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San José State University Economic Summit

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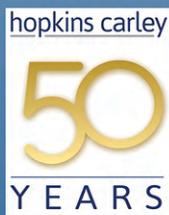
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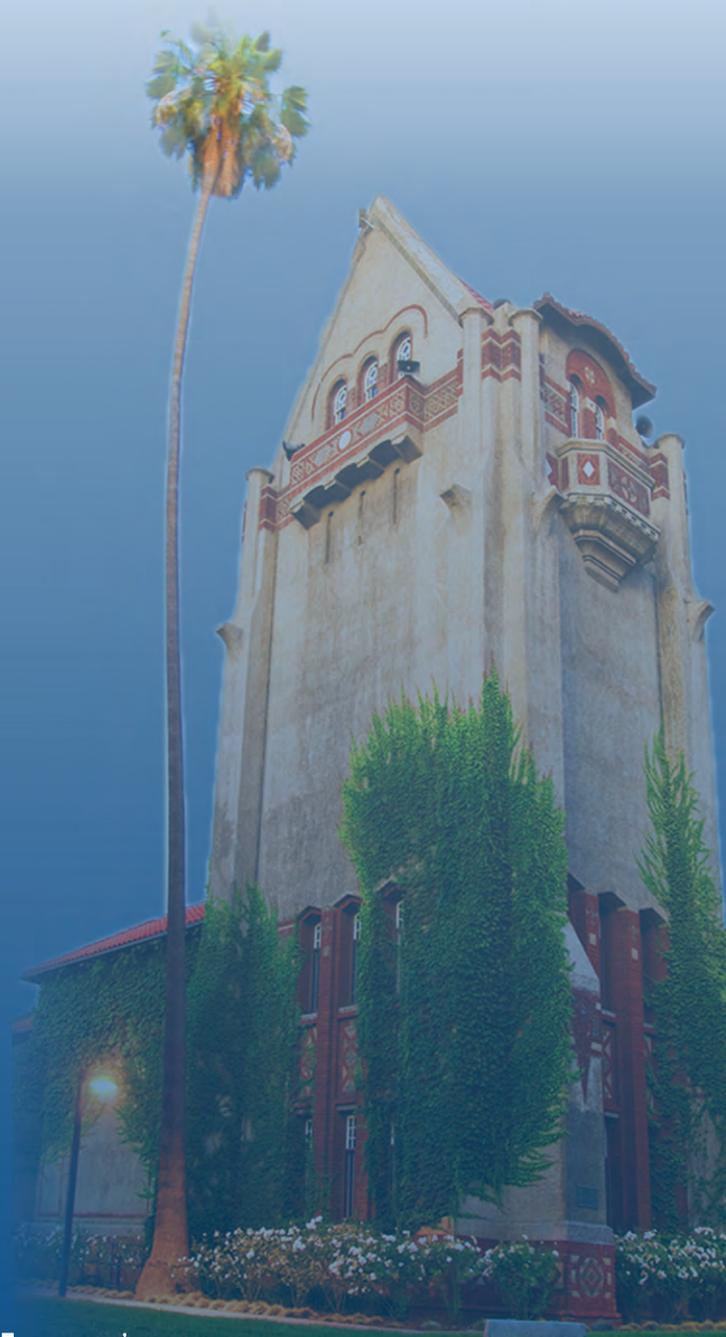


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PANELIST

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San Jose State University

Regional Intelligence Report



April 2018



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United States Outlook

by Christopher Thornberg, PhD

Beacon Economics

Stepping on the Gas and the Brake at the Same Time

Despite all the political tumult of 2017, the U.S. economy was a smooth-running machine. The nation's economy grew at a solid, steady pace throughout the year with overall output expanding by a reasonable 2.3% over 2016 levels. Industrial production started growing again, and by the end of last year U.S. manufacturing output reached a record high level. The labor market continued its steady improvement with over 2 million jobs added even as the U.S. unemployment rate dropped to nearly record lows. Wage growth and labor force participation rates both increased. The financial markets also improved with the stock market continuing its steady upward rise, marked by little volatility. Long-term interest rates remained low, as did inflation. In short, if economists were to dream up the perfect economic year—2017 might well be a close reflection.



Despite the strong momentum, the start of 2018 has been far less sanguine. Volatility returned to the financial markets with a bang and the market has made little headway since the start of the year. The first panic came from a number of reports suggesting signs of inflation, which in turn have caused long-term interest rates to drift up. Consumer spending—a big driver of growth last year—has softened, with both auto sales and retail spending disappointing after a strong holiday season. Not all the indicators are negative however—the U.S. jobs report for February was quite strong. But, in sum, growth for the first quarter of 2018 is looking to come in below 2% when the first estimates are released by the U.S. Bureau of Economic Analysis (BEA).

