and Wells Fargo Securities

Together we'll go far



The center of gravity soon began to shift to large, public schools in the South and Midwest.

Since its humble beginnings at elite schools in the Northeast, the center of gravity for college football began to gradually shift towards larger, public schools, mostly in the South and Midwest. Alabama's 1926 Rose Bowl victory over Washington, which has since been dubbed the "game that changed the South", marked a major turning point, and it was not long before football rose to its ascendant status as the most popular spectator sport across the region. The "South's Oldest Rivalry", between the University of Virginia and the University of North Carolina, is the second most played matchup in FBS history at 123 games, trailing only Wisconsin and Minnesota at 128 games. The "Deep South's Oldest Rivalry", on the other hand, is between Georgia and Auburn. Georgia has played Auburn every year that it has played football, including the first matchup which took place in Atlanta's Piedmont Park in 1892.

Outside of the FBS, Lafayette and Lehigh have played an astounding 154 times, dating back to 1884. The majority of the oldest rivalries, however, are between Northeastern schools, reflecting its early dominance. The growing popularity of professional football from the 1950s onwards likely took some national attention away from the college game, but with a relative lack of professional franchises across the South, the regional infatuation with college football only increased. Today the college game remains as popular as ever across the South, captivating fans year round.

Challenges and Opportunities for the College Game

Today college football faces some challenges. Attendance at FBS games fell last year to the lowest level since 1996, and has fallen for eight of the last ten years. The rising number of game telecasts each week and the affordability and convenience of watching on TV—at home or at a restaurant or bar—have diminished the relative attractiveness of in-person attendance. The ACC Network is kicking off coverage this season, joining the SEC Network (launched in 2015), Pac-12 Network (2012) and Big Ten Network (2007) as channels dedicated to a single conference. These are in addition to regular broadcasts on ESPN, ESPN2, ABC, FOX, CBS and myriad mobile viewing options.

The plethora of viewing options is a fairly recent innovation. The University of Georgia and the University of Oklahoma sued the NCAA back in the early 1980s, arguing that the individual universities and not the NCAA owned the rights to televise their games. The Supreme Court ruled in the universities' favor, with Justice John Paul Stevens noting that the NCAA's system was insensitive to viewer preferences. Under the prior system, there were one or two games televised each week, typically with a national game and a second regional game later in the day. In the year prior to the Supreme Court ruling only 89 games were broadcast; in the year after the ruling more than 200 were broadcast.

One of the downsides of the increase in televised games is that schools have had to adjust their start times to meet the needs of the networks. This has often meant that games start earlier in the day or have been shifted to nighttime, both of which have made it difficult for fans to attend the game. Many universities are located in small towns, with limited hotel options, which means fans must get up early or drive home very late for a game, which has taken a toll on attendance.

The expansion of conferences has also tended to reduce attendance for non-conference games. Many of the Power 5 conference schools strive to have at least six home games, which is challenging for schools that have long-time non-conference rivalry games, such as Florida-Florida State, Michigan-Notre Dame or Georgia-Georgia Tech. One result is that many schools have had to drop some long-time rivalry games in order to ensure they have six home games. Georgia dropped Clemson from their regular schedule and Florida dropped Miami, for example. These rivalries were replaced with one-off games, typically against smaller universities looking for a big payday and increased exposure by playing in front of a much larger audience.

The rise of these so-called 'cupcake' games, when Power 5 teams play mid-majors, are something of a win-win for both programs—the mid-major usually gets a seven-figure payout and the major conference team gets an easy win—but not necessarily for the fans, as the prospect of a 90-degree noon kickoff for a blowout is not likely to entice many to choose to come to the stadium

The rise of digital offerings has taken a toll on attendance.

over a comfortable air-conditioned spot on the sofa. Occasionally, however, these games provide some of the sport's greatest upsets, such as when 45-point underdog Howard beat UNLV 43-40 in 2017, after receiving a \$600,000 payout from its FBS opponent. And of course, football fans will not soon forget that #5 Michigan paid \$400,000 for the privilege of losing to a Football Championship Subdivision (FCS) opponent Appalachian State in front of 109,208 fans on their home turf in Ann Arbor. That 2007 matchup marked the first time an FCS team beat an FBS opponent, sent Michigan from top-five to unranked in a single week and caused the Associated Press to change its polling policy to allow FCS teams to be eligible for the top-25. Appalachian State also soon moved their program to the FBS.

