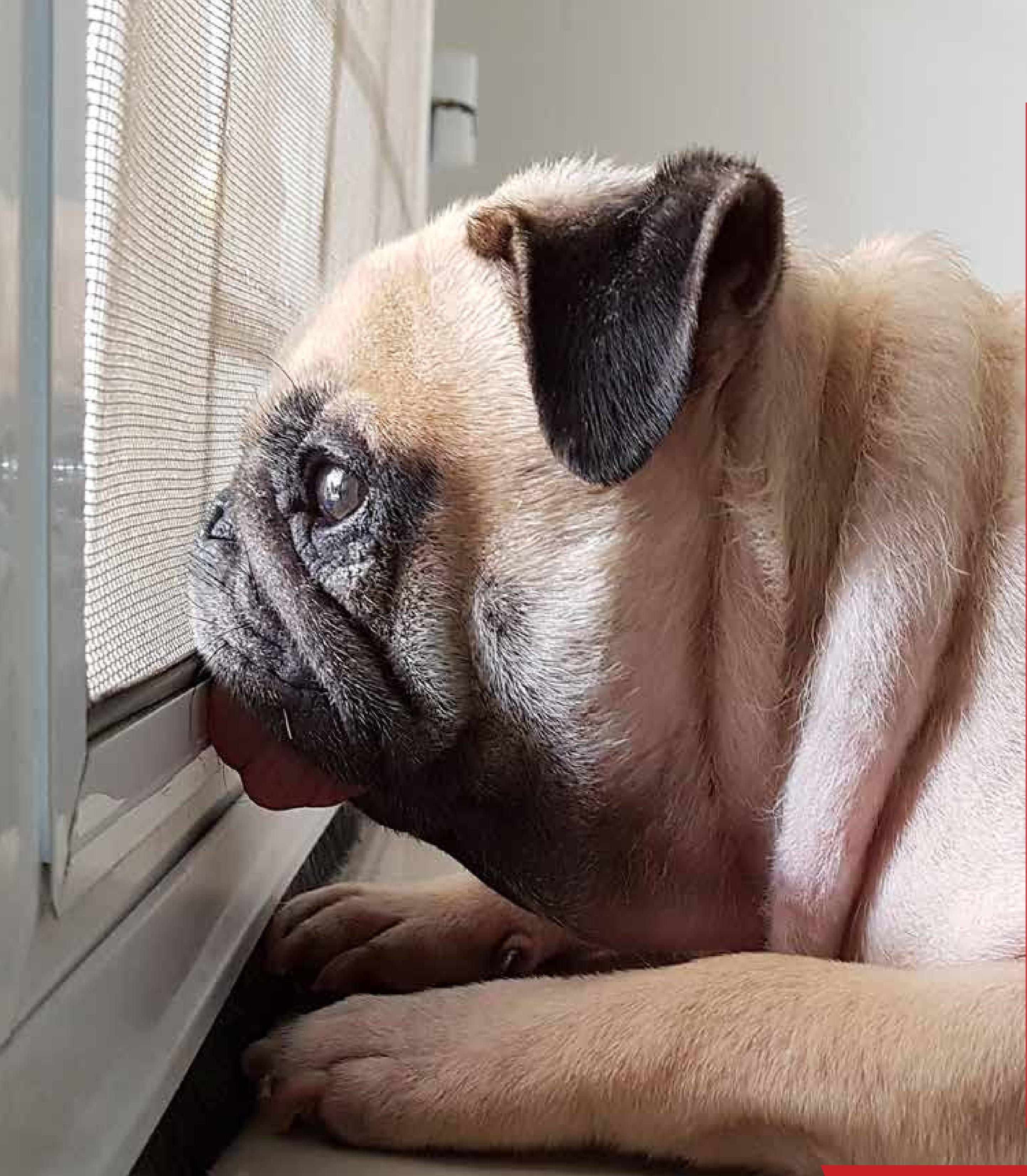
WAITING FOR GODOT? VIRGINIA IMPATIENTLY ANTICIPATES THE END OF SEQUESTRATION

Budget sequestration is a procedure in United States law that limits the size of the federal budget.

– Wikipedia, in a classic understatement insofar as Virginia is concerned



A decade after the Great Recession, economic growth in the Commonwealth remains tepid. For six consecutive years, the real (after inflation) economic growth of Virginia's economy trailed that of the United States. In two of these years, our state's economic growth was negative, meaning the Virginia economy contracted. There has been real economic growth in 2017, but it once again will be less than that of the nation.

The reasons for this underperformance are numerous: a dependence on federal spending, lackluster job creation among small and medium-sized enterprises, less than optimal development strategies and constraints on local governments. At the same time, Virginia has become an expensive place to pursue a public higher education degree, must deal with an opioid crisis and is burdened by several regions whose traditional economic bases have eroded substantially.

Some disagreement exists on the condition of Virginia's economy. Is our economic glass half full or half empty? No one believes we are amid an economic boom, but some point with enthusiasm to the Commonwealth's job growth, competitive business environment, thriving port and attractive location as harbingers of a much brighter future. To others, however, Virginia is a state exhibiting mediocre or worse economic performance; suffering from unnecessarily burdensome taxes and regulations; and experiencing an outmigration of younger workers.[1] Both views contain kernels of truth. Reconciling these discordant views is a task we undertake in this chapter.

The economic data reveal a mixture of good and bad news. Economic growth decelerated in 2016, but picked up in 2017. Virginia's unemployment rate has fallen, its labor force has expanded and earnings have risen. On the other hand, our labor force participation rate remains low when compared to prior to the Great Recession – increasing numbers of people no longer are actively seeking employment. Job creation by small and medium-sized firms has fallen, raising questions about Virginia's efforts to encourage and sustain new businesses.

Making sense of conflicting economic news is difficult. It is much easier to cherry-pick one statistic to trumpet on Twitter, cable TV or the internet. However, this would provide a deceptive view of what is a much more complicated economic situation. The task of this chapter is to make sense of this jumble of seemingly contradictory data.

Disappointing Economic Growth Rates

Gross domestic product (GDP) is the headline measure of economic performance in the United States and the Commonwealth. It places a dollar amount on the value of all the goods and services we produce. While no measure of economic activity is perfect, and GDP does not count nonmarket activities such as barter, misses portions of the "gig economy" and does not place a value on household production, it is the most commonly used benchmark of the value of overall economic activity. In order not to be deceived by price inflation, however, we focus on real (price-adjusted) GDP.

1 Gregory S. Schneider, "In their final debate for Va. Governor, Northam and Gillespie spar over records, economy, taxes." *The Washington Post* (Oct. 10, 2017).

Let's examine Graph 1. The Commonwealth's real GDP growth in 2016 was only 0.6 percent, well below the somewhat weak performance of the entire United States economy at 1.6 percent. There are, however, glimmers of good news in these numbers. Economic activity picked up in the second half of 2016 and Virginia now has had three consecutive quarters with growth at or above 1.5 percent. The national economy is accelerating, with 3.1 and 3 percent growth in the second and third quarters of 2017, respectively.[2] The question is whether Virginia will pick up the pace or continue to fall behind.

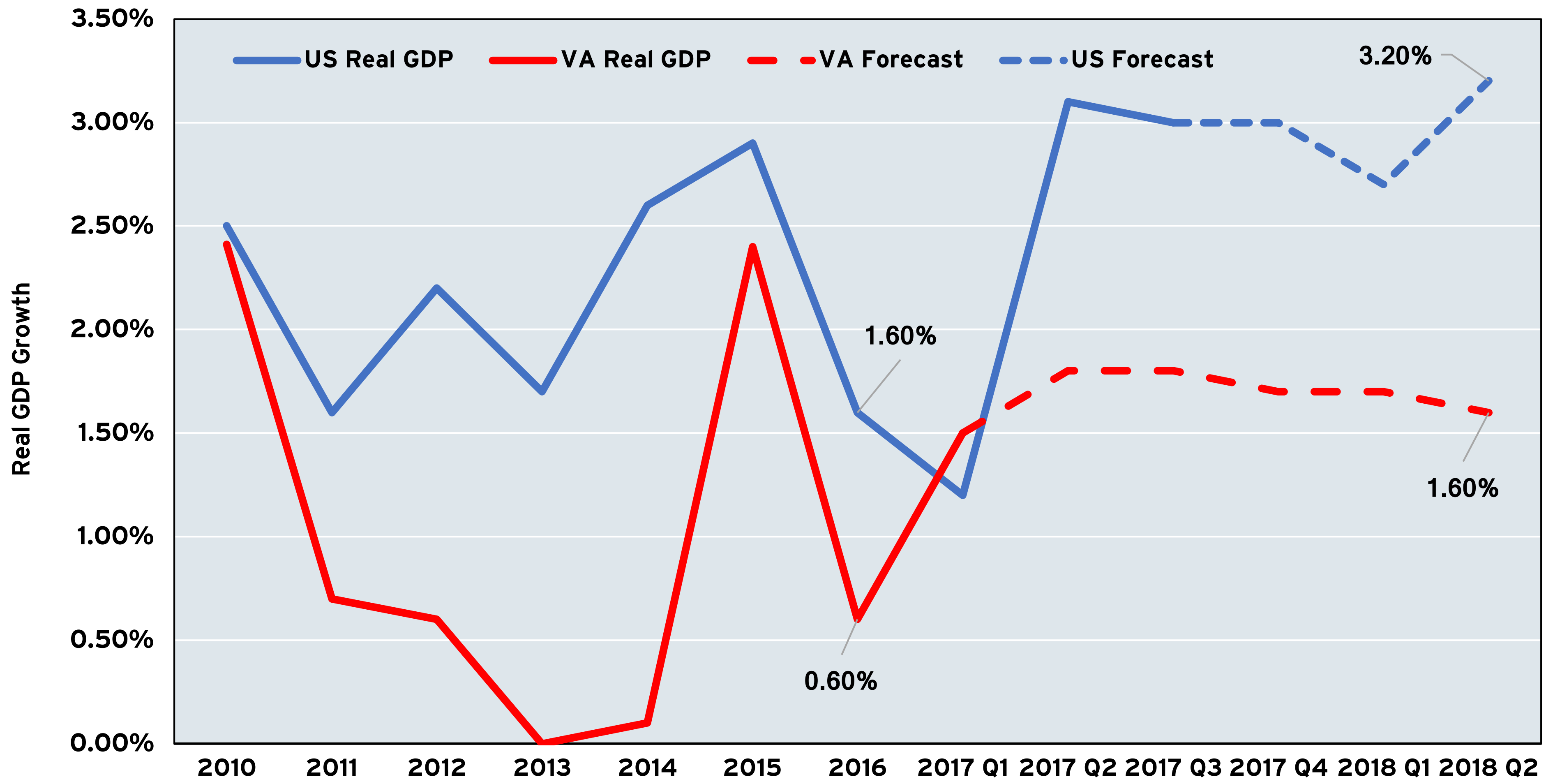
Our estimate for economic growth for 2017 is 1.8 percent, which would represent an increase in economic activity from 2016. However, we will grow more slowly than our historical average and more slowly than the United States. If our forecasts are reasonably accurate, however, then this would represent the first consecutive years of real GDP growth above 1 percent for Virginia since 2005-2006.

What is behind Virginia's lethargic economic performance? An obvious culprit is the recent stagnation in federal government spending in Virginia. The federal government accounts for almost 30 percent of state GDP[3] and therefore constant or declining federal spending is problematic. In fiscal year 2015 (FY 2015), Virginia was first among states in annual federal spending per capita ($17,502), annual per capita spending on federal contracts ($5,819) and annual per capita defense spending ($6,324). Virginia was also one of three states with annual total federal salaries and wages above $20 billion, the other two being Texas and California.[4]

2 Bureau of Economic Analysis, National Income and Product Accounts, Gross Domestic Product: Third Quarter 2017 (advance estimate).
3 The Council on State Governments (2017). "Federal Spending in the States" http://knowledgecenter.csg.org/kc/system/files/2017_CFFR_Report_3.pdf.
4 Office of Economic Adjustment (2017). "Defense Spending by State: Fiscal Year 2015" www.oea.gov/resource/defense-spending-state-fiscal-year-2015.

GRAPH 1

UNITED STATES AND VIRGINIA ACTUAL AND FORECASTED REAL GDP, 2010-2018 Q2



Sources: Bureau of Economic Analysis and the Center for Economic Analysis and Policy at Old Dominion University

Graph 2 shows the decline in the total dollar volume of federal contracts and Department of Defense (DOD) contracts in Virginia between FY 2008 and FY 2016. Total federal contracts in Virginia fell 7.8 percent over this period, from $54.8 billion in FY 2008 to $50.6 billion in FY 2016.[5] The total dollar volume of DOD contracts was down 21.1 percent over the same period. Not only have contract awards fallen, but also the number of active-duty military personnel in Virginia declined by 25.5 percent over a similar period – from 119,950 in September 2008 to 89,333 in June 2017.[6]