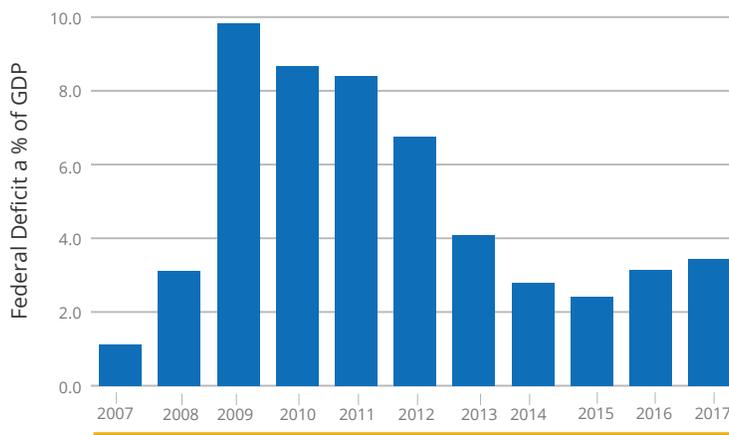
Beacon Economics still expects 2018 to end up being a robust year for growth—perhaps even better than 2017. But the top line numbers will not hide what will likely be a turbulent year, with any number of imbalances starting to form in the system. This unsteadiness is being driven by conflicting forces—some pushing hard to make the economy grow faster while others try to slow it down. The tension is like being in a moving vehicle and pressing hard on the brake and gas simultaneously. While the vehicle’s speed may not change much, the ride will become fairly turbulent, and the chance of skidding off the road and crashing will become increasingly likely as opposing pressures build up in the overall system.

Hitting the Gas: On the acceleration side, the new Federal budget is front and center. The tax cuts that were put in place for this year under the Tax Cuts and Jobs Act were supposed to be balanced by reductions in various tax offsets such as State and Local tax deductions and interest deductions for corporations. While Republican leaders initially claimed the plan would pay for itself, the best-case scenario suggested it would add at least \$1.5 trillion to the national deficit over the next decade.

The changes in the tax code by itself would have generated more in the way of economic growth, but the tax cuts were followed by a sharp increase in Federal spending on both defense and non-defense line items—and any chance of revenue neutrality was lost. These latest revenue and spending plans are estimated to add well over \$2 trillion in debt to an already dismal fiscal outlook. The Federal budget deficit has widened to 3.6% of GDP over the last twelve months, up from 3.1% of GDP the previous year.

Debt-driven government spending is typically used during economic downturns in an effort to mitigate the effects of a recession. This kind of spending in a full employment economy clearly diminishes some of the potential power of the growth—but it will nevertheless goose the economy for this year and likely in 2019 as well. It is worth noting that debt-driven spending was also responsible for the sharp increase in the trade deficit at the end of 2017.

Another major accelerant will come from business investment—particularly spending on equipment and software, which will be driven by a number of changes. First are the recent tax cuts. There is a clear, if modest, relationship between corporate tax rates and levels of business investment in the economy. Secondly, the tax plan carried with it changes to the rules surrounding depreciation for corporations. For those who may have missed it, the new tax code allows companies to accelerate depreciation on various sorts of capital expenditures—which is likely to stimulate spending.



UNITED STATES DEFICIT AS A PERCENTAGE OF GDP
2007 - 2017

Source: U.S. Bureau of Economic Analysis

Lastly is the growing labor shortage in the United States. With the nation’s unemployment rate below what economists refer to as ‘full employment’ and job openings still near an all-time high, businesses will have to figure out how to expand output without being able to fill all their available positions. This will lead companies to invest in labor saving technologies (e.g. invest in capital).

Hitting the Brakes: On the other side of the equation are economic brakes. The clearest one comes from rising interest rates on both the long and short end of the yield curve. The short end is being driven by Federal Reserve increases in the Federal Funds interest rate. There have been five rate hikes since the end of 2016, and the Fed has not been shy about indicating that there may be more to come. The long end jumped recently after a number of reports were released on inflation and anticipation of a sharp increase in treasury sales intensified.

One “non-brake” is inflation. For all the recent turmoil, realistically, inflation risk is still very low. It is true that the CPI has jumped in recent months, but this is only offsetting a number of very weak months for inflation last year. The core PCE index (the BEA’s CPI) suggests prices are only 1.5% above last year, well below the Fed’s modest inflation target of 2%. Add to this slowing M2 growth and weak bank lending and deflation would appear to be more of a risk at this point. And while wages are rising, wage-led inflation is typically seen in a higher inflation environment such as the one that existed in the 1970s and early 1980s—not in a low inflation regime such as today.

Still, the Fed is signaling plans to further tighten this year. Why is unclear. Perhaps the Fed believes that inflation is a risk despite these other indicators. Perhaps they are worried about a new financial bubble forming, or the economy overheating. Regardless of their motivation, tightening will cause borrowing costs to rise, will flatten the yield curve, and ultimately will dampen growth. The effects will be felt more strongly if inflation slows in the coming months, as expected.



MONEY SUPPLY AND U.S. BANK LENDING GROWTH
2000 - Present

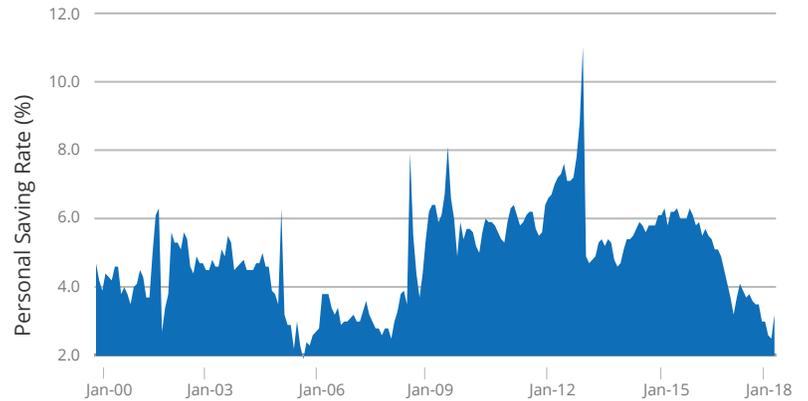
Source: Board of Governors of the Federal Reserve System



