

Economics Group

Special Commentary

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Army—Navy

Pageantry and Prestige in Philadelphia

After last weekend’s whirlwind of conference championship games and the announcement of the four teams selected to the College Football Playoff, this weekend the spotlight rests solely on the 120th meeting of Army and Navy. The annual matchup of the nation’s oldest service academies generally gets a weekend of its own, typically the second Saturday in December, before the ever-growing slate of bowl games kicks off.

**Army—Navy
stands alone
this weekend.**

The game returns to Lincoln Financial Field in Philadelphia, roughly halfway between the schools, which has hosted 88 of the 119 matchups since 1890. The matchup has also been played at various historic stadiums across the country—Franklin Field (still the home of University of Pennsylvania football today) and Veterans Stadium in Philadelphia; the home fields of the universities; Polo Grounds and Yankee Stadium in New York; Municipal Stadium, M&T Bank Stadium and FedExField in Maryland; Giants Stadium and Osbourne Field in New Jersey; Soldier Field in Chicago; and the Rose Bowl in Pasadena. It will return to Lincoln Financial in 2020 and 2022, but in 2021 it will be at MetLife Stadium in East Rutherford, New Jersey, as a tribute to the 20-year anniversary of the 9/11 attacks.

The game is rich with traditions. Before kickoff there is a “prisoner exchange,” when seven West Point cadets and seven Naval Academy midshipmen who had been part of the Service Academy Exchange Program are swapped and get to sit with their own school to watch the game. Moreover, *all* the cadets and midshipmen march across the field before kickoff in a display of discipline before taking their seats for the hotly contested fight. The rivalry ends, however, with the final whistle—no matter the outcome, the players join their opponents to “honor the fallen” by singing the alma maters of *both* schools, in an act of supreme sportsmanship, solidarity and recognition of their shared ultimate mission.

Figure 1



Figure 2



Source: NCAA, CNA, Defense Manpower Data Center and Wells Fargo Securities

Together we’ll go far



The President often attends, but makes sure not to show any favoritism among the branches he oversees, by spending half the game on the Navy side and half the game on the Army side. President Dwight D. Eisenhower holds the distinction of the only President to have also played in the Army-Navy game (his football career ended after a knee injury sustained trying to tackle Jim Thorpe). On Saturday, President Trump will be in attendance for the third time as Commander-in-Chief, continuing his recent tour of major sporting events, including Game 5 of the 2019 World Series in Washington, D.C., #1 LSU vs. #2 Alabama in Tuscaloosa and UFC 244 at Madison Square Garden. At stake each year is the Commander-in-Chief's Trophy, awarded to Army, Navy or Air Force, based on which has the best record against the other two. The Air Force Academy currently holds the trophy, but its rivalries are perhaps not quite as strong as Army-Navy, given it was only founded in 1954 (compared to 1802 for West Point and 1845 for the Naval Academy), and is much farther geographically, in Colorado Springs, Colorado.

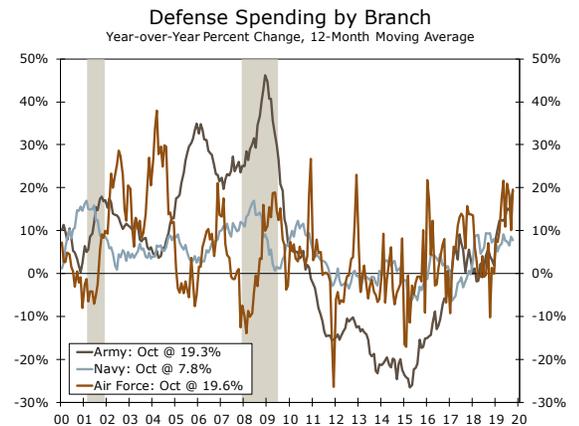
Both teams were major powerhouses.

