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Produced by Beacon Economics, LLC

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REGIONAL INTELLIGENCE REPORT

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Prepared by Beacon Economics, LLC

Eighth Edition

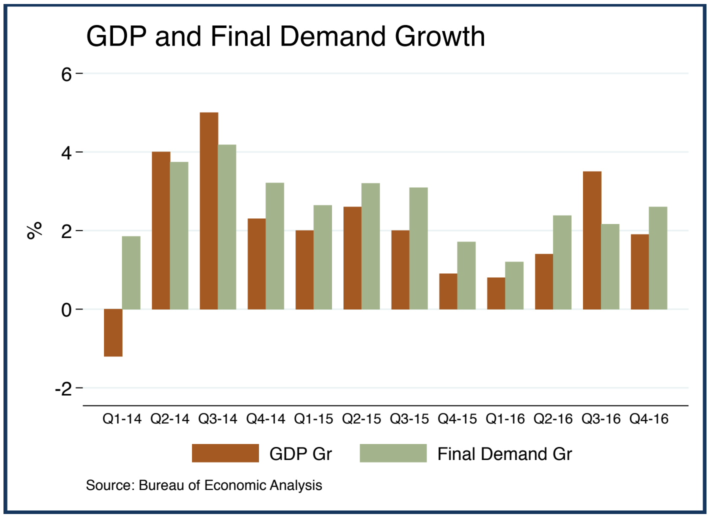
April 2017

United States

The Unknown Unknowns

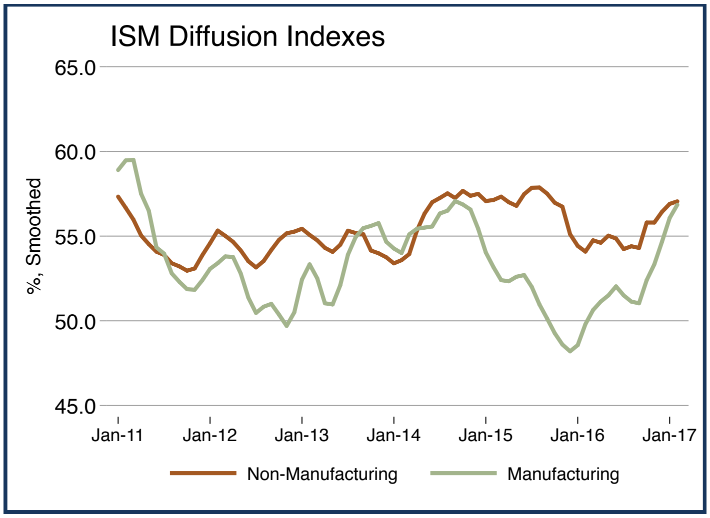
As the first quarter of 2017 comes to a close, two distinctly opposing trends have formed in terms of the U.S. economy's outlook for the year. On one hand, the nation's economy is clearly picking up momentum after a year of slow growth in 2016. On the other hand, the policy uncertainties created by the surprise election of Donald Trump to the presidency have only become worse as his administration moves into its third month.

President Trump's first major agenda items—travel bans and health insurance reform—have become mired in political and legal battles. The net result is that while Beacon Economics' point estimate for growth in 2017 has increased marginally, to slightly less than 2.5% growth for the year, the range of variance around this estimate is also widening. In other words, uncertainty is the biggest issue the nation is dealing with.



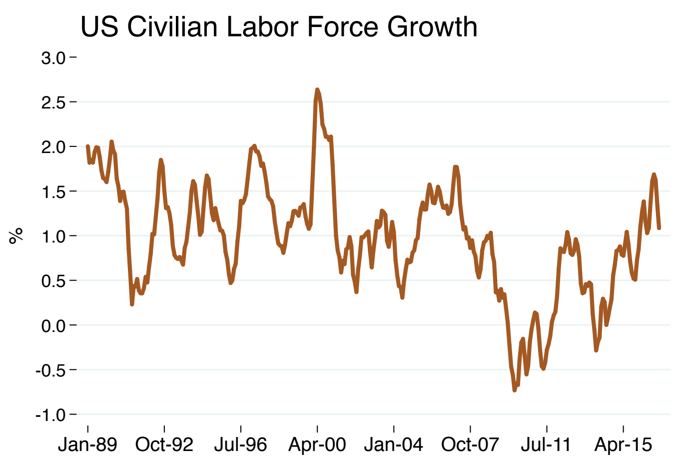
Taking a look at current economic trends, U.S. economic growth in the last quarter of 2016 came in at a weaker than expected 1.9% and may be even lower for the first quarter of this year—perhaps as low as 1% given the current reading. But these top line numbers belie growing momentum in the economy. The fourth quarter growth rate was pushed down by a very large jump in the nation's trade deficit, yet in contrast, domestic demand (driven by increases in consumer, business, and government spending) grew at a 2.6% pace of growth—the best since the third quarter of 2015.

As for the weak first quarter of 2017, this is a data pattern that had been seen continuously since 2010, with first quarters averaging 1% growth, while the final three quarters of each year averaging 2.5%. Why the seasonal adjustment process has not ironed out this persistent pattern is difficult to say.