Another brake on the economy is the consumer savings rate. Consumers were a steadying influence through the mini-slowdown that occurred in 2015-16. But their consistent pace of spending increases was not matched by income growth—in other words consumers were saving less. The savings rate dropped below 3% in the 4th quarter of 2017—the lowest since the mortgage debt fueled spending spree of 2006 and 2007. While the ‘bad debt’ situation of a decade ago isn’t in place today, nevertheless, consumers have little slack to play with this year.

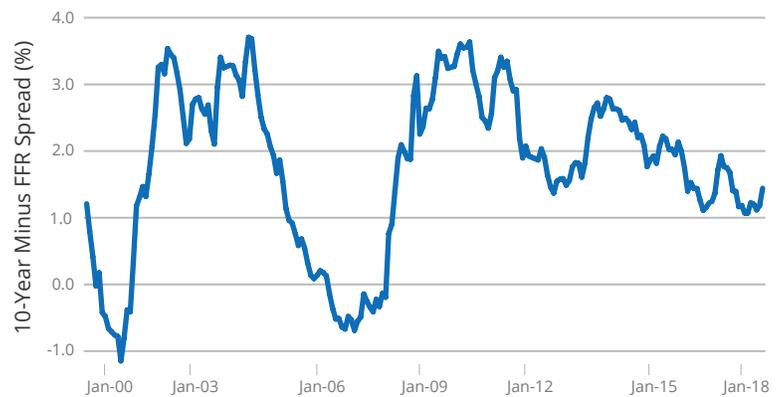
Lastly, braking action may come from foreign trade. The recent announcement placing tariffs on imports of steel and aluminum captured headlines around the world. This event, on its own, is un-newsworthy. Imports of these products represent less than 30% of U.S. consumption, and those products are less than 2% of total imports. The tariffs will impact only a few thousand workers—a margin of error on a monthly job gains report. But a tit-for-tat exchange of competing punitive tariffs could quickly devolve into a trade war—something that no one side ever wins. Where this goes from here is still unclear, but the threat by itself may well give pause to companies that are considering making major investment decisions in any sort of trade related industry.

Add it all up and 2018 will be a good year overall for the economy. But the turmoil generated by these competing forces is likely to begin creating imbalances in the system. While Beacon Economics still sees no recession in the works for the next 24 months, we may well look back at 2018 as the year in which the cause of the next downturn took hold in the U.S. economy. Be happy, but beware.



PERSONAL SAVINGS RATE
2000 - Present

Source: U.S. Bureau of Economic Analysis



10-YR TREASURY YIELD MINUS FEDERAL FUNDS RATE
2000 - Present

Source: Federal Reserve Bank of St. Louis

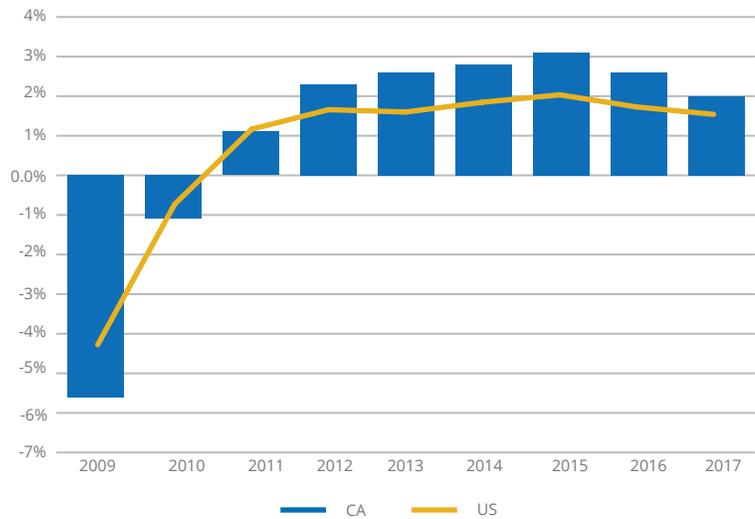


California Outlook

by Robert Kleinhenz, PhD
Beacon Economics

Long-Run Challenges in Times of Economic Gain

The U.S. economy has experienced steady growth in recent years, and later this year, the current economic expansion will become the second longest on record. Throughout much of this expansion, California has outpaced the nation and many states in terms of economic growth and job gains, and improvements in its unemployment rate, fueled by strength in many of its key industries. California will continue to lead the United States in 2018, making this year an opportune time to take on both current and long-term challenges.



ANNUAL CALIFORNIA & U.S. JOB GAINS

Year to Year % Change in Nonfarm Jobs

Source: U.S. Bureau of Labor Statistics; California Employment Development Department

California began 2018 on a high note with January employment numbers showing the largest yearly job gain in 18 months. Growing at a 2.4% year-to-year rate, the state added 400,000 jobs, with the Health Care, Natural Resources and Construction, and Leisure and Hospitality sectors accounting for over half of this increase. In percentage terms, the state was led by Natural Resources and Construction, Logistics, and Health Care, a pattern that has prevailed over much of the past year.