Many of the early meetings, when both teams were college football powers, had major implications for national standings. The 1926 matchup in particular stands out, marking the dedication of what was then called Municipal Grant Park Stadium in Chicago as Soldier Field, in honor of World War I veterans. There were over 110,000 in attendance and many more listening to one of the first radio broadcasts of a sporting event. The end result—a 21-21 tie—secured the national championship for Navy, a title that was made possible by a peculiar twist of fate. In the audience that day in Chicago was legendary Notre Dame coach Knute Rockne, who was so confident in his team's prospects versus tiny Carnegie Tech that same day that he chose to skip the game, which saw the 5-to-1 underdogs punish the Fighting Irish for their head coach's hubris, handing them their only loss of the season.

Figure 3



Figure 4



Source: U.S. Department of the Treasury and Wells Fargo Securities

The 1944 and 1945 games were both #1 vs #2. And while the U.S. military certainly had bigger things on its mind in 1944, the results of the game in Baltimore did not go unnoticed. Before the game, Army coach Earl Blaik read a telegram to his team from former West Point Superintendent Robert Eichelburger, then serving in the Pacific theatre, which commanded them to “Win for all the soldiers scattered throughout the world.” The Cadets went on to win 23-7, securing their third national championship. After the game, West Point alumnus and former Superintendent Douglas MacArthur, who had fulfilled his promise to return to the Philippines earlier that year, took the time to send a telegraph from the other side of the world, reading “The greatest of all Army teams—STOP—We have stopped to war to celebrate your magnificent success. MacArthur.” Two weeks later the Germans launched the Battle of Bulge, the third deadliest campaign of World War II for the United States.

Academy alumni paid attention to the game even while serving overseas.

Athletics at the Academies

Army’s five national titles—1914, 1916, 1944, 1945 and 1946—reflected to a large extent the higher volume of young men flowing through the Academy during wartime, as well as the relative scarcity of able-bodied men at other major programs. Still, even in peacetime, the academies were powerhouses in the early years of college football. This eventually changed, as the center of gravity of the game moved away from small private universities in the Northeast to larger universities in the Midwest and South, many with surging athletic budgets. The academies must also face the hurdles of required active duty service after graduation (generally five years), no redshirt seasons and things as quirky as height and weight requirements (the ideal dimensions of a fighter pilot are not exactly the same of those of an offensive tackle).

Army’s last national title was in 1946.

Admission into the academies is also highly competitive and requires a nomination from a member of Congress. Regarding the possibility of a professional athletic career, the Defense Department has gone back and forth, with Secretary James Mattis opposing a policy from the Obama administration that allowed deferment of military service for academy athletes who are drafted by a professional sports league. Current Secretary Mark Esper, however, brought it back with a memo in November of this year after President Trump directed him to allow athletes to compete professionally immediately after graduation.

With or without the policy, several men have served their country and gone on to play in the NFL. Most famously, Roger Staubach won the Heisman Trophy and led the Midshipmen to the national championship game in 1963, and then served in Vietnam before debuting as a Dallas Cowboy in 1969 as a 27-year old rookie. He eventually led America’s team to five Super Bowls and two victories. Alejandro Villanueva, currently a starting offensive lineman for the Pittsburgh Steelers, served in Afghanistan after graduating from West Point. Pat Tillman, of course, went the opposite route, enlisting in the Army after a multiyear career with the Arizona Cardinals, before paying the ultimate price in Afghanistan.

West Point

Officially known as the United State Military Academy at West Point, the U.S. Army’s service academy is the oldest continuously occupied military post in the nation, located on a strategically elevated position, considered by George Washington to be the single most important in America, above the Hudson River, 50 miles from Manhattan.

West Point is at a strategic location 50 miles from New York City.