Figure 3

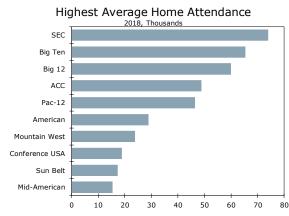
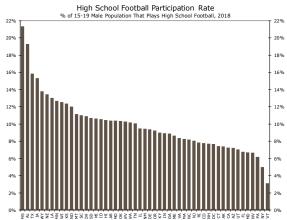


Figure 4



Source: NCAA, National Federation of State High School Associations, U.S. Department of Commerce and Wells Fargo Securities

The falloff in attendance is adding to concerns over the future of the game, as participation at the high school level is also falling. Nationwide, the number of teenagers donning shoulder pads for their high school fell 2% last year to 1,037,000, according to the National Federation of State High School Associations. Thirty-nine states saw participation drop, and overall it is down 6.5% since its peak in 2010. Track & field passed football as the most popular high school sport in 2017. Concerns about injuries and the high costs of operating a program relative to other sports is also contributing to the slide in participation, as are the nation's changing demographics.

Despite all the challenges, football continues to dominate the airwaves. Eight of the ten most watched programs in the United States in 2018 were professional or college football games, while NBC's Sunday Night Football has been the number one program on television for the past eight years. Last year's College Football Playoff was watched by 25.2 million viewers, which may have been even higher if not for the blowout nature of Clemson's 44-16 victory over Alabama. Ratings across the 'New Year's Six'—the major FBS bowl games (Rose, Sugar, Orange, Cotton, Peach and Fiesta)—were up 8% compared to the year prior.

Looking ahead to this season, fans looking for variety may be dismayed to see that Clemson and Alabama again occupy the top two sports in the Associated Press pre-season rankings, followed by Georgia, Oklahoma and Ohio State. Aside from the top five, other programs generating a great deal of preseason buzz include LSU, Notre Dame, Texas and Washington.

Last year our series covered schools from 18 different states; to view any of those reports, please click <u>here</u>. This year we will write about teams from 26 states. Our coverage begins with an intrastate Florida matchup between the Florida Gators and the Miami Hurricanes, before heading up to the Piedmont for the battle of the Carolinas. We will also cover Historically Black Colleges and Universities—with key matchups between Tuskegee and Morehouse and Prairie View A&M and Grambling State—and a matchup between perennial FCS powers North Dakota State and South Dakota State, who begin the year ranked #1 and #3. We end the year with a preview of the

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conference championships and the Army-Navy game a week later. Please see below for a full schedule.

Figure 5

WFS Economics College Football Schedule							
Week o	8/24/2019	Miami	vs.	Florida	Orlando, FL		
Week 1	8/31/2019	Auburn	vs.	Oregon	Dallas, TX		
Week 1	8/31/2019	South Carolina	vs.	North Carolina	Charlotte, NC		
Week 2	9/7/2019	Stanford	@	Southern Cal	Los Angeles, CA		
Week 3	9/14/2019	Maryland	@	Temple	Philadelphia, PA		
Week 4	9/21/2019	Notre Dame	@	Georgia	Athens, GA		
Week 5	9/28/2019	Ohio State	@	Nebraska	Lincoln, NE		
Week 5	9/28/2019	Prairie View A&M	vs.	Grambling State	Dallas, TX		
Week 6	10/5/2019	Iowa	@	Michigan	Ann Arbor, MI		
Week 7	10/12/2019	Washington State	@	Arizona State	Tempe, AZ		
Week 7	10/12/2019	Washington	@	Arizona	Tuscon, AZ		
Week 7	10/12/2019	Tuskegee	vs.	Morehouse	Columbus, GA		
Week 8	10/19/2019	Georgia Tech	@	Miami	Miami, FL		
Week 9	10/26/2019	Texas	@	TCU	Fort Worth, TX		
Week 9	10/26/2019	South Dakota State	@	North Dakota State	Fargo, ND		
Week 10	11/2/2019	Georgia	vs.	Florida	Jacksonville, FL		
Week 11	11/9/2019	LSU	@	Alabama	Tuscaloosa, AL		
Week 12	11/16/2019	Yale	@	Princeton	Princeton, NJ		
Week 13	11/23/2019	Penn State	@	Ohio State	Columbus, OH		
Week 14	11/30/2019	Wisconsin	@	Minnesota	Minneapolis, MN		
Championships	12/7/2019						
Special	12/14/2019	Army	vs.	Navy	Philadelphia, PA		

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