Industry	Jan-18 (000s)	YTY Change (000s)	YTY % Change
Total Nonfarm	17,038	400	2.4%
Health Care	2,312	76	3.4%
NR/Construction	870	76	9.6%
Leisure and Hospitality	1,986	58	3.0%
Government	2,580	39	1.5%
Prof Sci Tech	1,240	26	2.2%
Logistics	640	22	3.6%
Retail Trade	1,708	20	1.2%
Education	374	19	5.4%
Admin Support	1,111	19	1.8%
Information	534	12	2.3%
Other Services	568	8	1.4%
Wholesale Trade	727	8	1.1%
Financial Activities	837	8	0.9%
Manufacturing	1,319	5	0.4%
Management	234	3	1.2%

CALIFORNIA JOB CHANGES BY INDUSTRY
January 2018

Source: California Employment Development Department

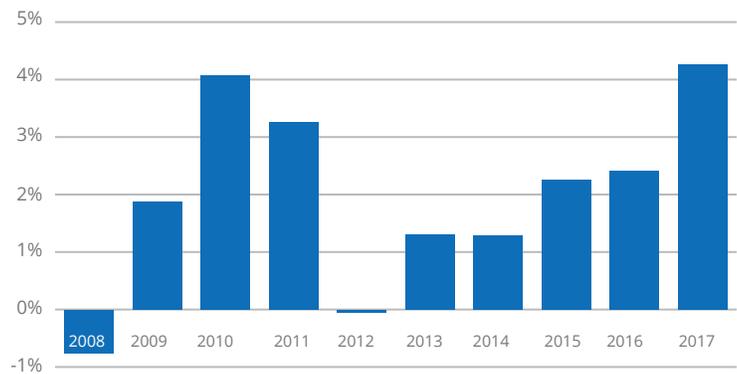


January’s gains come on the heels of six consecutive years during which California outpaced the nation in percentage job gains. Moreover, updated job numbers released in March revealed that California’s job gains were better than initially reported, up from an initial estimate of 1.8% growth to 2.0%, because of substantial upward revisions in important industries such as Health Care, as well as Professional, Scientific, and Technical Services, and Logistics.

The broader state economy displayed continued momentum, with Gross State Product rising by 2.3% year-to-year in the third quarter of 2017 and taxable sales showing a 4.1% increase over the same period. Fueling these advances, personal income increased by 3.8%, the third highest growth rate among the 50 states. Meanwhile, per capita personal income in California stood at \$58,500/year in the third quarter of 2017, 16% higher than in the United States as a whole. But while California saw a 3.1% increase in personal income, far outpacing the 1.9% gain nationally, gains in purchasing power have been tempered by inflation running at nearly three percent in the state compared to just two percent nationally.

With California hitting its lowest unemployment rate since 1976, wage gains in the state have accelerated in recent years. Average weekly wages in California increased by 4.3% in 2017, the largest increase in the last 10 years. With limited increases in the labor force expected this year, workers are almost guaranteed to see wages rise again. And it is too soon to gauge the effects of the hike in the statewide minimum wage as pay hikes are currently being driven by the scarcity of labor more than anything else.

Steady job growth and limited increases in the labor force will keep the unemployment rate low and push up wages for nearly all workers. With these gains in financial and economic well-being, households in California will fuel growth in their local economies by buying homes, appliances, and cars, and causing expansion in local-serving industries such as retail stores, restaurants, and personal services. Meanwhile, the state’s Logistics, Technology, and other external-facing industries will benefit from growth domestically and among our trading partners. All in all, California’s economic outlook for 2018 is good, in fact, somewhat better than was previously expected, making this an ideal time to devote serious attention to the state’s long run concerns.



YEAR TO YEAR % CHANGE IN WEEKLY EARNINGS IN CA

Source: U.S. Bureau of Labor Statistics

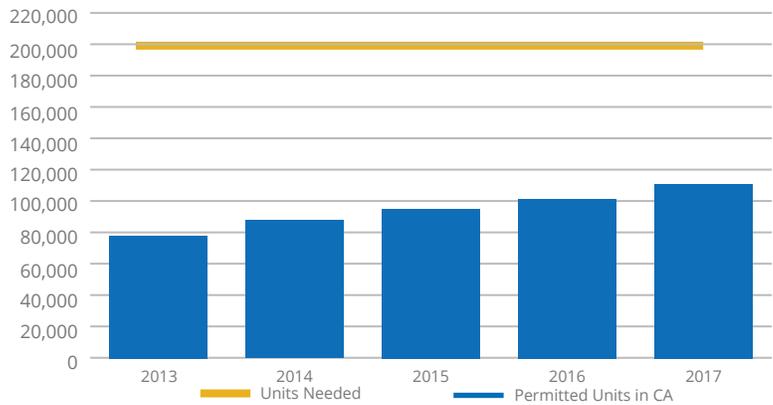
Long-Term Challenges... Short-Term Opportunities

In looking at California’s long-term challenges, the housing problem must be near the top of the list because of its significance for so many of the state’s residents and its economy. While Californians clearly understand that high home prices limit affordability, the obvious solution seems less clear: High prices reflect scarcity that can only be addressed through increases in supply.