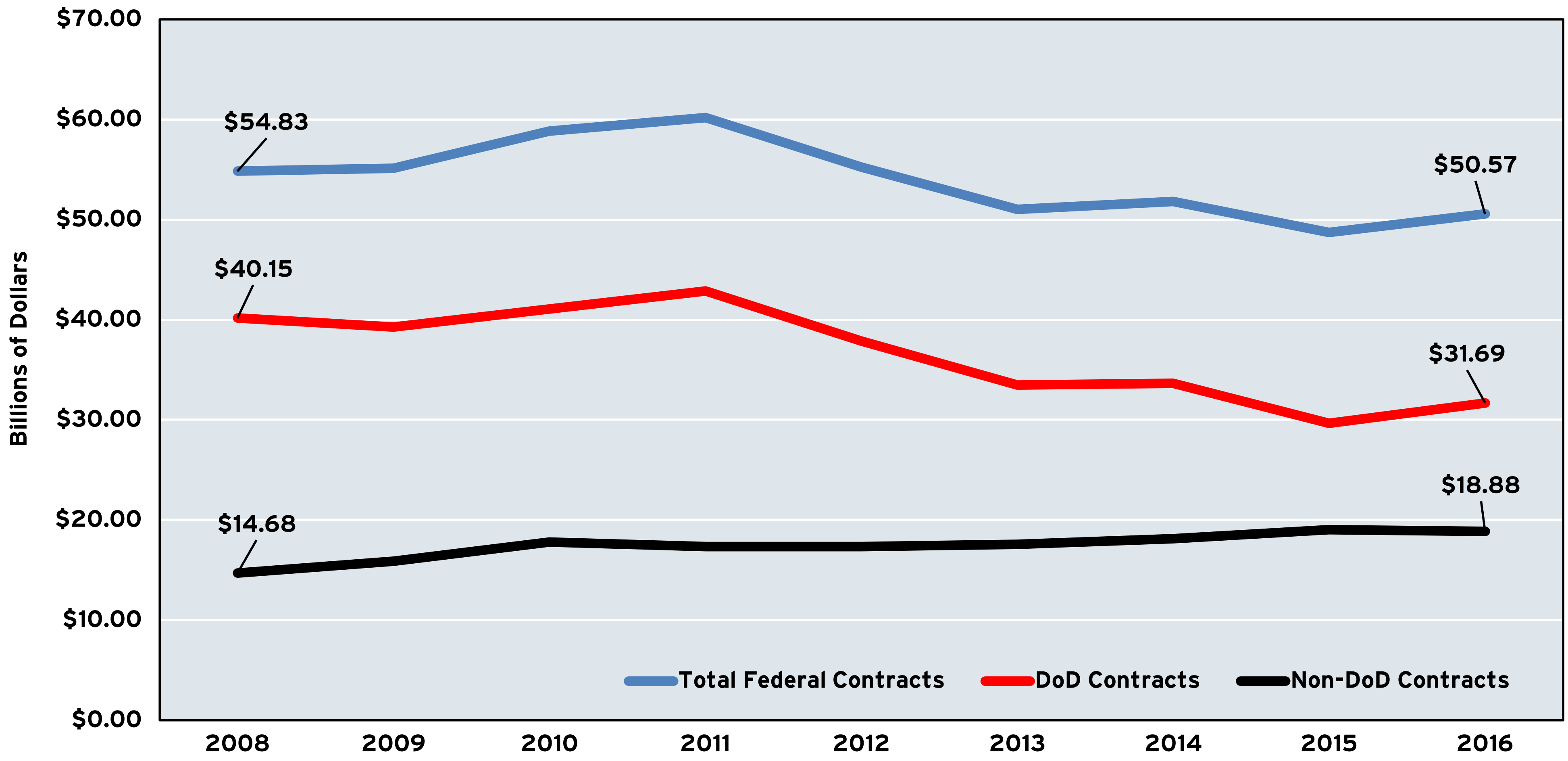
At the same time DOD contract spending was stagnating, total federal awards declined in Virginia.[7] As illustrated in Graph 3, total federal awards for all purposes peaked in FY 2012 and declined from FY 2013 through FY 2015. That Virginia's economy remained in neutral during most of these years should be no surprise.

Navy.mil

5 USAspending.gov (2017). State Summary: Virginia.
6 Defense Manpower Data Center, Military and Civilian Personnel by Service/Agency by State/County, 2017, www.dmdc.osd.mil/appj/dwp/dwp_reports.jsp.
7 Total awards include contracts, other financial assistance, grants and loans.

GRAPH 2

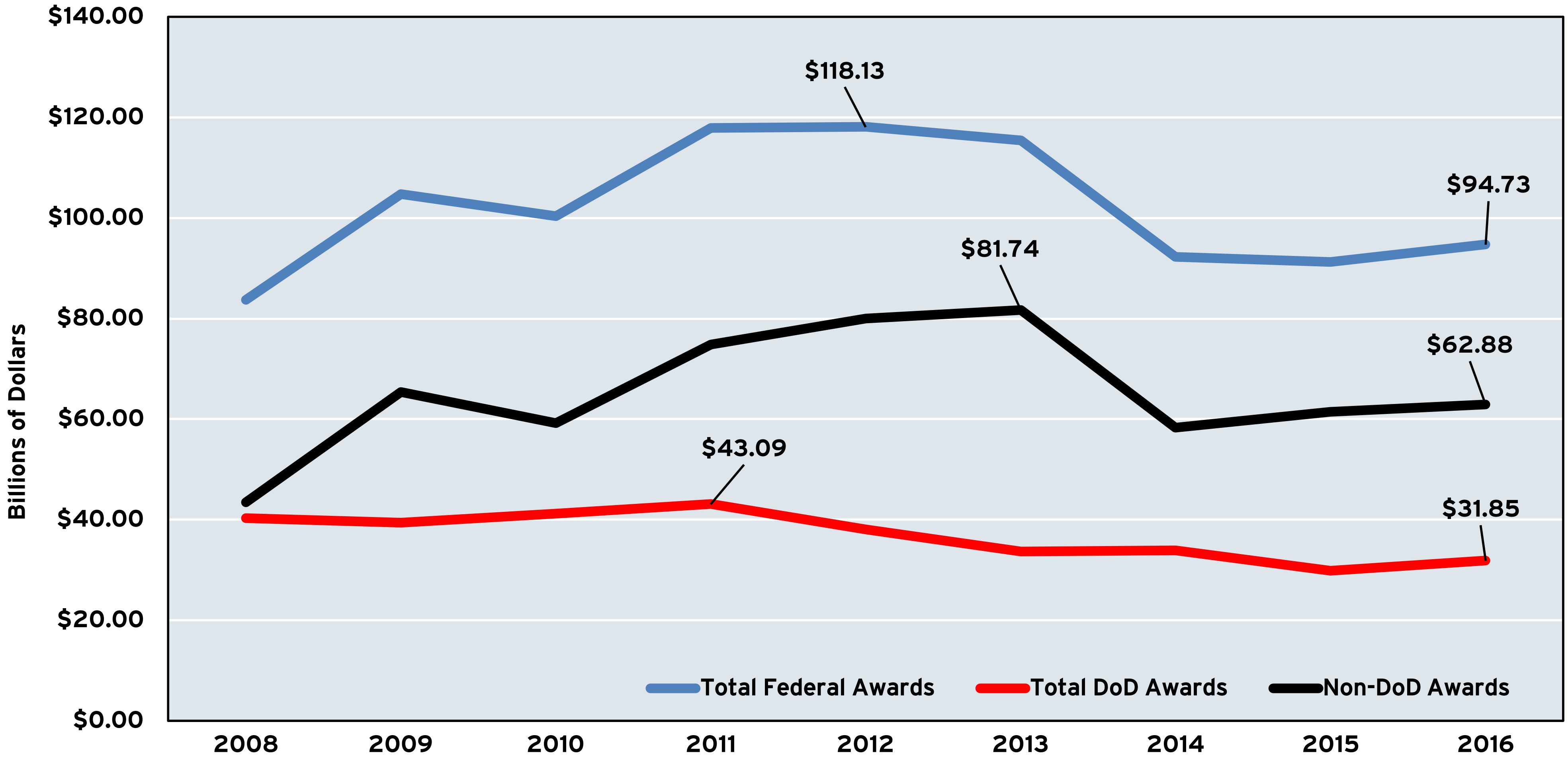
FEDERAL CONTRACTS IN VIRGINIA, FY 2008 TO FY 2017



Source: USAspending.gov

GRAPH 3

TOTAL FEDERAL, DOD AND NON-DOD AWARDS IN VIRGINIA, FY 2008 TO FY 2016



Source: USAspending.gov

Changes In Output: Running In Place

Before the Great Recession, which began in December 2007 and ended in June 2009, Virginia consistently ranked in the top half of states in terms of real GDP growth. Since the recession, Virginia has fallen behind its peers. With one exception (2015), Virginia's economic performance has been in the bottom half of states since 2011.

Table 1 ranks Virginia's real GDP growth against other states. The rankings do not give much reason to brag. Two states stand out as boom or bust: Alaska and North Dakota. When energy prices rise, the economies of these states grow rapidly, but falling energy prices generate the opposite effect.

Why is this important for Virginia? Federal spending in the Commonwealth is akin to oil and natural gas for Alaska and North Dakota. In the first decade of the century, rapid increases in defense spending fueled economic growth in Virginia. In the second decade, declines in federal awards and active-duty DOD personnel have shifted the Commonwealth's economic engine to neutral.

Not all the news is bad. Real economic growth in the first quarter of 2017 was 2 percent,[8] above that of the United States and catapulting Virginia into the Top 10 of states in economic growth. Whether we can sustain this rate of economic growth depends, in part, on whether proposed increases in defense spending materialize in late 2017 and into 2018.

TABLE 1

REAL GDP GROWTH RANK

	Virginia	Top State	Bottom State
2010	12	North Dakota (7.2%)	Alaska (-1.7%)
2011	35	North Dakota (7.8%)	Louisiana (-2.6%)
2012	31	North Dakota (22.2%)	Wyoming (-3.5%)
2013	40	Texas (5.1%)	Alaska (-4.4%)
2014	48	North Dakota (7.3%)	Alaska (-3.3%)
2015	19	Texas (4.5%)	North Dakota (-3.1%)
2016	41	Washington (3.7%)	North Dakota (-6.5%)
2017 (Q1)	8	Texas (3.9%)	Nebraska (-4.0%)

Source: Bureau of Economic Analysis, Gross Domestic Product by State: First Quarter of 2017

8 2nd Quarter real GDP data for Virginia is scheduled to be released on Nov. 21, 2017.

Defense Spending And Sequestration: A Closer Look

Using the word "sequestration" is almost equivalent to cursing in public for many Virginians. Sequestration historically referred to the forcible removable of assets until a debt was paid. In 2011, with the passage of the Budget Control Act (BCA), sequestration described a specific requirement for the president to reduce appropriated expenditures to the limits set by the BCA. While sequestration occurred only once in FY 2013, the term is now used to describe the BCA's caps on national defense and nondefense discretionary spending. Under current law, these caps extend to FY 2025.

Attempting to forecast the outcome of the budget process in the current political climate is fraught with pitfalls, but we can make some useful observations. Congress must not only reconcile competing defense authorization bills, but must also come to an agreement on defense appropriations bills.

Congress also is attempting to pass tax cuts, extend the debt ceiling, reauthorize the Children's Health Insurance Program (CHIP), decide whether to act on Deferred Action on Childhood Arrivals (DACA) and, most recently, discuss the Iranian nuclear deal. The legislative calendar is, to put it mildly, full.

Authorization bills create, extend or modify laws and set the amount of money that appropriators may spend on a specific program. **Appropriations** bills provide discretionary funding to agencies and programs that have been authorized. While an authorization bill may create or extend a new program (building a new aircraft carrier, for example), the program is not funded by Congress until an appropriations bill containing the funding is signed into law. Federal agencies may only spend what is appropriated by Congress.

Comparing the differences between the defense authorization and appropriations bills sheds light on the challenges facing Congress. The BCA cap for FY 2018 on national defense discretionary budget authority is $549 billion.[9] The president's budget request for national defense in the FY 2018 budget was $603 billion, $54 billion above the cap established by the BCA. The House's version of the National Defense Authorization Act proposed national defense spending of $624 billion, while the Senate proposed spending at $640 billion. The conference agreement set the base national defense spending at $626.4 billion, clearly above the existing BCA caps.[10]

Turning to the appropriations process for the DOD, the president's base budget request for FY 2018 was $574 billion, exceeding the DOD's BCA's caps by $52 billion. The House passed an appropriations bill in July 2017, setting the DOD's base budget at $584 billion. While the Senate had yet to move a DOD appropriations bill out of subcommittee by the time this report was distributed, in all likelihood, the Senate's defense appropriations bill will also be in excess of the BCA caps.

Although members of the House and Senate publicly acknowledge that the defense spending proposals exceed the BCA caps, no action has yet been taken to amend or repeal the spending caps. This means that even if Congress were to agree to higher levels of FY 2018 defense spending, the president would be required to implement a sequester to lower spending to the FY 2018 caps.

Using the House appropriations bill as a reference point, the president would be required under the BCA to order the DOD to implement an across-the-board 13 percent sequester, *twice the amount* of the FY 2013 sequester. To say that such a sequester would significantly harm the DOD's operations is an understatement. Another round of sequestration would likely throw Virginia's economy into reverse.

Given the legislative hurdles to pass the defense authorization and appropriations bills, there is a good chance that Congress will pass a

9 The National Defense budget function (050) consists of the DOD military (subfunction 051), defense-related programs in the Department of Energy (subfunction 053) and Department of Justice (subfunction 054). DOD activities have typically been 95 percent of the national defense budget request.

10 https://www.armed-services.senate.gov/press-releases/senate-and-house-armed-services-committees-complete-conference-on-national-defense-authorization-act-for-fiscal-year-2018.

new continuing resolution (CR) when the current CR expires on Dec. 8, 2017. A CR is legislation in the form of a joint resolution passed by Congress to provide budget authority to federal agencies and programs to continue in operation until regulation appropriations acts are passed by Congress and signed into law. Continuing resolutions typically provide existing agencies and programs with budget authority based on the previous year's appropriations.

Continuing resolutions usually prohibit expansion of existing programs and most new program starts. These resolutions typically constrain the ability of federal managers to address a changing environment and new demands for goods and services.

The impact of a CR on the DOD is not trivial. Over the last decade, the DOD has entered all but one fiscal year under a CR. The most recent delay, for example, between the start of FY 2017 and the passage of a defense appropriations bill was 217 days (Graph 4), a delay exceeded only once since 1970.