Figure 5

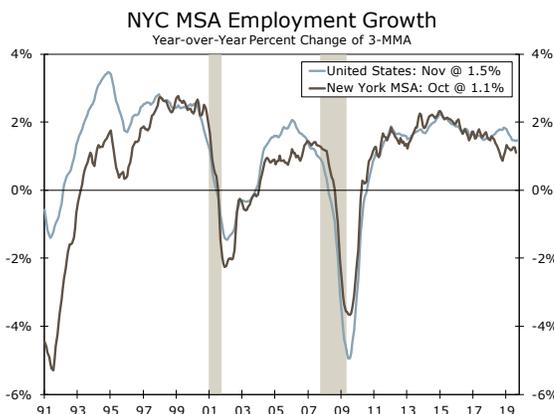
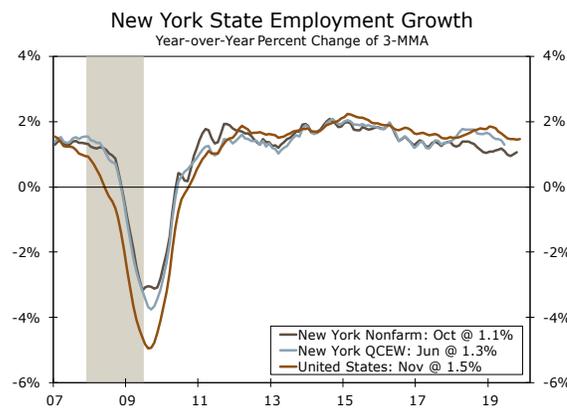


Figure 6



Source: U.S. Department of Labor and Wells Fargo Securities

West Point is located in Orange County, which recently was reclassified by the U.S. Office of Management and Budget (OMB) from the New York-Newark-Jersey City Metropolitan Statistical Area (MSA) to the Poughkeepsie-Newburgh-Middletown MSA, which was just created in the most

85.8% of the U.S. population lives in an MSA.

recent OMB Bulletin in September 2018. We talk about MSAs extensively, but how are they actually defined?

MSAs have at least one urban area with a population of 50,000 or more, based on U.S. Census Bureau data, plus “adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties.” There are 384 MSAs in the United States, as well as 542 Micropolitan Statistical Areas, which have a similar definition but a threshold of more than 10,000 and less than 50,000 for the urban core. For context, 85.8% of the U.S. population lives in an MSA, and 94.3% lives in either an MSA or a Micropolitan Statistical Area, all of which are composed of whole counties. Of the 3,142 counties in the United States, 1,840 are in an MSA or Micropolitan Statistical Area, meaning the remaining 1,302 are therefore effectively considered ‘rural.’

Always emphasizing discipline and honorable conduct, West Point has moved beyond its early emphasis on civil engineering training and today offers 36 majors for its approximately 4,000 students. Alumni, who together form the “Long Gray Line,” include Buzz Aldrin; Presidents Dwight D. Eisenhower and Ulysses S. Grant; Civil War generals Stonewall Jackson, Robert E. Lee, George Pickett, William Tecumseh Sherman; Duke basketball coach Mike Krzyewski; World War II generals Douglas MacArthur, George Patton; and recent high-ranking administration officials Stanley McChrystal, David Petraeus, H.R. McMaster and Mike Pompeo.

With a goal of “Every cadet an athlete,” athletics and physical preparedness are highly important at West Point, where every cadet must participate in a NCAA, club or intramural sport. The NCAA football program is one of six FBS football programs that are independent—along with BYU, Liberty, New Mexico State, Notre Dame and UMass—and has produced three Heisman Trophy winners (Doc Blanchard in 1945, Glenn Davis in 1946 and Pete Dawkins in 1958). Of note, Vince Lombardi and Bill Parcells were both on the football coaching staff at one point. All other Army sports compete in the Patriot League.

Statewide, New York payrolls are rising 1.1% per year, and the unemployment rate is 4.0%.

Naval Academy

The U.S. Naval Academy is located in Annapolis, Maryland, on the Chesapeake Bay about 30 miles northeast of Washington, D.C. and 30 miles south of Baltimore. Its location in a relatively secluded small town was chosen to save midshipmen from “the temptations and distraction that necessarily connect with a large and populous city,” but today Anne Arundel County is part of the Baltimore-Columbia Towson MSA, indicating “a high degree of social and economic integration with the core,” as mentioned above.