California’s median home price was \$464,000 in the fourth quarter of 2017, nearly double that of the United States, where the median price stood at just over \$250,000. Since 1990, California’s median home price has routinely been significantly higher than that of the nation.

Home prices in inland California are closer to the U.S. norm: \$252,000 in Fresno, \$340,000 in the Inland Empire, and \$380,000 in Sacramento. However, the situation is quite extreme in coastal areas, with the median price in San Francisco at \$1.3 million, \$605,000 in Los Angeles County, and \$596,000 in San Diego County.

Renters are also challenged by the high cost of housing. The number and share of renting households in the state of California grew in the years following the Great Recession. With a limited response on the supply side, average rents rose steadily in many areas of the state.



CALIFORNIA HOUSING PRODUCTION VS HOUSING NEEDS
Annual Permits by Year

Source: Construction Industry Research Board

The magnitude of California’s housing shortage is well documented. At present, the state is estimated to need about 200,000 new housing units built per year, yet it has barely seen more than 100,000 units come on line in each of the last few years. As implied above, the state needs a mix of both single family and multifamily housing as well as a mix of for-sale and rental housing. To be sure, the state and its regions periodically estimate housing needs and set housing goals. In fact, state law requires that metro areas and their jurisdictions develop multi-year housing goals known as the Regional Housing Needs Allocation or RHNA. However, few jurisdictions come close to meeting the RHNA-based housing goals because there is little incentive to do so. In the calculus of local government finance, a new housing unit will impose new burdens on government services, yet yield only a modest increase in property tax that is mostly controlled by state government. Local governments are far more inclined to prefer retail development, which has the potential to generate new taxable sales that go straight into the general fund.

Recognizing that the state has a chronic housing shortage and understanding that inadequate housing has the potential to impede economic growth, state legislators have succeeded in passing legislation that has the potential to make a difference. Laws such as SB 35 put teeth behind the RHNA goals, stipulating that a given project that complies with local land use regulations may receive ministerial approval if the jurisdiction in which it is located has not met its housing goals.

SB 35 has lent new urgency to a problem that has festered for many years, and very likely will force local jurisdictions to rethink their housing strategy. In response, local jurisdictions must first acknowledge that population growth is an inevitable part of their future. They must take steps to understand what that growth will look like, plan adequately, and, finally, execute on those plans. This effort must address the concerns of both current and future residents: renters as well as homeowners, apartment dwellers as well as occupants of single-family homes. Doing so will go a long way toward addressing the state’s housing needs while also ensuring its long-run economic dynamism and vitality.

South Bay Outlook

OVERVIEW

Recent data scandals by companies like Facebook have raised questions about the management, security, and use of consumer data. At the same time, the threat of punitive measures toward Amazon by the federal government led to a 3% drop in NASDAQ trading in a single day, with Amazon losing 5% of its value. In the midst of all of this tech sector turmoil, however, is a strong and growing tech sector in the South Bay. In fact, the South Bay economy has grown strongly over the past year due in part to the strength of the tech sector. Venture capital funding is on the rise, even though 2017 showed fewer overall deals than 2016. The South Bay economy is as healthy as ever.

Despite these positive signs, a lack of housing is limiting the region's potential for economic growth. The South Bay is adding jobs, and wages are growing, but the stock of housing continues to fall short, making the existing stock expensive. Workers are living in more affordable areas and commuting to the South Bay. These new jobs are important for the South Bay economy, but commuters will put a strain on local infrastructure and worsen traffic that much more. While the outlook for the South Bay economy remains bright, particularly in the tech sector, affordability continues to be the region's biggest concern.

EMPLOYMENT

Over the course of 2017 and into early 2018, the South Bay's economy continued adding new jobs, albeit at a slower pace than in recent years. The unemployment rate for the San Jose Metropolitan Statistical Area (Santa Clara County and San Benito County) fell to 2.9%, a 0.8 percentage decrease from January 2017 to January 2018. This drop is attributable to the increase in total nonfarm employment, as the workforce increased by 2.8% in the same time period.

Total nonfarm employment as of January 2018 stood at 1.1 million workers in the South Bay. Total nonfarm employment growth in the South Bay outpaced both California (2.4%) and Oakland (2.1%) over the course of 2017. Meanwhile, total household employment (the measure of working residents of the South Bay, who may work in the South Bay or other areas) was 1.0 million, an increase of 0.6% between January 2017 and January 2018. Consequently, it appears that South Bay businesses are adding primarily commuters from throughout the region even as more residents of the South Bay are finding jobs.

Industry	18-Jan (000s)	YOY Change (000s)	YOY Change (%)
Total Nonfarm	1,116.2	30.3	2.8
Information	89.7	9.2	11.4
Utilities	2.5	0.2	9.1
Management	14.3	0.9	6.6
NR/Construction	51.9	2.8	5.8
Leisure & Hospitality	106.0	5.1	5.1
Education/Health	171.3	4.6	2.8
Prof, Sci, & Tech	149.5	3.9	2.7
Finance & Insurance	22.1	0.5	2.1
Manufacturing	170.5	3.2	1.9
Retail Trade	86.9	1.1	1.2
Government	96.2	1.1	1.1
Wholesale Trade	35.7	0.2	0.4
Real Estate	14.4	0.0	-0.2
Admin Support	63.8	-1.5	-2.3
Transport/Warehouse	12.5	-0.9	-7.0