With an increasingly volatile geopolitical environment and increasing demands on the military services, CRs constrain DOD flexibility and planning. CRs also result in the delay of maintenance programs (including ship repair) and reductions in training and readiness. Former DOD Comptroller David Norquist eloquently captured the impact of a CR on DOD, "The longer the CR lasts, the more damage they do. They are corrosive."[11]

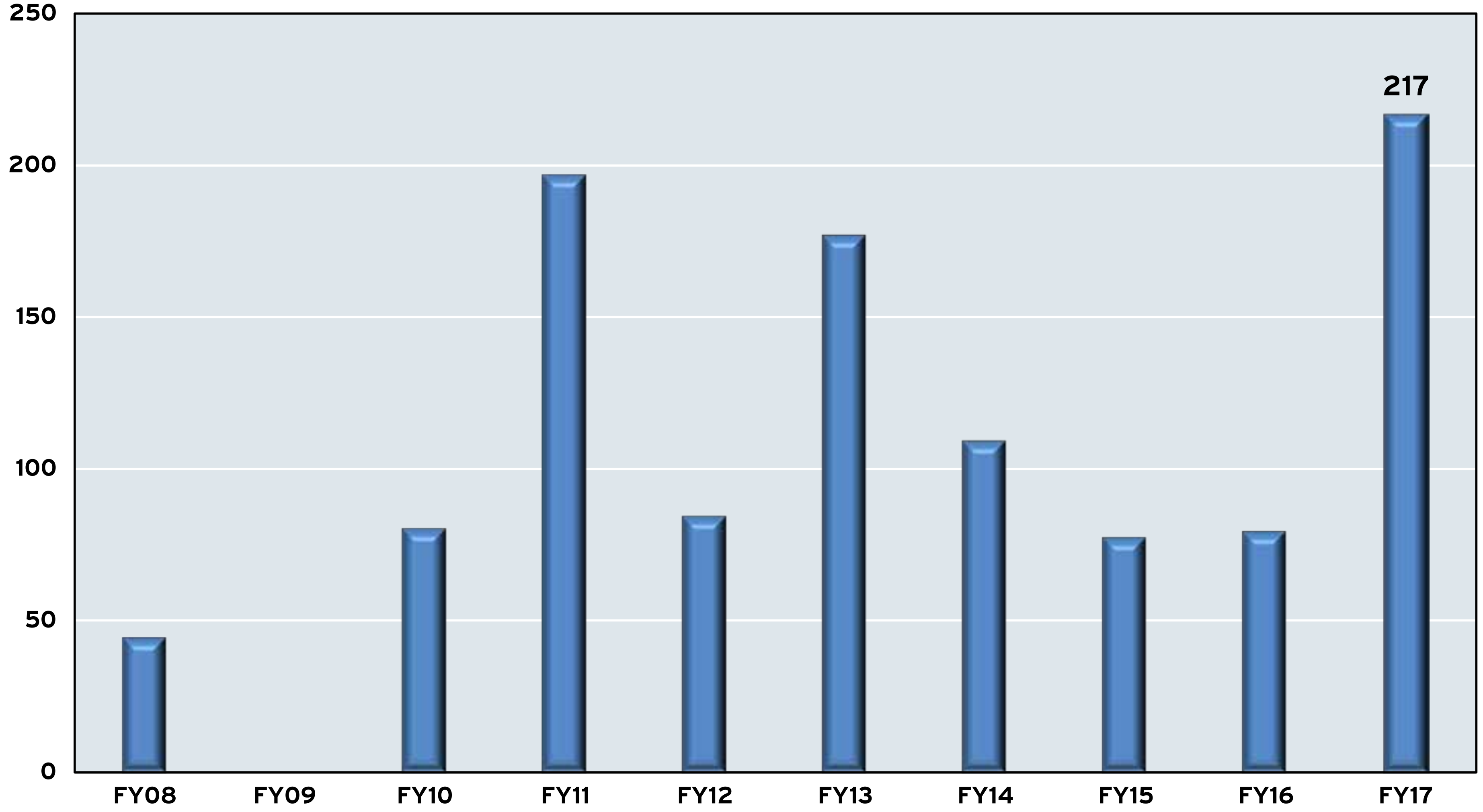
The good news for Virginia is that we expect defense spending will increase in 2018. While there is not much agreement in Congress, there appears to be an emerging consensus that the BCA caps should be modified (or eliminated entirely). With a modification of the BCA caps and passage of the authorization and appropriations bills, defense expenditures in Virginia would increase in the second half of 2018. Such increases would be welcome news and would spur increased economic growth, subject to the usual caveats on economic and political shocks.

Navy.mil

11 https://federalnewsradio.com/defense-main/2017/09/cr-for-defense-likely-until-december-but-with-a-few-anomalies/.

GRAPH 4

LENGTH OF CONTINUING RESOLUTION FOR DOD APPROPRIATIONS



Sources: Center for Strategic and International Studies and Todd Harrison (2017)

Sectoral Growth In Virginia

Data from the Bureau of Economic Analysis suggest that the manufacturing sector contracted by 5.6 percent from 2015 to 2016. Graph 5 provides the annual growth rate for manufacturing as well as the other major sectors of the economy.

2016 represented the sixth consecutive year of decline for the manufacturing industry. As a share of overall economy activity in Virginia, the manufacturing sector declined from 11.6 percent at the beginning of the century to only 8.2 percent in 2016.

Potentially troubling is the contraction in economic activity in the management of companies. Wages and salaries in this sector are typically higher than other sectors and any contraction would signal a loss of high-paying jobs. In 2015, the sector grew almost 4 percent, so it is possible that 2016 is an anomaly.

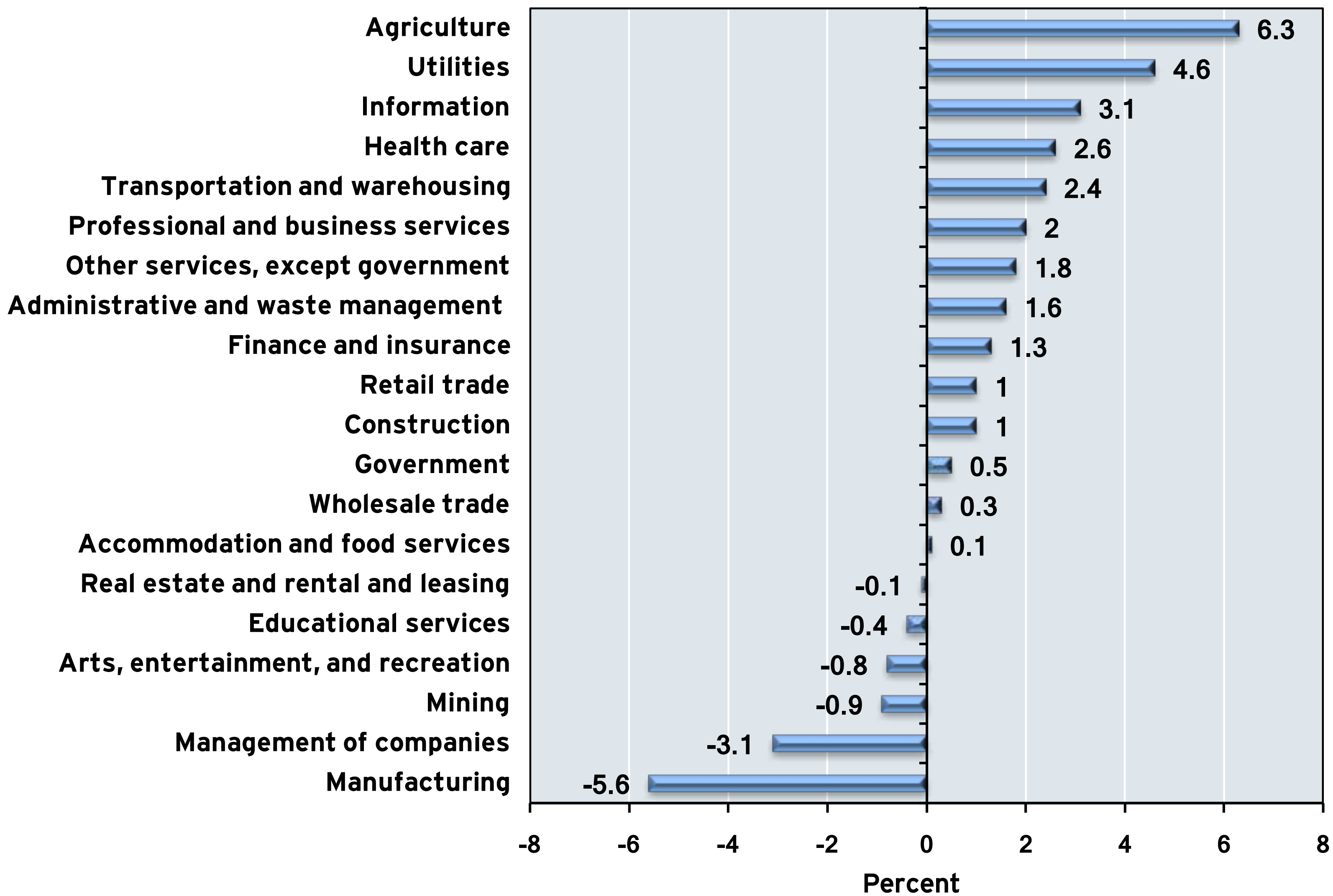
On a more positive note, the agricultural sector grew by almost 6.4 percent in 2016. Utilities, information and health care, transportation and warehousing, and professional and business services also grew in 2016.

How has the economy of Virginia changed over time? In Graph 6, we compare the shares of real GDP in 2007 and 2016 for each major industry in the Commonwealth. Not only does this capture the relative contribution of each sector to overall economic activity, but also the changing contributions of each sector. Strong growth in professional and business services, health care and social assistance, and finance and insurance illustrate the increasing importance of these sectors to Virginia. More traditional sectors, to include manufacturing and wholesale trade, declined in importance

What about agriculture and mining? These sectors have steadily declined in relative importance over time, now each accounting for about 0.3 percent of economic activity in Virginia. The mining sector continues to struggle with a 0.9 percent decline in 2016 on the heels of a 12.8 percent contraction in 2015. While mining once offered a source of good-paying jobs and contributed positively to economic growth in Virginia, it appears that this sector will continue its decline relative to other parts of the economy.

GRAPH 5

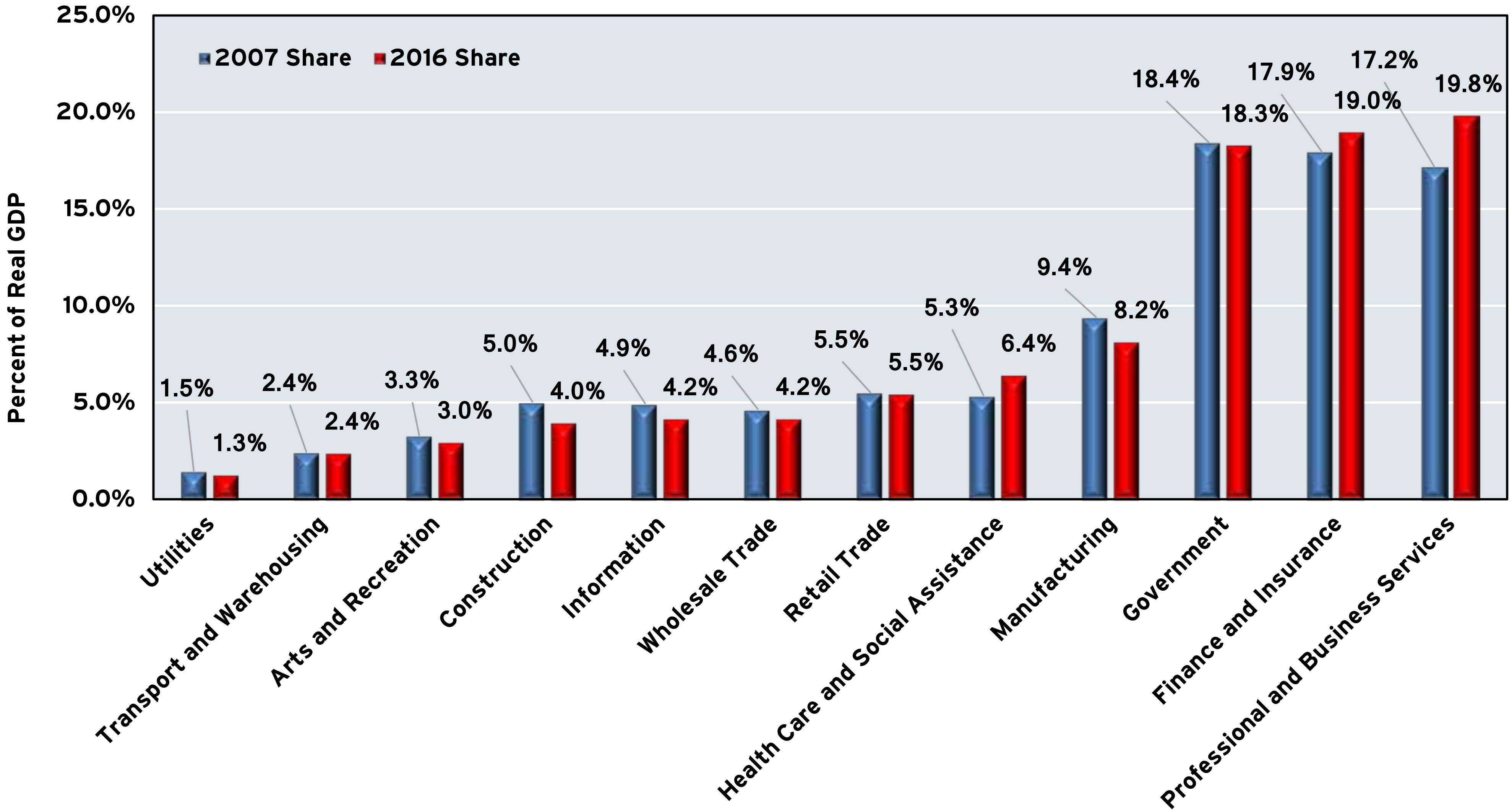
VIRGINIA: 2015-2016 GROWTH IN SELECTED INDUSTRIAL SECTORS



Source: Bureau of Economic Analysis, real GDP by state in millions of chained 2009 dollars.

GRAPH 6

INDUSTRY CONTRIBUTIONS TO REAL GDP, 2007 AND 2016



Source: Bureau of Economic Analysis

Labor Market Conditions

Labor market conditions generally continued to improve in 2016. Nearly 4.4 million Virginians were in the labor force in September 2017, an increase of around 85,000 from the year previous (Graph 7). Not only were more Virginians employed or actively looking for work, but also the number of employed workers increased in 2017. July 2017 represented the largest labor force and the largest number of employed Virginians on record since data collection began in 1976.

The data in Graphs 7 and 8 come from the Current Population Survey, which surveys households to find out if they are working, actively seeking work or not in the labor force. The U.S. Census Bureau conducts the survey for the Bureau of Labor Statistics.