The Naval Academy lies roughly halfway between Washington, D.C. and Baltimore.

Figure 7

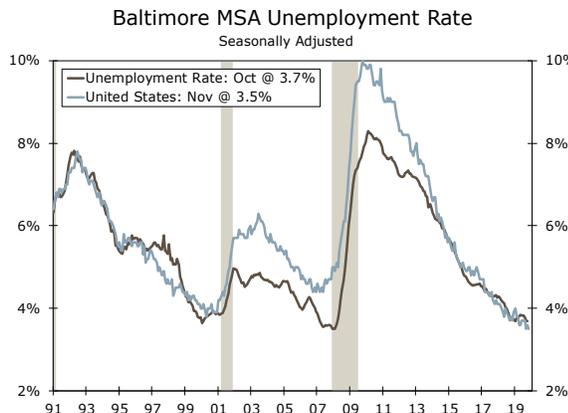
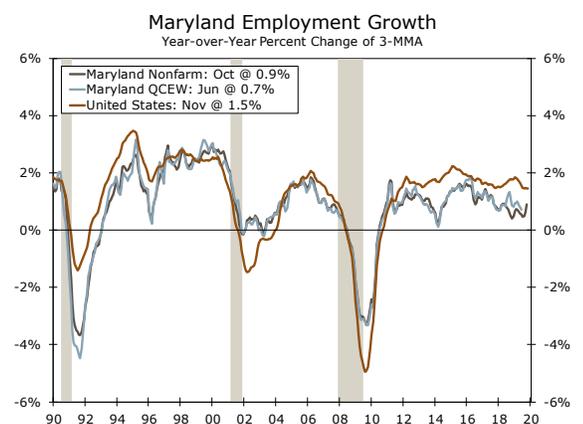


Figure 8



Source: U.S. Department of Labor and Wells Fargo Securities

The original Naval Academy curriculum included math, navigation, gunnery, steam and chemistry, but today there are 25 majors for the 4,000 students. Famous alumni include President Jimmy Carter, Senator John McCain, Ross Perot, Roger Staubach and Montel Williams.

The football team currently plays in the American Athletic Conference, and has one national championship from 1926. The 1910 team had its own unique accomplishment, allowing 0 points all year, with an aggregate score across nine games of 99-0 (their victory over Army that year was a 3-0 barnburner).

Maryland nonfarm employment has risen 0.9% this past year and the unemployment rate is 3.7%.

The Regional Economic Impact of the Military

The military has a major impact on the economy. As of June 2019, there were 1,111,541 enlisted U.S. military members, and many more who work for an array of defense contractors and support industries. If you expand defense personnel to include active duty, civilian, National Guard and Reserve, the number (for fiscal year 2017) rises to 2,530,000, with a total payroll of \$135.3 billion. There are more than 420 major military installations across all 50 states, not to mention dozens more overseas.

Defense spending is also fairly volatile, dependent on state and federal government budgets—including showdowns over budget caps, sequestrations and debt ceilings—exogenous shocks and long-term base realignment. Based on data revised in March 2019, Department of Defense spending on contracts and payroll in fiscal year 2017 was \$407 billion, which is 2.3% of GDP or \$1,500 per resident. The impact varies widely by region, however.

Defense spending can broadly be broken down into contract spending and personnel spending. Some states, such as North Carolina, rank highly for personnel spending but not for contract spending, with differences arising due to the distribution of bases (high personnel spending) vs high-tech research and manufacturing facilities (high contract spending). Localized data can be hard to tabulate, but individual states are increasingly commissioning reports to study the local impact of military spending. For example, a 2015 report found that the defense industry accounts for 10% of economic activity and 540,000 jobs in North Carolina, which has the third largest military population in the nation (Fort Bragg in Fayetteville is the largest base by population in the country, with over 50,000 active duty troops).