TOTAL NONFARM EMPLOYMENT

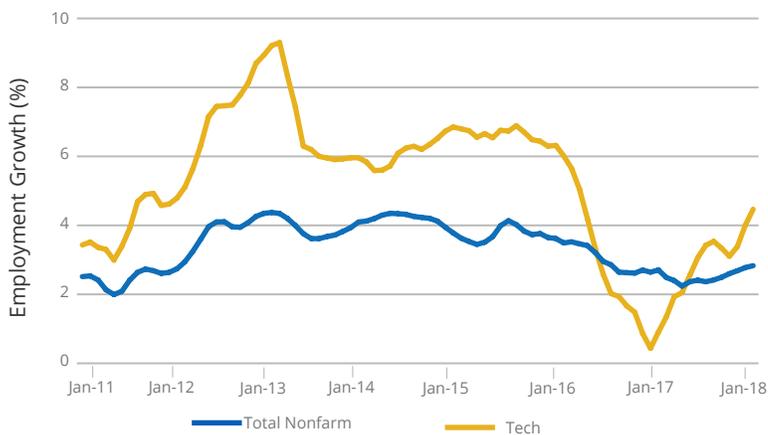
Source: California Employment Development Department

Despite concerns that tech employment was in a lull in the region, of the many industries that sustained employment growth over the course of 2017 and into 2018, the Professional, Scientific and Technological Services industry was among the strongest. Between January 2017 and January 2018, the industry added more than 3,200 employees, growing by 2.7% overall. Employment growth for Professional, Scientific and Technical Services industry within the South Bay still falls short of that of San Francisco (6%), while outpacing the statewide average slightly (2.5%).

The South Bay’s largest employment growth in absolute numbers was in the Information industry, where over 9,000 employees were added between January 2017 and January 2018, for 11.4% growth. In an area like the South Bay, the Information industry includes many jobs in telecommunications and data processing and hosting. The strong job growth in Information adds even more evidence that tech sector employment in Silicon Valley is in no way in a lull.

The largest employment growth in percentage terms came from the Arts & Entertainment industry, with an increase of 20.7%, or 3,100 employees—a particularly strong increase given the industry’s relatively small size in the overall South Bay economy. Economic growth not only in the South Bay but across much of the country has encouraged an increase in tourism and business travel, motivating businesses in the South Bay Leisure & Hospitality industry to bring on new employees. The industry added more than 5,000 workers (5.1% growth) between January 2017 and January 2018.

While most of the industries in the South Bay added jobs over the past year, some industries shrank, though fortunately these aggregate job losses were relatively minor compared to gains in other industries. The largest job losses were in region’s Transportation, Warehousing, and Utilities industry, which shed almost 1,000 jobs, or 4.7% of its workforce, between January 2017 and January 2018. Administrative and Support Services, which includes office administrative positions, custodial positions, and security workers, among others, lost the most employees of any industry, 1,500 in all, or about 2.3% of its workforce, between January 2017 and January 2018. However, strong job growth across much of the South Bay economy was able to more than make up for job losses in certain industries.



SOUTH BAY TECH VS TOTAL NONFARM EMPLOYMENT GROWTH

Source: California Employment Development Department

Job growth has translated into higher pay for South Bay workers. As the unemployment edges down to record lows, this causes wages to go up out of demand for labor. Wages have grown across most of the industries in the South Bay. In the third quarter of 2017, the average annual wage in the South Bay reached slightly above \$124,000, an increase of 4.2% from the third quarter of 2016. Growth in the South Bay outpaced that of the East Bay (-0.2%) and California (0.5%). Furthermore, the average annual wage in the South Bay was significantly higher than that of California (\$63,200) and the East Bay (\$69,800). Of course, South Bay wages are particularly high due to the concentration of high-skilled workers in the tech sector and professional services, among others.

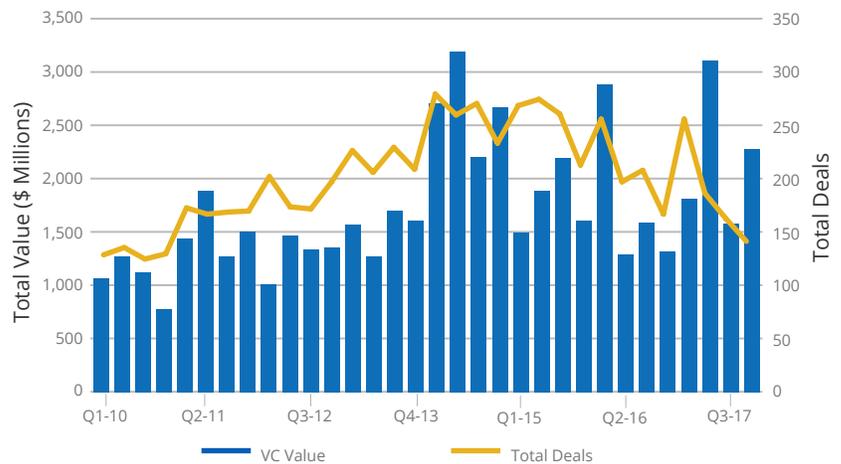
In fact, the growth in the average annual wage in the South Bay has been increasing across many industries, whether they are low-paying industries or otherwise. Professional, Scientific and Technological Services wages increased 6.3% from the third quarter of 2016 to the third quarter of 2017, with the average annual wage in the industry surpassing \$180,000. On the other hand, the average wage for Leisure and Hospitality, one of the largest-growing industries in the South Bay providing jobs to many of the region’s lower-skilled workers, increased 3.5% to \$38,100.