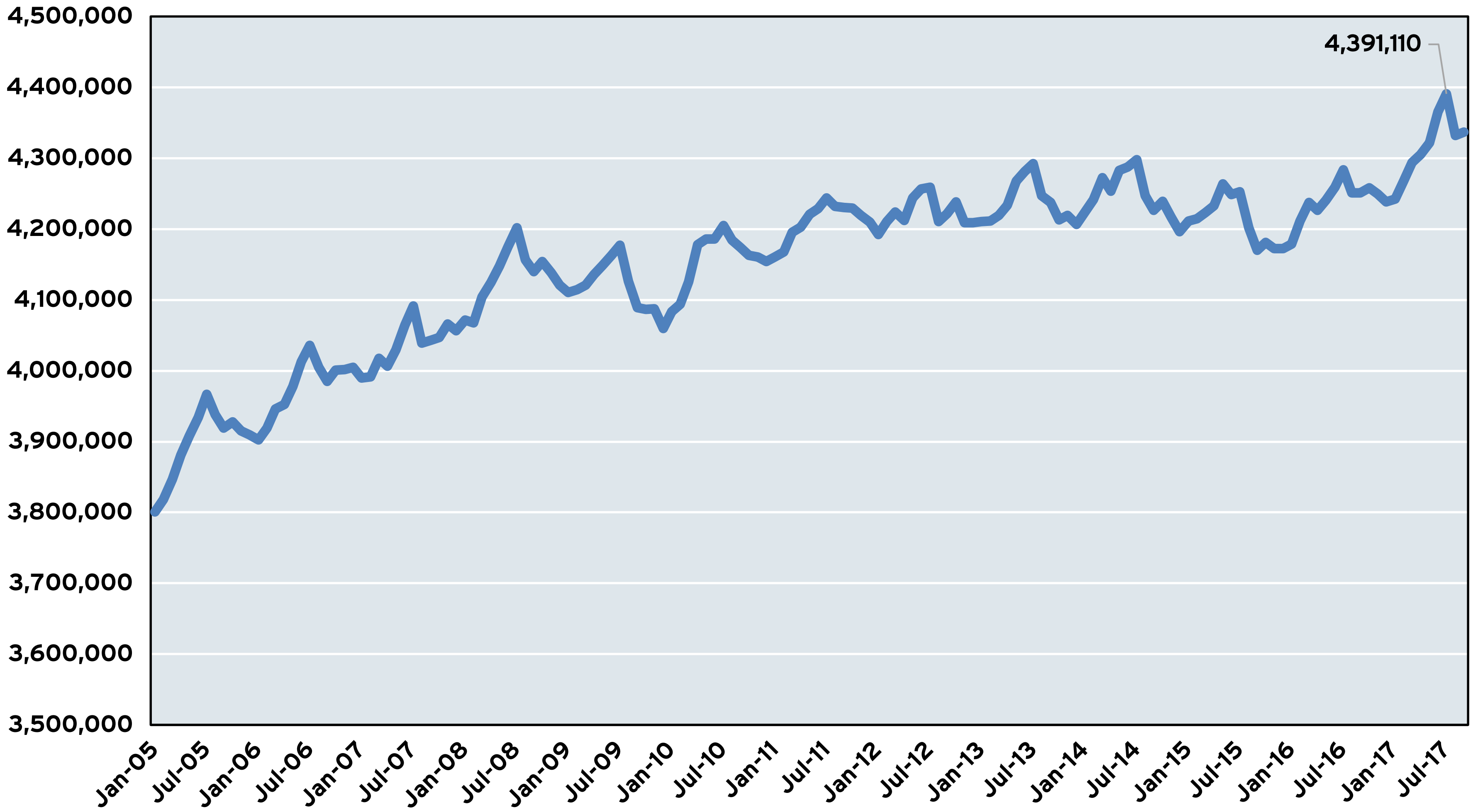
More Virginians at work drove the Commonwealth's unemployment rate to lows not seen since April 2008. Graph 8 displays the unemployment rates in Virginia and the United States and shows that the unemployment rate in the Commonwealth typically has been below that of the United States. In September 2017, the unemployment rate in Virginia was 3.7 percent, compared to 4.2 percent for the United States.

However, there is some cause for concern. Traditionally, Virginia's unemployment rate has been about 1.5 percent below that of the nation. This 1.5 percent gap continued all through the 2002-2008 expansion and even grew during the Great Recession. However, since 2012, Virginia's unemployment rate only has been about 0.7 percent lower than the national rate.

Could this signal a new economic reality for Virginia? Perhaps. The era of hyper-partisan politics and federal budget uncertainty could mean that a more "natural" rate of unemployment for the state is around 3.5 percent instead of 3 percent. In that case, the Virginia economy may be close to full employment.

GRAPH 7

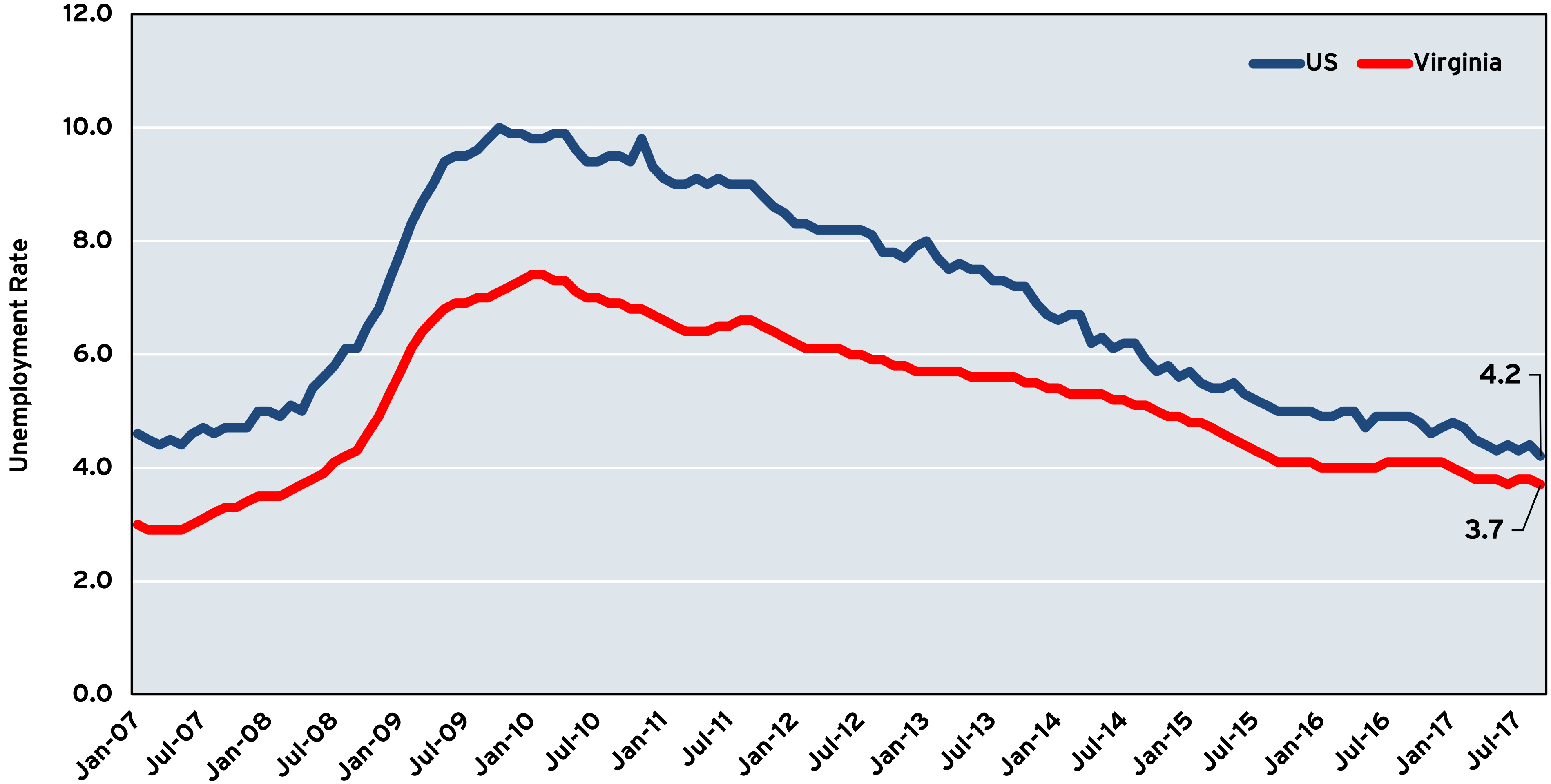
SIZE OF THE LABOR FORCE IN VIRGINIA, JANUARY 2005 TO SEPTEMBER 2017



Source: Virginia Employment Commission, Local Area Unemployment Statistics (not seasonally adjusted data)

GRAPH 8

UNEMPLOYMENT RATES FOR VIRGINIA AND THE UNITED STATES, JANUARY 2007 TO SEPTEMBER 2017



Sources: Bureau of Labor Statistics and the Virginia Employment Commission (seasonally adjusted data)

Labor Force Participation

Whether Virginians choose to participate in the labor force influences the level of employment, unemployment and the overall size of the labor force. Virginia's labor force participation rate typically exceeds that of the United States and 2017 is no exception. Almost 66 percent of Virginians participated in the labor force in September 2017 versus about 63 percent of all Americans.[12]

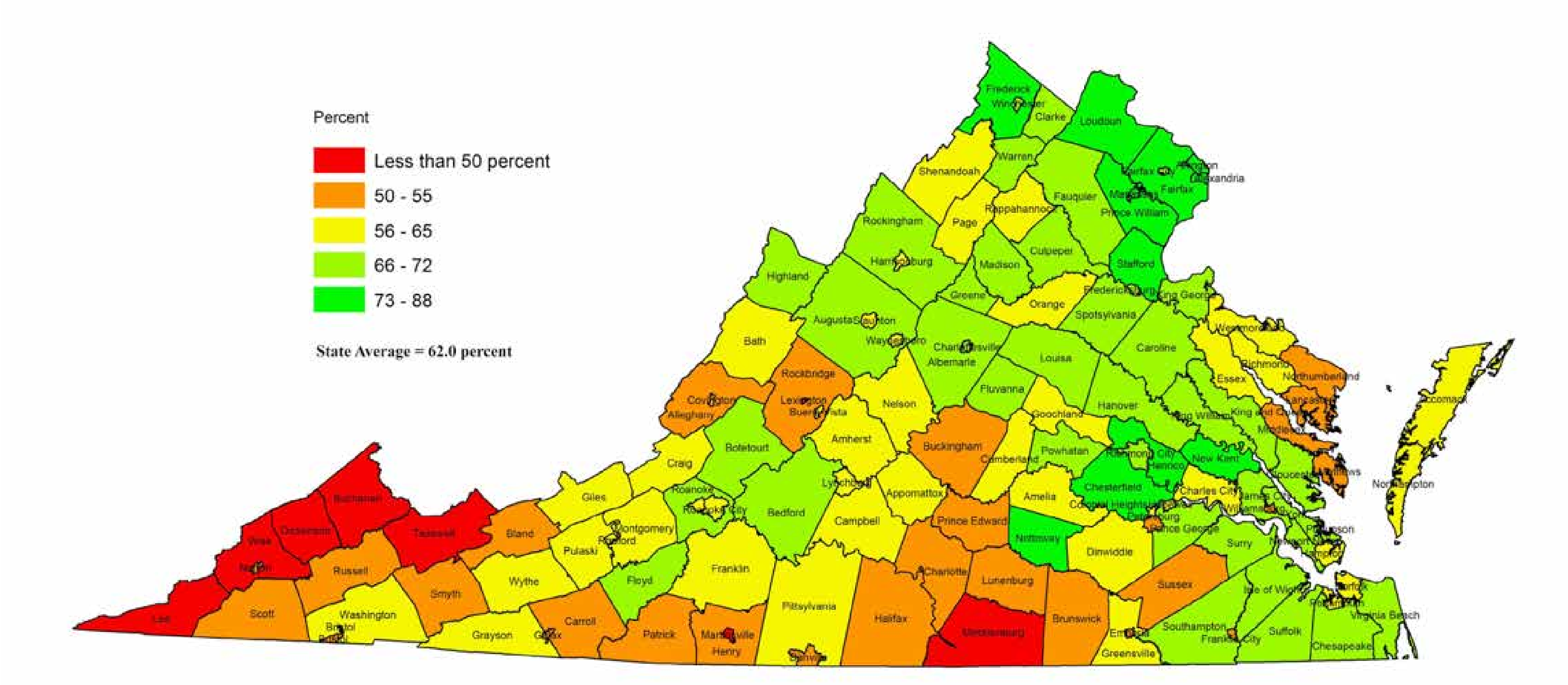
Labor force participation varies by locality. Figure 1 shows participation rates for 2016 were below 50 percent in many counties in southwestern Virginia and above 70 percent in Northern Virginia, Richmond and much of Hampton Roads. A challenge for Virginia is to address the declines in manufacturing, mining and other traditional employment sectors that influence participation rates. A further challenge, discussed later in this report, is how the opioid crisis undermines labor force participation.

Here is where the rubber meets the road with regard to labor force participation rates. One way or another, society must support individuals of prime working age who for whatever reasons are not in the labor force. Falling labor force participation therefore constitutes an anchor that drags down economic growth. Hence, one way to stimulate economic growth in Virginia is to increase labor force participation rates.

12 Bureau of Labor Statistics, Local Area Unemployment Statistics, October 2017.

FIGURE 1

VIRGINIA LABOR FORCE PARTICIPATION RATE BY LOCALITY, 2016



Source: Virginia Employment Commission, Economic Information & Analytics, September 2017

Virginia's Job Performance: Better But Not Great

How has Virginia performed in terms of jobs? Total nonfarm payroll employment expanded by 58,500 jobs in 2016, a 1.5 percent increase from 2015 (Graph 9). This was the second-highest year for job creation since the Great Recession and is a welcome sign after our mediocre growth in 2013 and 2014. Job growth in the Commonwealth, however, continues to lag the United States.

The data in Graphs 9 and 10 come from the Current Employment Statistics program, which is a monthly survey of establishments on employment, hours and earnings. The Bureau of Labor Statistics conducts the survey.