Defense spending is a major driver of the economy of certain regions.

Defense spending can be broken down into contract spending and personnel spending.

Figure 9

| Total Defense Spending in Billions, FY-2017 | |
|---|--------|
| California | \$49.0 |
| Virginia | \$46.2 |
| Texas | \$37.7 |
| Maryland | \$21.1 |
| Florida | \$19.2 |
| Washington | \$15.2 |
| Connecticut | \$15.0 |
| Georgia | \$13.2 |
| Pennsylvania | \$12.1 |
| Alabama | \$10.9 |

Figure 10

| Total Defense Spending, % of State GDP, FY-2017 | |
|---|------|
| Virginia | 8.9% |
| Hawaii | 7.3% |
| Connecticut | 5.6% |
| Alaska | 5.5% |
| Maryland | 5.3% |
| Alabama | 5.1% |
| DC | 4.5% |
| Mississippi | 4.2% |
| Maine | 4.1% |
| Kentucky | 4.0% |

Source: U.S. Department of Defense Office of Economic Adjustment and Wells Fargo Securities

California and Virginia rank high for both personnel and contract spending, as the large military presence is complemented by the huge shipyards that build aircraft carriers and other ships. Fairfax County, Virginia and San Diego County, California are the only two in the country that rank in the top-ten for both personnel and contract spending. The top counties for defense personnel spending,

California and Virginia rank high for both personnel and contract defense spending.

in order, are San Diego County, CA; Honolulu County, HI; Bexar County, TX; Cumberland County, NC; El Paso County, CO; and Norfolk City, VA.

The top counties for defense contract spending—which tend to be in major metro areas with research clusters rather than just the home of a large military installation—are Fairfax County, VA; Tarrant County, TX; San Diego County, CA; King County, WA; St. Louis County, MO; and New London County, CT. The top defenses contractors in fiscal year 2017 were Lockheed Martin (\$30.5 billion), Boeing (\$22.0 billion), General Dynamics (\$13.5 billion), Raytheon (\$11.8 billion) and Northrop Grumman (\$11.5 billion).

This week the leaders of the House and Senate Armed Services Committees announced an agreement on the 2020 National Defense Authorization Act, setting a topline spending target of \$738 billion for 2020, which included the creation of a Space Force. It is unclear whether the Space Force will get its own academy.

Back to Football

The series has been fairly balanced overall—Navy leads 60-52-7—but there have been a few strings of dominance. Most recently Navy won 14 games in a row from 2003 to 2015, but Army has turned the tables and won the past three.

Army coach Jeff Monken has helped to get the Black Knights back on track, also reaching three straight bowl games after just one winning season in the 17 years before he took over. This year Army is only 5-7, but they took #7 Michigan to double overtime in Ann Arbor in Week 2. One reason for the renewed success has been a slight loosening of admissions standards and the growing role of the United States Military Academy Prep School (USMAPS). Academy prep schools were originally an avenue for candidates who would otherwise struggle to transition to the academic and discipline requirements of the schools, but they have also aided the recruitment of higher caliber athletes. This year, 60% of Army's roster went to USMAPS, which can function as a de facto redshirt year.

#23 Navy is 9-2. Both Army and Navy run similar triple-option offenses, and rank first and second in the nation for rushing offense (Navy at 361 yards per game and Army at 312 yards per game). Navy's ground game is so strong that quarterback Malcolm Petty has the sixth most *rushing* yards in the country (1,500 yards and 19 touchdowns), and he has tacked on 1,027 yards and six scores through the air.

Army's leading rusher is also their quarterback, but they have a balanced ground game, with rushers of 706, 637, 555, 484, 387 and 373 yards this season. Quarterback Kelvin Hopkins Jr. has only thrown for 570 yards all season, suggesting some play action may be effective on Saturday, when Navy is favored by ten points.

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