Although the average annual wage growth in the South Bay demonstrates the excellent health of the local economy, affordability remains a concern. With an average wage above \$124,000 but with workers in some industries earning less than one-third of that, these workers may opt to live in more affordable communities far away, generating commute problems throughout the region, among other quality of life problems for the South Bay. Affordability will be addressed further in the Residential Real Estate section below.

Venture Capital

With the tech sector of the South Bay on the upswing, venture capital funding is growing in turn. While the total number of venture capital deals in the South Bay in 2017 was 10% lower than in 2016 (roughly 1,200 deals overall), the overall value on these deals increased significantly. In 2016, the total value of venture capital funding was \$7.1 billion, but in 2017 that value jumped up by 23% to \$8.8 billion. In contrast, there were 17.5% fewer deals in San Francisco between 2016 and 2017, with a 9.3% decrease in total value. However, San Francisco remains the country’s top destination for venture capital funding, at a total value of \$15.8 billion in 2017, still almost twice as much as the South Bay in 2017. Perhaps unsurprisingly, however, given the abundance of tech in the South Bay and its reputation as a hub for entrepreneurship, the South Bay’s venture capital deals account for more than 20% of the statewide venture capital deals done, behind only San Francisco.

South Bay firms captured some of the largest venture capital deals in the fourth quarter of 2017. Skybox Security – a San Jose-based company focusing on security management solutions, accumulated \$150 million from venture capital deals, second among firms generating venture capital funding in the fourth quarter of 2017. Fourth overall in total venture capital funding in the fourth quarter of 2017 was Palo Alto’s Bill.com, which offers services for small to medium companies in payments, invoicing services, and document storage. The company accrued \$100 million in venture capital funding and includes investors such as J.P. Morgan Chase and Temasek Holdings. As noted above, the tech sector in the South Bay is not at all in a lull, and the region’s businesses remain an attractive option for investors going forward. Substantial amounts of venture capital funding will allow these firms to scale and add many more high-wage, high-skilled jobs to the South Bay economy.



SOUTH BAY VENTURE CAPITAL

Source: Pitchbook

The recent turmoil resulting from breaches in data privacy leaves the future of data management and security uncertain. The recent events involving companies such as Facebook might introduce a new sector revolving around data protection for consumers. This new field could open up doors to more employment and establishments in the South Bay. On the other hand, this could cause concerns of mistrust between investors and the public on tech companies in general, potentially leading to decline in valuations of these companies.

Local Spending

Growth in consumer and business spending has led to growth in wages and employment in the South Bay. High-paying jobs in Silicon Valley help to generate higher-than-average spending by consumers (part of what drives the high cost of living in the region). Between the fourth quarter of 2016 and the fourth quarter of 2017, taxable sales in the San Jose MSA increased by 7.1%, or \$806 million. The East Bay had a slightly better year for taxable sales, with an increase of 7.7%, or just under \$953 million, between the fourth quarter of 2016 and the fourth quarter of 2017. Taxable sales growth in the South Bay was comparable to growth in the state overall, at 7.3% from the fourth quarter of 2016 to the fourth quarter of 2017.

Taxable receipts data for the 2016 and 2017 year to date (Q1-Q3) shows that spending activity was higher across most sectors of the South Bay economy in 2017, with only a few exceptions. Total taxable receipts were 1.4% higher for the 2017 year to date than the 2016 year to date. Taxable receipts for Business and Industry, which accounted for 23.7% of total taxable receipts in 2017, decreased slightly, at 1.2%, while General Consumer Goods, which accounted for 17.2% of total taxable receipts in 2017, decreased by 2.2%.

Nonetheless, Autos and Transportation spending (14.1% of total taxable receipts) continued to drive overall spending growth, with a 4.1% increase in taxable receipts, while affordable gas prices bolstered Fuel and Service Stations spending, with an 8.5% increase in taxable receipts. Not surprisingly, as demonstrated by the increase in industry jobs described above, Leisure and Hospitality spending was also on the upswing, with Restaurants and Hotels taxable receipts increasing by 2.6%. Though some major categories of spending were notably lagging over the course of 2017, the overall trend is up, and employment growth across much of the South Bay economy, as well as a strong fourth quarter of 2017 in taxable sales, suggest that local spending will remain on the rise in 2018.



Residential Real Estate

With wages and employment on the rise in the South Bay, affordability nonetheless remains an issue, as local home prices are increasing faster than average wages. As of the fourth quarter of 2017, the existing single-family median home price in the region has risen to \$1.1 million, a substantial 23.6% increase from the fourth quarter of 2016. While the pace of home price appreciation is similar in other nearby regions, price appreciation in the South Bay is the starkest. Oakland's existing single-family median home price increased by 11% to \$699,000 between the fourth quarter of 2016 and the fourth quarter of 2017, while the existing single-family median home price in San Francisco increased by 13% to \$1.3 million in that time.