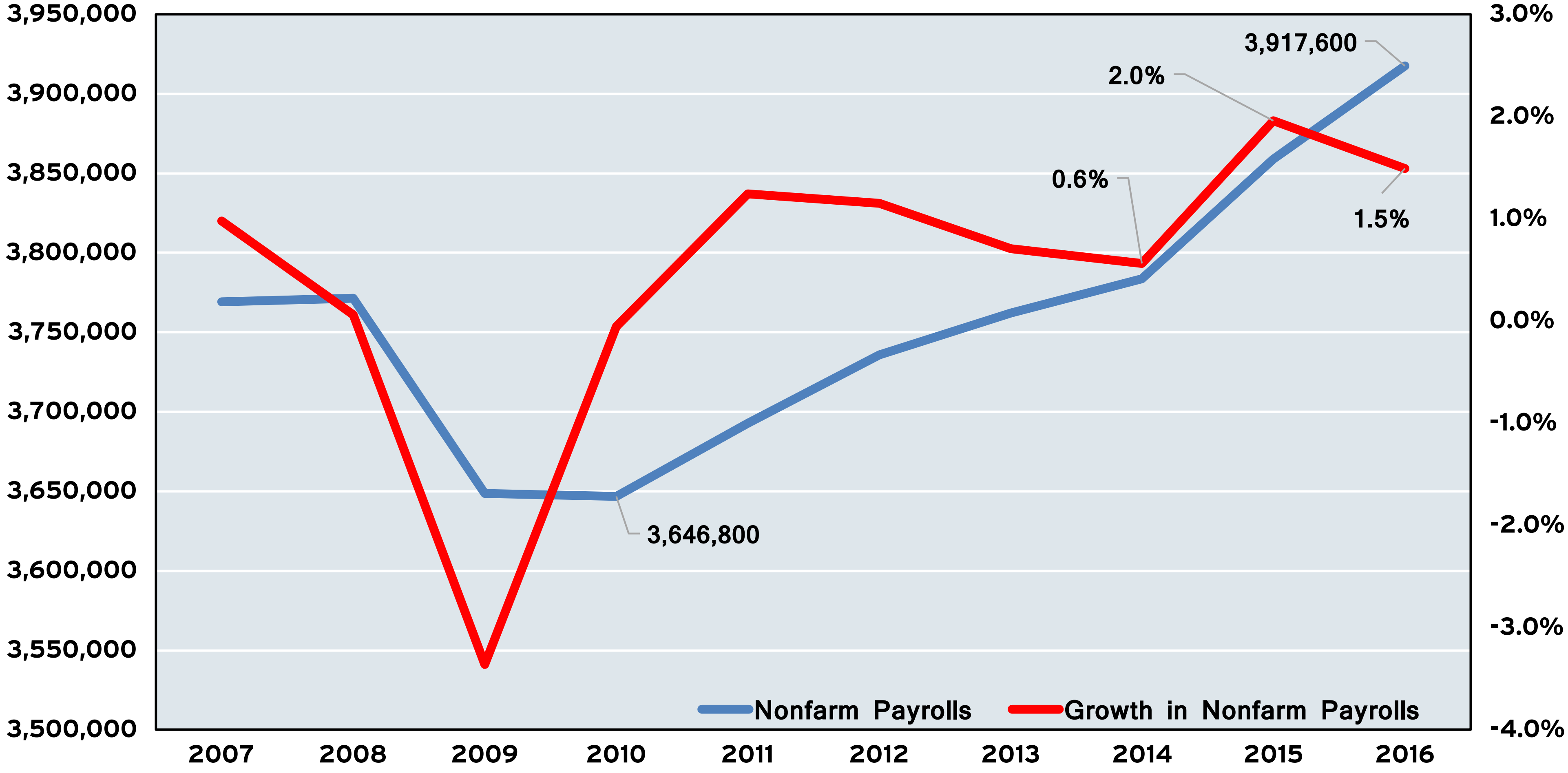
Digging into the monthly job numbers, Virginia's year-over-year total nonfarm employment growth rate exceeded that of the United States in 2015 (Graph 10), but decelerated in the second half of 2016 and the first half of 2017. While job creation in the Commonwealth exceeded that of the United States in July and August of 2017, year-over-year growth was anemic in September 2017 at 0.9 percent. Virginia is underperforming the United States in job creation.

Graph 11 examines sector-level employment growth from 2015 to 2016. The health care and social assistance and leisure and hospitality industries led job creation in 2016, each adding 13,700 jobs when compared to 2015. Professional and business services also generated a significant number of new jobs (12,900), while the government sector added around 3,000 jobs. The information, mining and manufacturing sectors lost jobs in 2016.

Virginia's share of total employment in manufacturing has declined every year since 1990. Compared to many neighboring states, Virginia has the lowest share of employment in manufacturing. Only 6 percent of Virginia's jobs are in manufacturing, compared to 12 percent in South Carolina, 11 percent in North Carolina, 10 percent in Pennsylvania and 9 percent in Georgia. While Virginia has a higher share of manufacturing jobs than Maryland, Delaware, New York and New Jersey, this may not be a peg on which the Commonwealth wants to hang its hat.

GRAPH 9

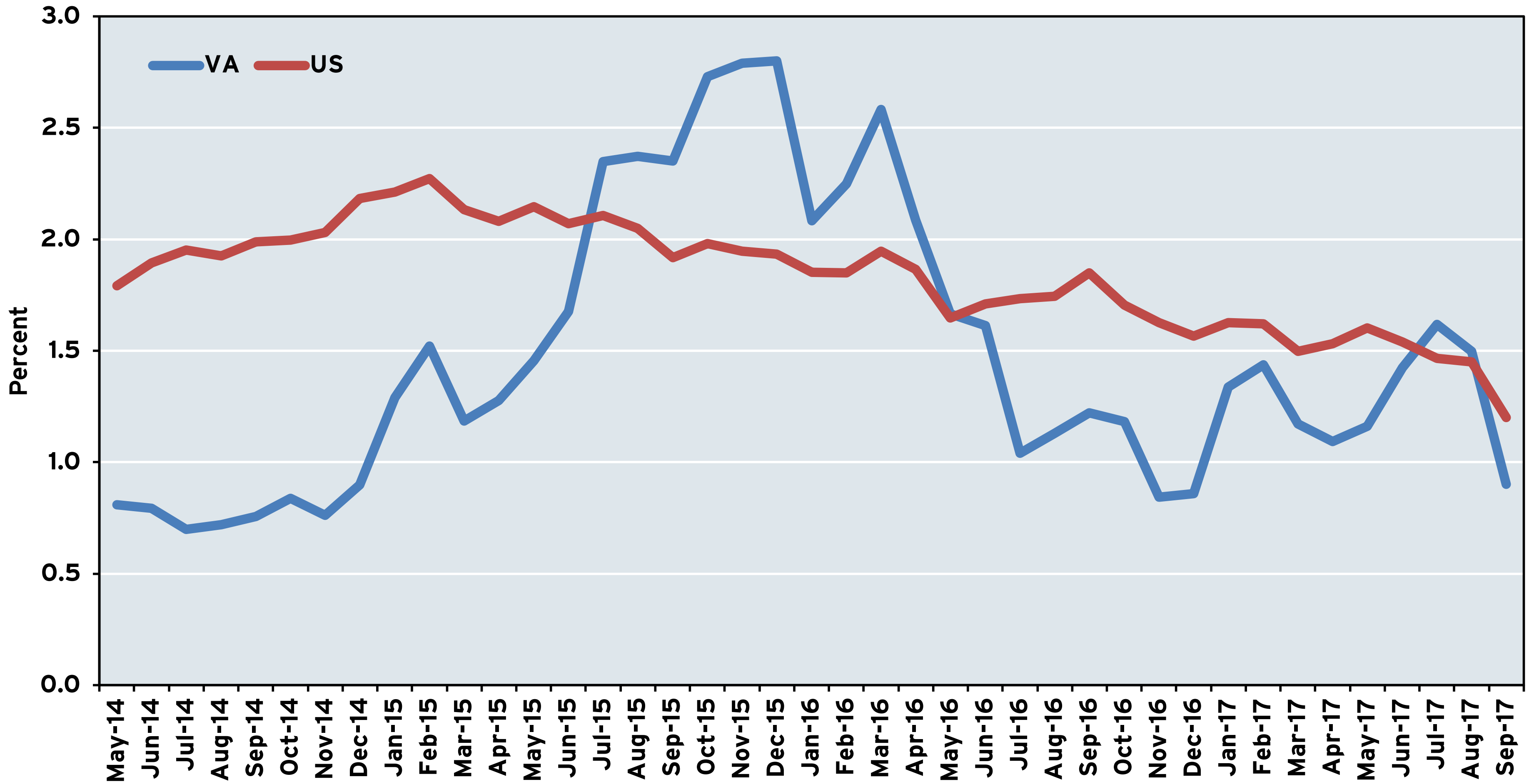
TOTAL NONFARM EMPLOYMENT AND ANNUAL GROWTH RATE, 2007-2016



Source: Bureau of Labor Statistics, Current Employment Statistics

GRAPH 10

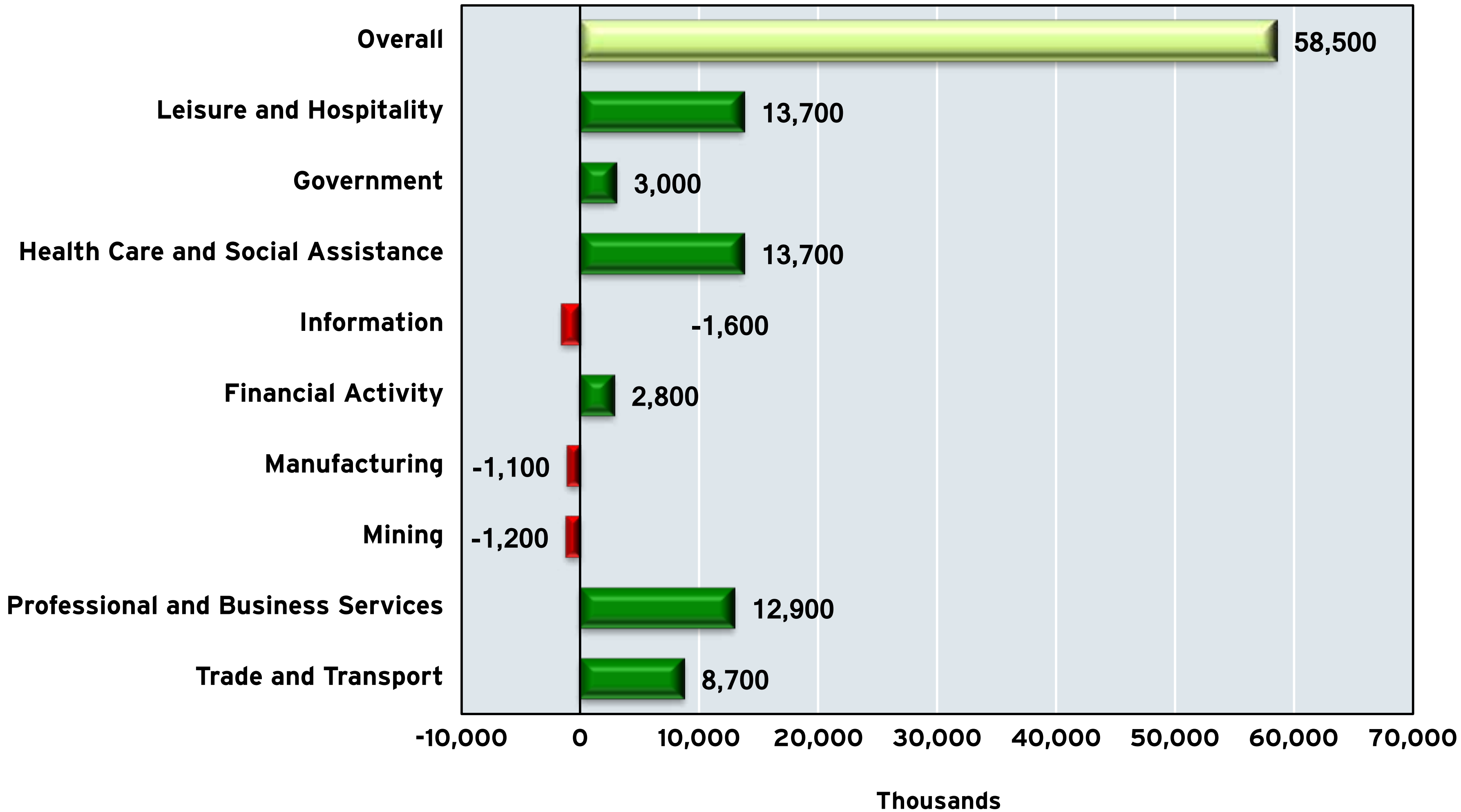
YEAR-OVER-YEAR GROWTH IN JOBS: VIRGINIA AND UNITED STATES



Sources: Bureau of Labor Statistics and the Virginia Employment Commission

GRAPH 11

VIRGINIA: CHANGE IN EMPLOYMENT LEVELS BY SELECTED SECTORS, 2015-2016



Sources: Bureau of Labor Statistics and Old Dominion University Center for Economic Analysis and Policy calculations

Average Weekly Earnings

Given that more Virginians are in the labor force and are employed, are they earning more money?[13] **The good news is that a Virginian's average weekly earnings grew by 3.4 percent in 2016, well above the 2.6 percent growth for the United States (Graph 12). Virginia's earnings growth, however, appears to have fallen behind the United States in 2017 and may end up being below 2 percent.**

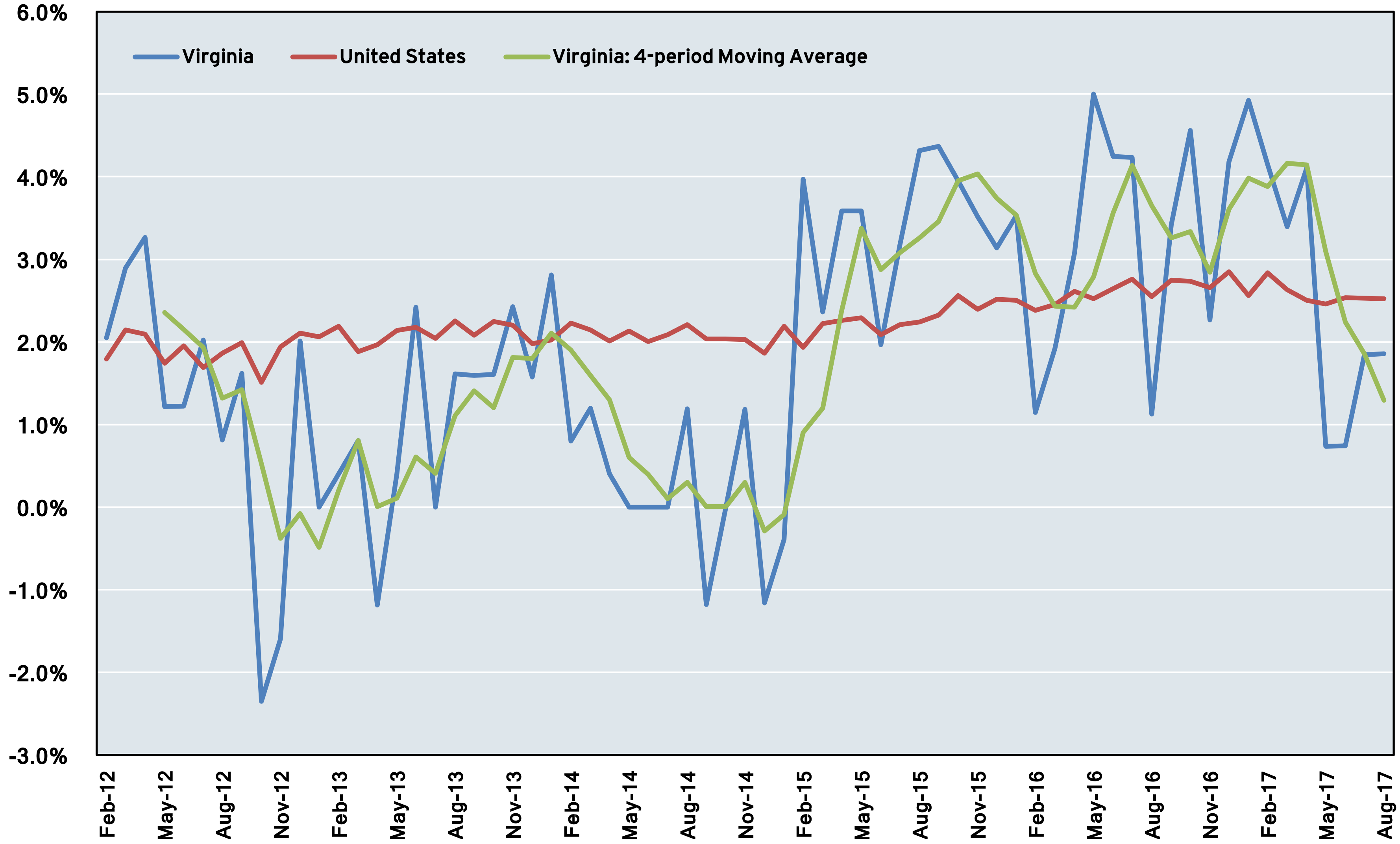
The latest average weekly earnings data for August 2017 show that Virginia's year-on-year average earnings growth increased by 1.9 percent when compared to August 2016. While this is still behind earnings growth in the United States, where earnings increased by 2.5 percent in the same period, it is higher than earlier in the year. We expect that earnings growth will pick up in 2018 if Virginia's economy continues its recent expansionary pattern.

The economic data are discordant. Output gains are anemic and lag the United States. More Virginians are in the labor force, gainfully employed and enjoying larger paychecks. However, when Virginia is compared to neighboring states and the nation, its economic performance is mediocre.

13 We use average hourly earnings from the Current Employment Statistics program. This series measures wages and not total compensation. Benefits, bonuses and payroll taxes paid by employers are not included. As a result, average hourly earnings is not a suitable indicator of labor costs to firms.

GRAPH 12

VIRGINIA AND THE UNITED STATES: GROWTH IN AVERAGE HOURLY EARNINGS, FEBRUARY 2012 TO AUGUST 2017



Source: Bureau of Labor Statistics

The Dynamics Of Establishments In Virginia

An interesting alternative way to view the lack of dynamism in the Virginia economy is to focus on the number of new business establishments that have been created. New business creation reflects both economic optimism and perceived opportunities.[14] It is apparent that Virginia has been falling short here recently. Let's see what the data tell us.

An overwhelming number of the employed (approximately 90 percent)[15] in the United States are employed by businesses (as opposed to being self-employed). Graph 13 displays the share of jobs for small and medium-sized enterprises (SMEs), which accounted for 48 percent of jobs in Virginia and almost 50 percent of jobs in the United States.[16] Virginia has tended to rely more on larger enterprises than the rest of the country, but this gap has closed dramatically since the Great Recession as the share of jobs in SMEs in the U.S. has declined below 50 percent. In other words, the share of total employment of large firms is growing in the United States and approaching that of Virginia.

Graph 14 displays SME's share of job creation in Virginia and the United States.[17] For most of this century, Virginia's job creation by SMEs has trailed the United States. Briefly, in the fourth quarter of 2015 and the first quarter of 2016, the share of job creation by SMEs in Virginia exceeded the national average, but retreated in the latest data available.

14 There are subtle but important differences between establishments, firms and enterprises. An establishment is a single physical location while a firm is an establishment or a combination of establishments. Most businesses in the United States are single-establishment firms and the use of establishment data provides more precision with regard to employment. For further discussion see: www.bls.gov/opub/mlr/2016/article/establishment-firm-or-enterprise.htm.

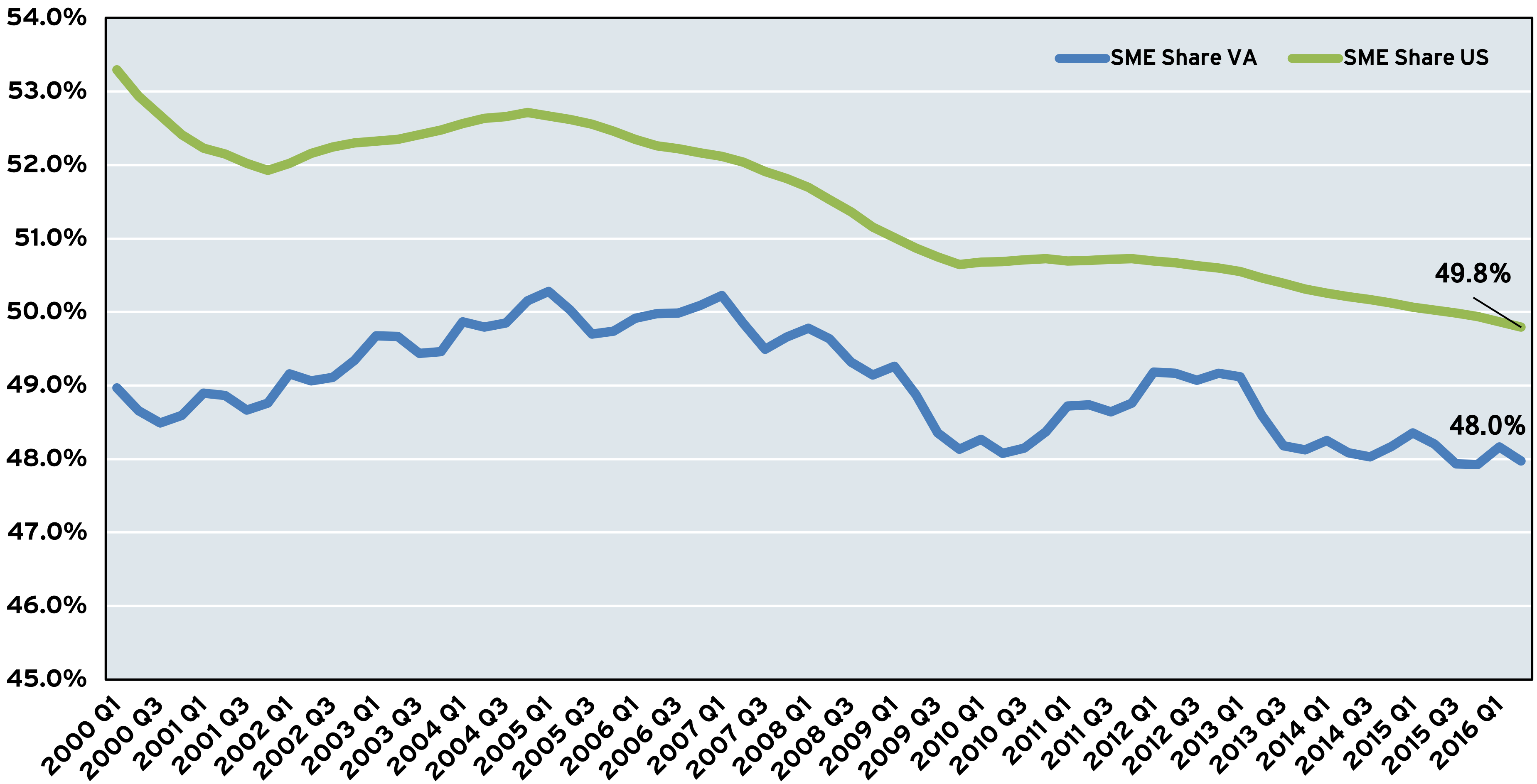
15 "Self-Employment in the United States," Steven Hipple and Laurel Hammond, Bureau of Labor Statistics, March 2016.

16 Small and medium-sized enterprises have 499 employees or fewer.

17 We examine gross job creation, which is different from net job creation. Net job creation is the difference between jobs being created (firm births and expansions) and jobs being destroyed (firm declines or firm deaths).

GRAPH 13

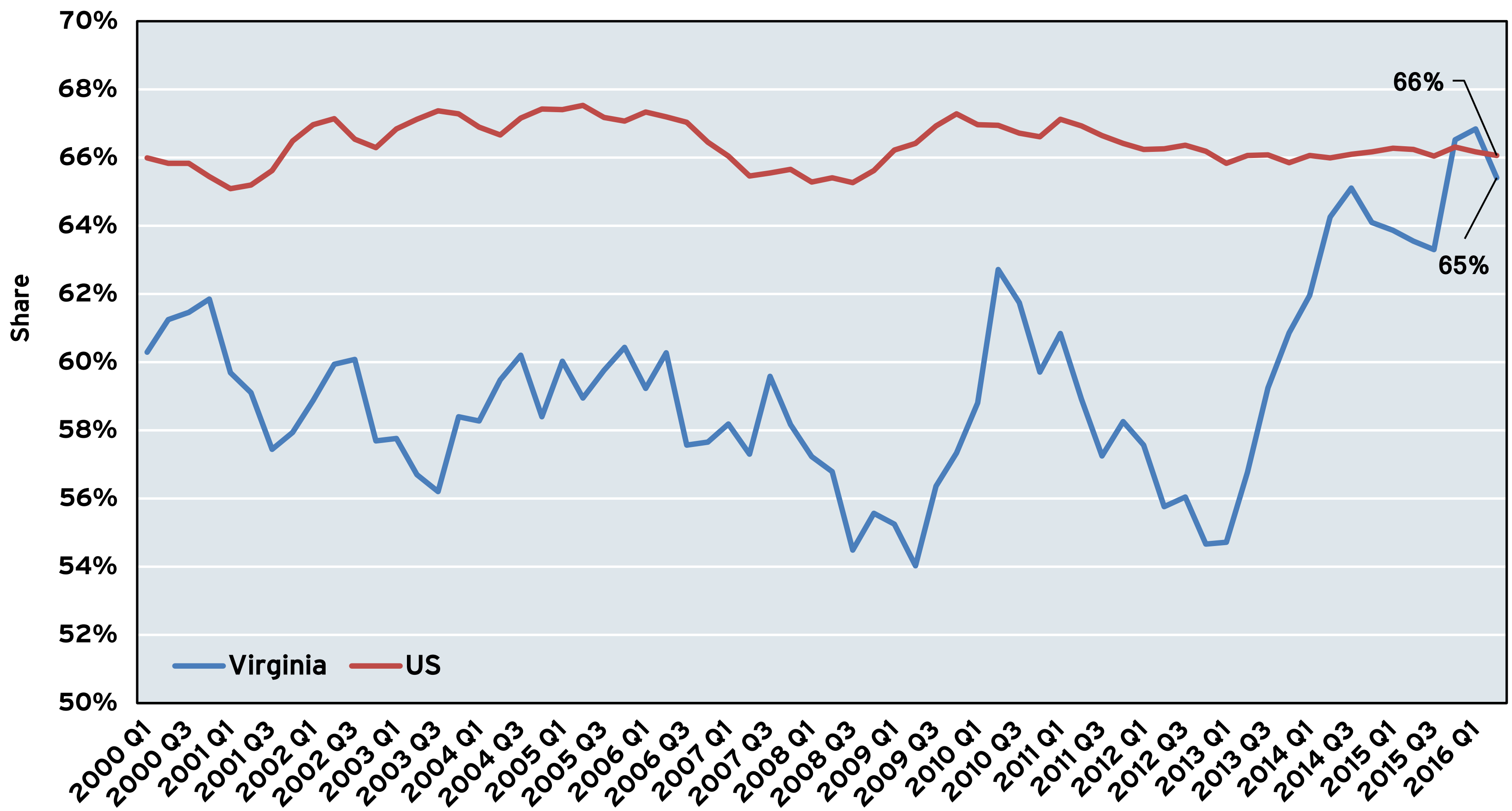
SHARE OF JOBS FOR SMALL AND MEDIUM-SIZED ENTERPRISES: VIRGINIA AND THE UNITED STATES, 2000 Q1 TO 2016 Q2
4-QUARTER MOVING AVERAGE



Source: U.S. Census Bureau, Longitudinal Employer-Household Dynamics

GRAPH 14

SHARE OF GROSS JOB CREATION BY SMES, 2000 Q1 TO 2016 Q2: 4-QUARTER MOVING AVERAGE



Source: U.S. Census Bureau, Longitudinal Employer-Household Dynamics

Small Establishment Creation

Not surprisingly, businesses start and fail on a regular basis. About 80 percent of establishments in the United States with employees survive their first year of business, 66 percent survive a second year and 50 percent survive until their fifth year of business. About 30 percent of establishments survive until their 10th year of business.[18] Improving establishment creation and survival is a key to generating long-term economic development.

How is Virginia faring in fostering a climate conducive to establishment creation? Graph 15 displays the number of new establishments in Virginia from the first quarter of 2000 through the last quarter of 2016. On average, about 5,600 new establishments are created each quarter in Virginia. The pace of new establishment births declined in the aftermath of the Great Recession and once again in 2013 in response to sequestration. Births peaked in 2015 and remained above the historical average for most of 2016. The four-quarter moving average is also trending back to the historical average, suggesting slowing establishment births. If the focus of public policy has been on fostering new establishments, then it appears that Virginia has been only modestly successful in this regard.

What about establishment destruction? Graph 16 presents establishment deaths in Virginia for 2000 to 2016 Q1. On average, 5,054 establishments died per quarter over the period. As one might expect, firm deaths during the Great Recession spiked and there also was an increase in deaths in the third quarter of 2013, perhaps due to sequestration. Firm deaths rose above the long-term average in the first quarter of 2016, in line with our previous discussion that 2016 was a poor year for economic activity in the Commonwealth.

If the objective of economic development is to foster an environment conducive to the creation and sustainment of new establishments, then Virginia's postrecession performance is underwhelming in most years.