The number of mortgage burdened households has gone down in San Jose between 2013 and 2016 by 1.8%. In addition, between 2011 and 2016, the share of households paying 30% or more on housing costs dropped from 28.9% to 19.8%, meaning housing cost affordability generally went down. Much of this decrease in mortgage-burdened households is due to significant job growth during that time, so this is an indicator worth monitoring as the pace of job growth in the South Bay slows down.

Apartment rents in the South Bay are also on the rise, reaching \$2,600 per month, a 3.3% increase between the fourth quarter of 2016 and the fourth quarter of 2017. This outpaced the growth in rent for Oakland (1.9%) and San Francisco (2.9%). San Francisco remains more expensive for renters, with the cost of rent at \$3,000, while Oakland remains more affordable than the South Bay, at \$2,200. Although the South Bay provides a high quality of life for its residents, and a substantial amount of high-paying jobs, workers in the region may opt to live in more affordable nearby regions and commute in, if the cost of housing in the South Bay continues to escalate.

As home prices rose between the fourth quarter of 2016 and the fourth quarter of 2017, home sales in the South Bay remained mostly flat. Total sales in 2017 exceeded those in 2016 by 3.1%, with more than 13,500 homes sold in 2017. On a quarterly basis, home sales have ranged between roughly 3,000 to 4,000 sales per quarter for several years. New construction will help to alleviate supply constraints and ease the upward pressure on home prices, even as home sales remain roughly the same from quarter to quarter. For renters, availability has not altered much. The apartment vacancy rate remained roughly flat between 2016 and 2017, at around 4.5%.



HOME PRICES & SALES

San Jose MSA, Q1-05 to Q4-17

Source: DataQuick

Fortunately for prospective homebuyers in the South Bay, residential construction is increasing, with the number of residential permits rising significantly over the course of 2017. The total number of residential building permits issued in 2017 was 10,400, compared to 6,000 permits issued the year prior—a 74% increase overall. Single-family permits increased by 92%, while multi-family permits increased 39%. The increase in residential permitting activity is not a local phenomenon. Residential permits in the Oakland MSA increased by 45.8% between 2016 and 2017. The total number of single-family permits issued in Oakland grew by 63% from 2016 to 2017. An abundance of new construction demonstrates high demand for residential property throughout the Bay Area, but particularly in the South Bay. Even so, given that the South Bay is already so far along in its economic expansion, residential construction is on the low side relative to pre-recession levels. The South Bay will need much more new construction to provide an affordable supply of housing for its growing workforce.

Commercial Real Estate

Among commercial properties, while cost of rent was on the rise, construction was on the decline over the course of 2017 in the South Bay. The total value of nonresidential building permits issued in the South Bay decreased 26.6% between 2016 and 2017. Much of the decline is due to a substantial drop-off in total office permit values, which fell by 81% in that time. In contrast, total nonresidential building permit values increased by 40% in San Francisco and by 30% in Oakland in that time.

Cost of rent for office property reached \$43 per square foot annually in South Bay, a 18.7% increase between the fourth quarter of 2016 and the fourth quarter of 2017. The increase in cost of office space reflects the increased demand for office property, as the vacancy rate for office space in South Bay decreased 0.8 percentage points to 13.7% between the fourth quarter of 2016 and the fourth quarter of 2017. The cost of South Bay office property is higher than Oakland's (\$33 per square foot annually) but much cheaper than San Francisco's (\$60 per square foot annually). Thus, while Oakland office space is ideal for businesses seeking the greatest affordability in the Bay Area, the South Bay provides an ideal spot for businesses that wish to avoid San Francisco prices but locate themselves at a hub for industries such as tech. The price of office property in San Francisco reflects its relatively tight supply with an office vacancy rate of 9.8% as of the fourth quarter of 2017. The vacancy rate in nearby Oakland is comparable to that of the South Bay, at 14.1%. Thus, as compared to neighboring regions, there is no shortage of office space in the South Bay.

Industrial space remains one of the cheaper commercial real estate options in the South Bay, at a cost of \$12 per square foot annually as of the fourth quarter of 2017. The price is rising however, up 5.6% from the fourth quarter of 2016 to the fourth quarter of 2017. The vacancy rate for the industrial space stood at 9.4%, dropping 0.8 percentage points between the fourth quarter of 2016 and the fourth quarter of 2017. In contrast, the supply of industrial property is very tight in San Francisco, with a vacancy rate of 4.7% as of the fourth quarter of 2017. In turn, San Francisco's cost of rent for industrial space is higher than that of the South Bay, at \$14 per square foot annually. Oakland's cost of rent is much lower, at \$9 per square foot annually as of the fourth quarter of 2017. The vacancy rate for Oakland is 7.6%, however, with Oakland becoming an increasingly attractive option for industrial space in the Bay Area in recent years.

The supply of retail space in the South Bay is constrained, with a vacancy rate of 5.1% as of the fourth quarter of 2017. The supply constraint is pushing the cost of retail space up, with cost of rent increasing 3% to \$36 per square foot annually between the fourth quarter of 2016 and the fourth quarter of 2017. The supply of retail space is just as tight in nearby communities. As of the fourth quarter of 2017, the retail vacancy rate stood at 3.1% in San Francisco and 6.6% in Oakland. Oakland's retail space remains more affordable than that of the South Bay, at \$31 per square foot annually, while San Francisco's retail space is on par with the South Bay, at \$37 per square foot annually.

San Jose State University

Regional Intelligence Report



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