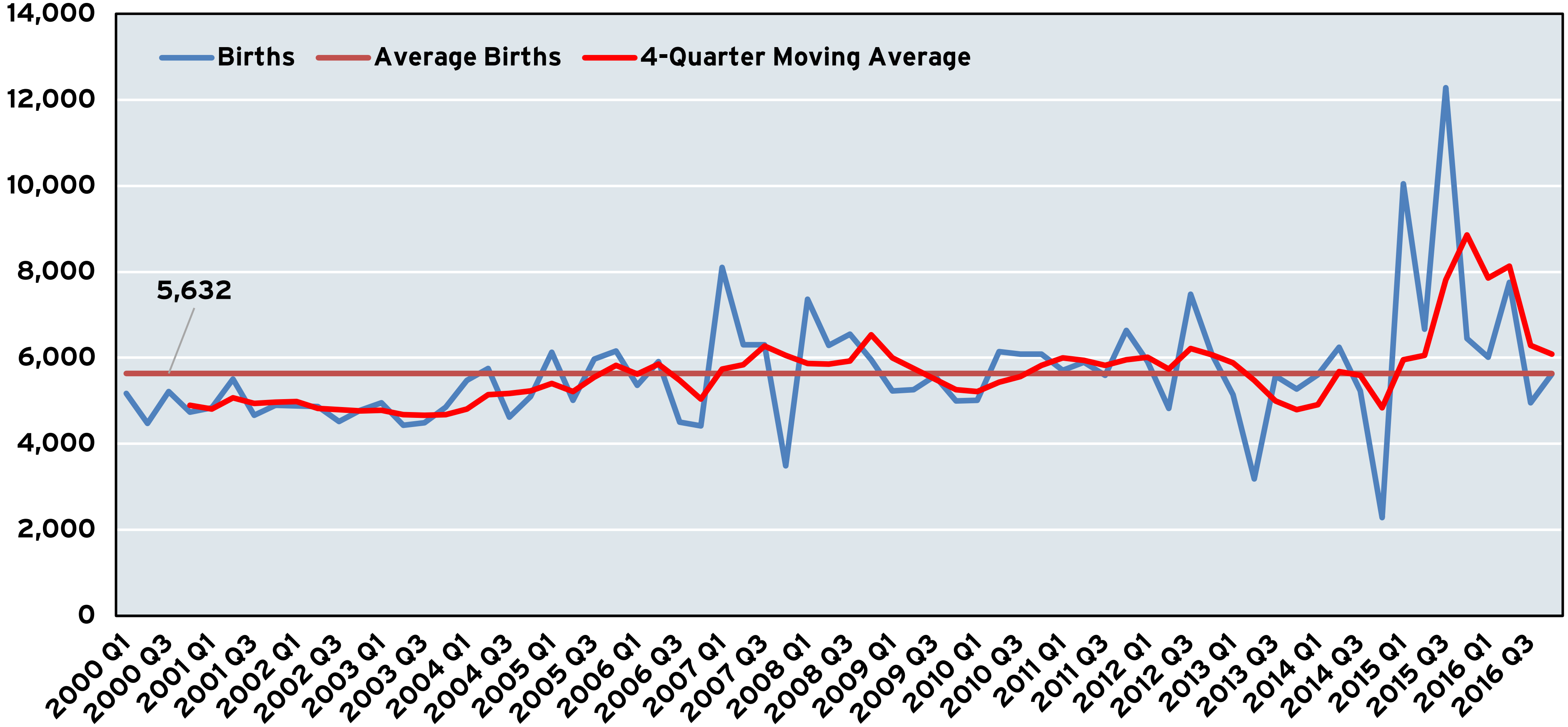
18 Bureau of Labor Statistics, "Survival of private sector establishments by opening year," www.bls.gov/bdm/us_age_naics_00_table7.txt.

As shown in Graph 17, net establishment creation was close to zero or negative in 2013 (likely due to sequestration) and uneven in 2014. 2015 was a robust year for establishment births in the first and third quarters, and the first quarter of 2016 saw more births than deaths. Not surprisingly, the Commonwealth posted its best postrecession real GDP growth in 2015 when Virginians created, on average, 2,000 net new establishments. Since the turn of the century, the Commonwealth's real GDP growth was lackluster in years when net births were negative and robust in years when net births were above the historical average.

New establishments create jobs, while establishment deaths destroy jobs. Graph 18 illustrates the net job gain or loss from the creation and destruction of establishments. We can again see that when net job creation falls, economic activity in the Commonwealth stagnates. The relatively good performance of the Commonwealth in 2015 was, in part, driven by a large uptick in new establishment job creation.

GRAPH 15

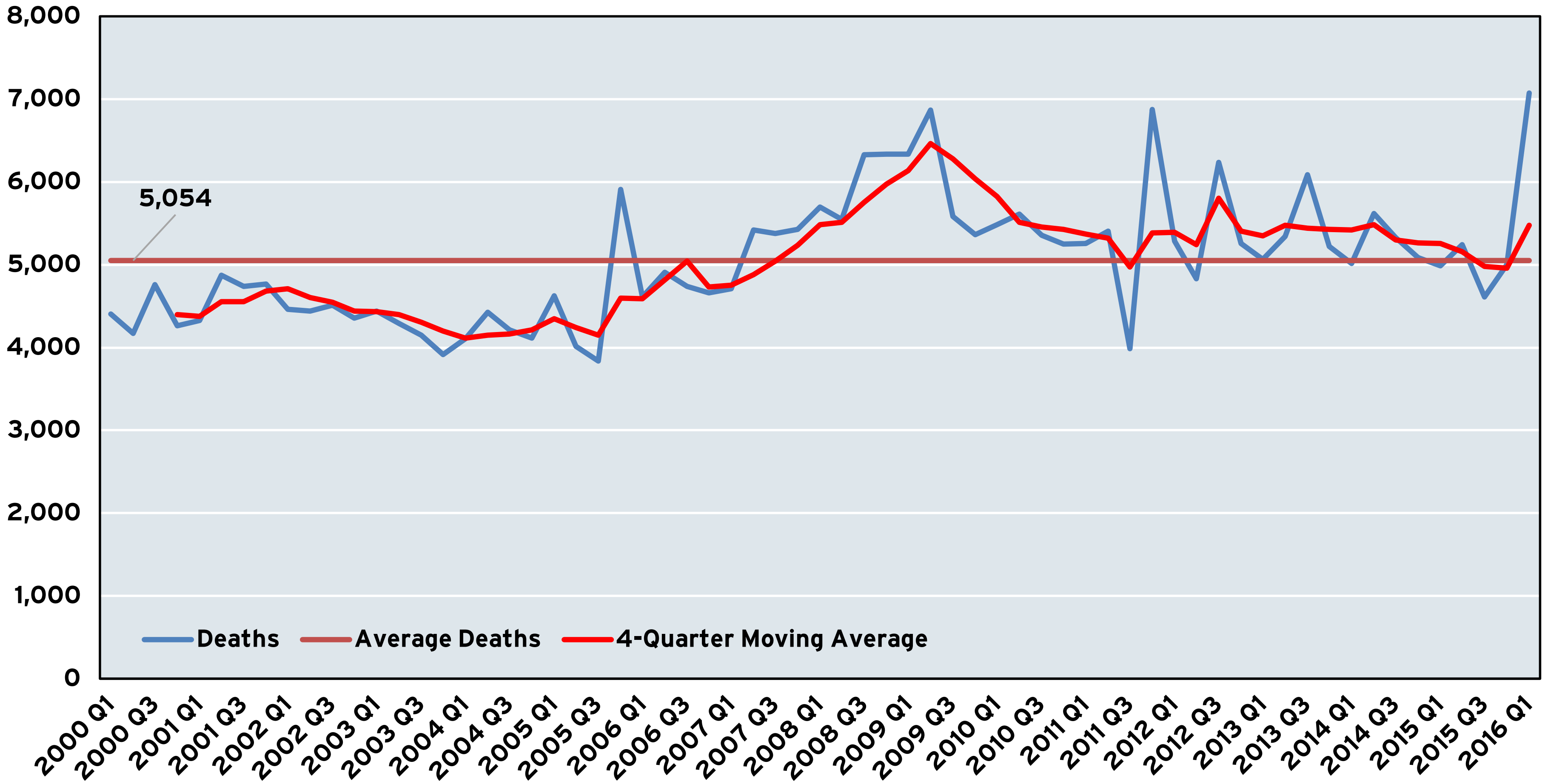
NUMBER OF ESTABLISHMENT BIRTHS, 2000 Q1 TO 2016 Q4



Source: Bureau of Labor Statistics, Business Employment Dynamics, 2017

GRAPH 16

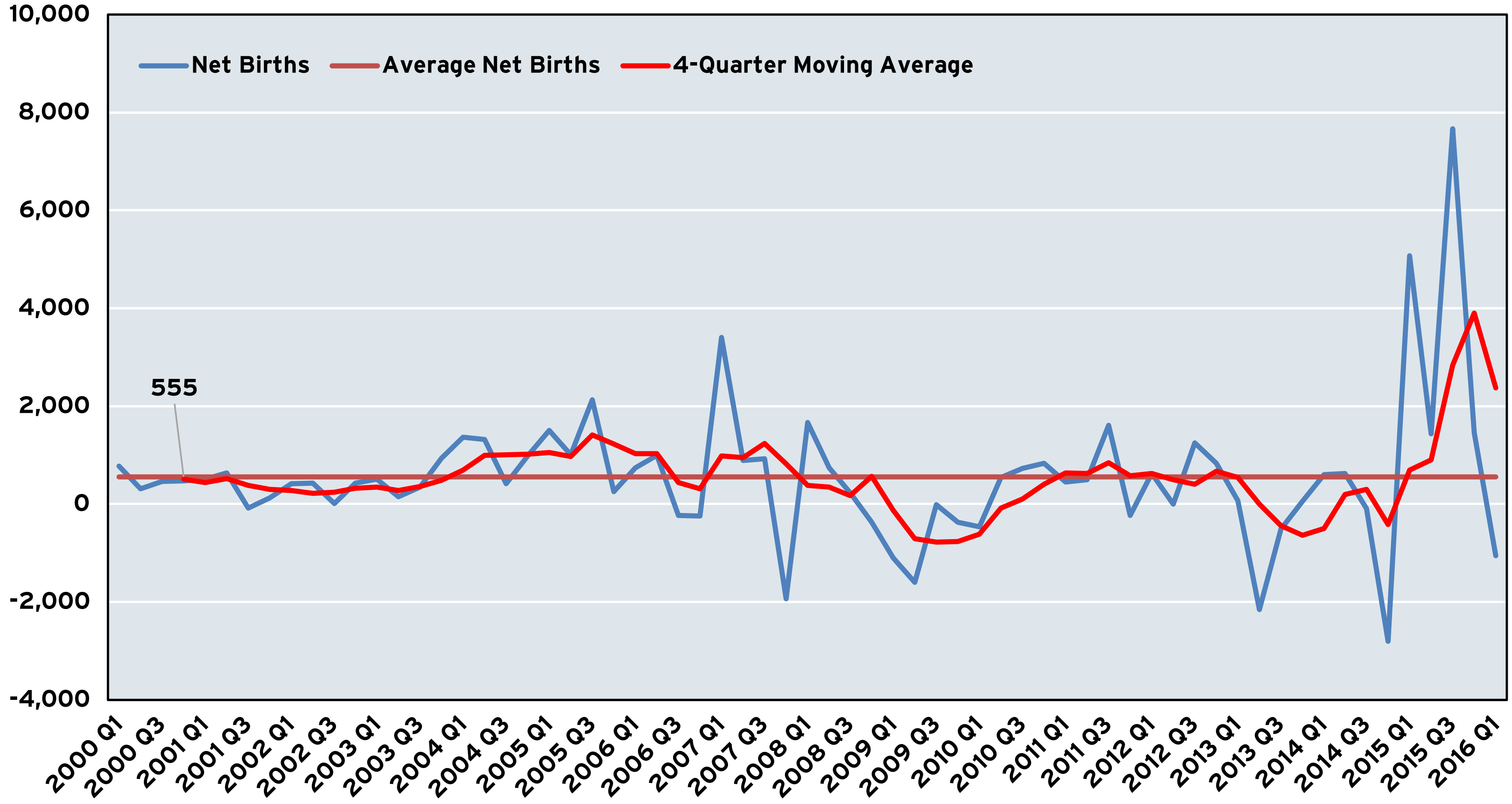
ESTABLISHMENT DEATHS IN VIRGINIA, 2000 Q1 TO 2016 Q1



Source: Bureau of Labor Statistics, Business Employment Dynamics, 2017

GRAPH 17

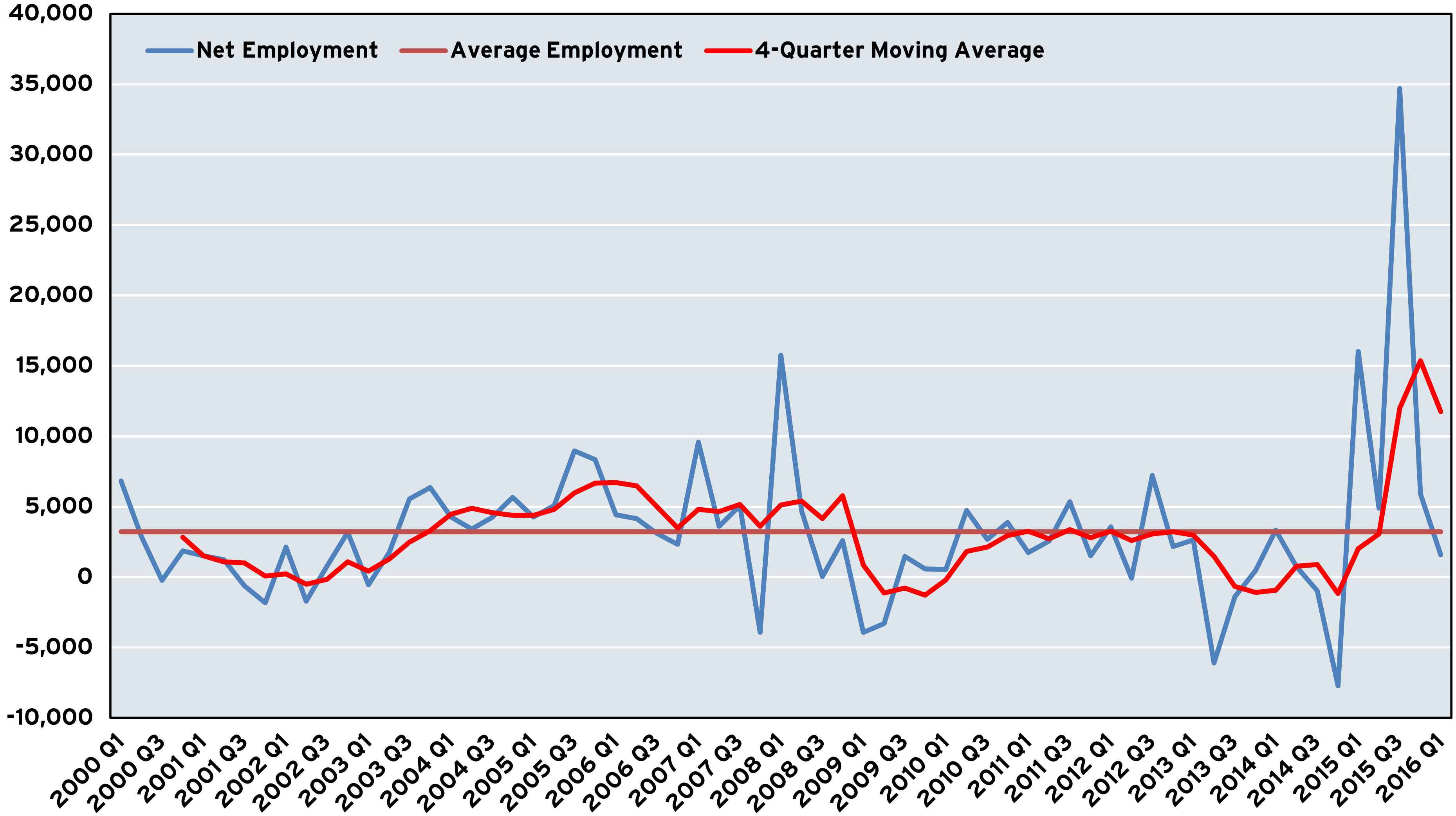
NET ESTABLISHMENT BIRTHS IN VIRGINIA, 2000 Q1 TO 2016 Q1



Source: Bureau of Labor Statistics, Business Employment Dynamics, 2017

GRAPH 18

NET JOB CREATION IN VIRGINIA BY NET ESTABLISHMENT BIRTHS, 2000 Q1 TO 2016 Q1



Source: Bureau of Labor Statistics, Business Employment Dynamics, 2017

Small And Young Firms And Job Creation

We now move to examining whether small firms and young firms contribute to job creation in the Commonwealth. We would like the reader to note that our conversation is shifting from establishments to firms as we are beholden to the available data. While the two are invariably linked (many establishments are single-unit firms), there are fewer firms than establishments. Young firms are the ones responsible for the lion's share of job creation.[19] Let's take one more dive into the numbers.

An establishment is a firm operating in a single physical location. A firm may have more than one establishment. A local "mom and pop" store with only one location is a single-establishment firm. A firm with multiple locations is a multi-establishment firm.

Undoubtedly, net job creation by small firms and net job creation by young firms are linked. Younger firms tend to be small, but there are also many small firms that are "long in the tooth." Firm size is a function of efficient scale, so equating startups with all small firms can be misleading.

It is interesting to examine net job data by firm age rather than firm size. We classify young firms as those in existence for 0 to 10 years and mature firms as those 11-plus years in existence. Graph 19 shows that net job creation is highly cyclical in mature firms, much more so than young firms. In fact, mature firms generate far more net jobs during periods of economic expansion. However, young firm net job growth is far more stable across the business cycle. Mature firms generated more net jobs in the early stages of recovery from the Great Recession, but the pace of job creation by younger firms now exceeds that of more established firms.

How does our pace of young firm job creation compare to the nation? Graph 20 shows that net job creation in both Virginia and the United States is highly cyclical, increasing during periods of economic expansion and declining during periods of slow growth or contraction. **Since the Great Recession, however, the paths of the United States and Virginia have diverged. Since 2012, younger firms in the United States have created net jobs at a higher rate than Virginia. Simply put, Virginia is falling behind in the creation of new jobs by young firms. The sluggishness of the Virginia economy may be due, in part, to the lack of dynamism in small firm creation.**

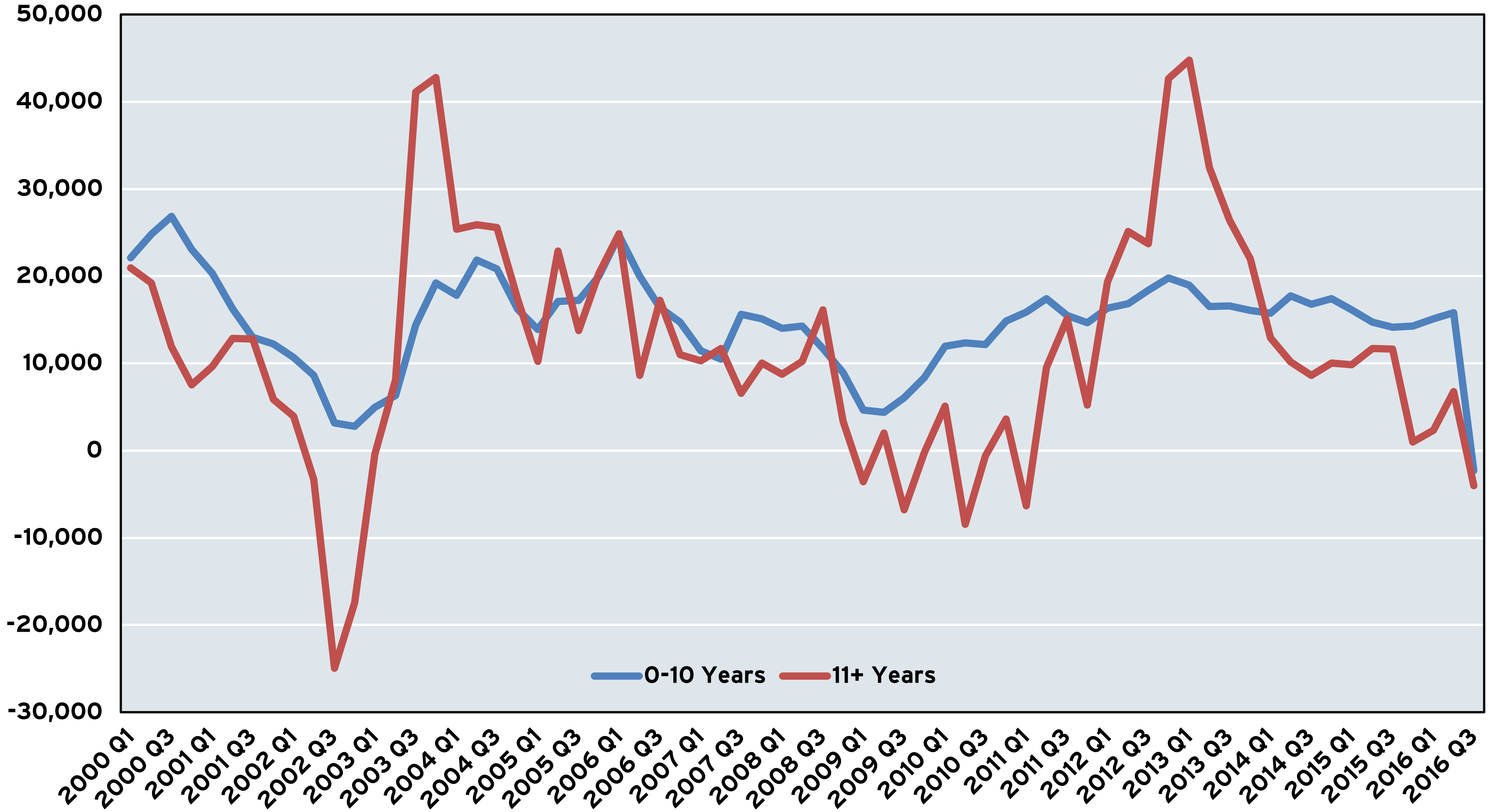
Is Virginia succeeding at fostering an improved climate for startups? The data suggest that the Commonwealth is creating an environment where individuals are creating more new firms than at any previous point in the century. Yet, the focus on firm creation may be misleading. The death rate of young firms in Virginia is too high and thus net job creation for smaller and younger firms in Virginia lags that of the nation.

We urge public officials and economic development agencies to focus on the sustainability of small and young firms. It is not enough to proclaim the number of startups as a measure of success. Reducing the mortality rate of these firms is important to retain the newly created jobs and create economic growth in the Commonwealth. Redirecting scarce public funds from grandiose development efforts to services that sustain small firms is a step in the right direction.

19 Haltiwanger, et al. "Who Creates Jobs? Small versus Large versus Young," *The Review of Economics and Statistics*, May 2013.

GRAPH 19

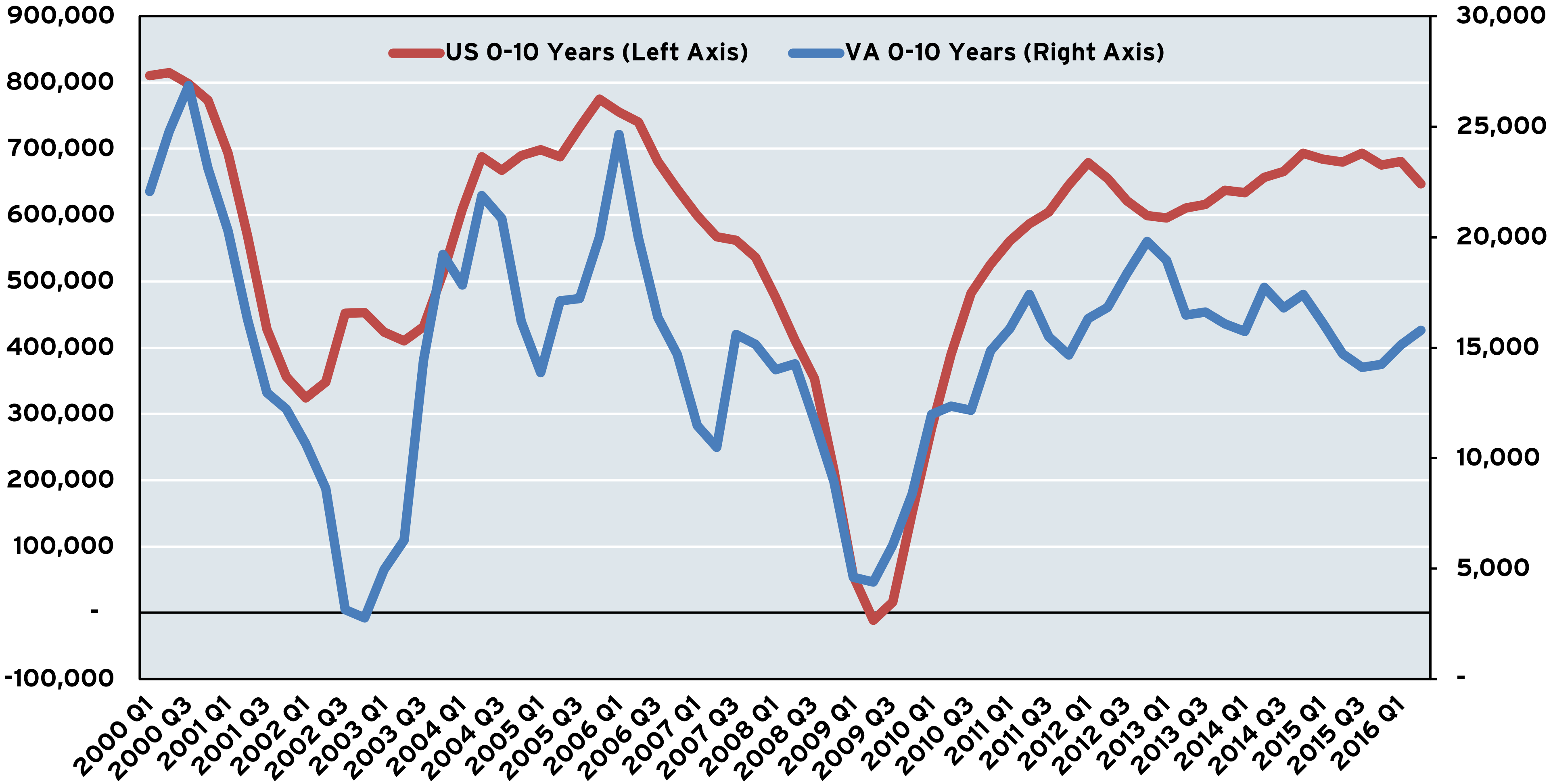
YOUNG FIRM NET JOB CREATION IN VIRGINIA, 2000 Q1 TO 2016 Q3: 4-QUARTER MOVING AVERAGE



Source: U.S. Census Bureau, Longitudinal Employer-Household Dynamics, Quarterly Workforce Indicators

GRAPH 20

YOUNG FIRM NET JOB CREATION IN VIRGINIA AND THE UNITED STATES, 2000 Q1 TO 2016 Q2: 4-QUARTER MOVING AVERAGE



Source: U.S. Census Bureau, Longitudinal Employer-Household Dynamics, Quarterly Workforce Indicators

Looking Ahead

In the next year or two, the only undisputed way to supercharge the Virginia economy is for the federal government to end budget sequestration. Federal spending continues to be the most important determinant of the Commonwealth's economic destiny.

In the long run, however, Virginia does control most of its own economic fate. We can make intelligent, focused decisions that improve the business climate in the Commonwealth. Improved economic infrastructure, an enhanced K-12 education system and targeted investments in "ed-med" research and development are among the most attractive strategies available to us.

However, as we have just seen, providing the environment and resources that will encourage the creation of a larger number of new firms also deserves increased attention and support, as do efforts toward helping these budding firms survive. Alas, this would constitute a new way of looking at things for most cities and counties, which have tended to focus their economic development dollars on financial grants to selected private entrepreneurs who construct showpiece hotels, arenas and other visible structures that elected officials proudly point to as immediate achievements. This is despite abundant empirical evidence that the economic rate of return on such public investments often is impressively low, or even negative.

Supporting new entrants into the marketplace represents a much less expensive and likely more productive use of public funds. While this is a long-run approach to economic development, it is more likely to lead to economic diversification.

The same can be said of investments in infrastructure, K-12 education and "ed-med" activities. They constitute long-term strategies. Witness California, North Carolina and Texas in this regard. Each of these states now is enjoying impressive growth based substantially upon investments made decades previously.

Do Virginia and its cities and counties have the vision and patience to pursue this path? We shall see.