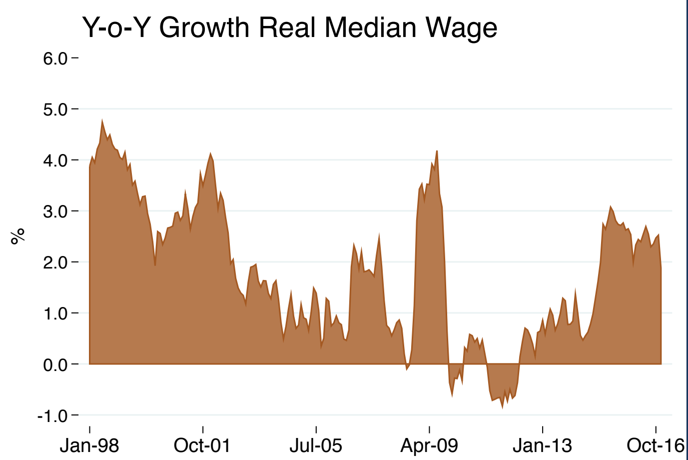


Beyond overall GDP growth, plenty of other economic indicators show that the U.S. economy is gathering momentum. Industrial production estimates from the Federal Reserve have been rising since last fall, while the ISM indexes for both manufacturing and services continue to rise.

These improved outcomes are being driven by an international economy that has returned to a growth track with better than expected numbers coming from many corners of the globe including Europe, China, and Japan, all which beat expectations for growth. U.S. exports have expanded accordingly, despite the rising value of the US dollar. The oil slump is also reversing itself. New well construction is rising again and oil production is back to over 9 million barrels per day.



Source: U.S. Bureau of Labor Statistics



Source: Federal Reserve Bank of Atlanta

These gains are reflected in increased business investment and rising corporate profits. And it isn't just business experiencing better times. Also significant is the nation's increasingly tight labor market. The headline U.S. unemployment rate is well below 5%, even as job openings remain close to an all-time high level. Consumer spending and credit expansion continues to move forward at a sustainable pace, helping to smooth out some of the bumps created by a volatile global economy. The net result has been an increase in wages as well as a sharp acceleration in labor force growth with workforce participation rates starting to climb again.

In other words, President Trump has had the good fortune of inheriting the strongest U.S. economy in the last decade. Unfortunately, Candidate Trump ran on a platform that did not emphasize the nation's economic strength, but its profound weakness. From trade to regulations to immigration to taxes, Trump created straw men to blame for problems that don't actually exist in the U.S. economy. He has proposed sweeping changes—most of which, by definition, cannot deliver the promised positive effects given the fact that the economy is not suffering in the way he has suggested.

The primary impacts from the Trump administration's proposed policy shifts will largely be confined to what economists refer to as the "law of unintended consequences." One example is the Federal budget. President Trump is proposing broad tax cuts for corporations and individuals, without any major cuts in revenues. Implicit in this proposal is the idea that a surge in economic growth combined with a reduction in wasteful spending and some tax deductions will make these actions largely revenue neutral.

Of course, the entire conversation has aggressively steered clear of the political minefield known as Federal entitlements, all of which are about to see a rapid acceleration in spending growth due to the Baby Boomer generation moving into retirement. By Beacon Economics' internal calculations, without making any change to tax policies, Medicare by itself will rise from 18% of current revenues to over 40% in 2035.

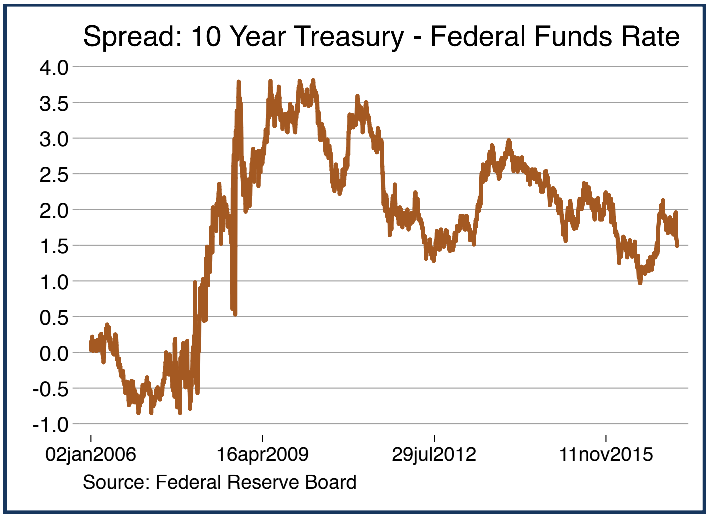
Realistically, the outlook for the U.S. deficit is grim regardless of any budget changes by the Trump administration unless the nation is willing to face these very real issues, something that is highly unlikely in today's political environment where even basic decisions such as raising the debt ceiling have become hyper-partisan. Similar arguments can be made around other hot policy items on the Presidential agenda, including trade and immigration.

If Beacon Economics believed President Trump would succeed in enacting his policy priorities, we might have better clarity on economic outcomes, for better or worse. But given that the administration's first three major policy initiatives on travel, health insurance, and the budget have all been stymied by the courts or infighting within the Republican party, it has become harder and harder to predict how policy in the United States will actually change – and what it may mean for economic growth.

Uncertainty about the direction of the nation seems to fly in the face of the stock market's ongoing rally. But then again, the stock market is strikingly incompetent in recognizing vague threats. Remember that it wasn't until the failure of Lehman Brothers—during the third quarter of the year-and-a-half-long 'Great Recession'—that the markets finally tanked. The market's focus is exclusively on profits and the potential for corporate tax cuts. Wall Street may only start to worry if Trump's tax cut proposals look less likely to succeed, a valid concern given the ongoing failures of his administration. Add to this clear signs of infighting among the President's team of advisors, deepening conflict of interest issues, and falling approval ratings, and it is little wonder that UK odds makers are now suggesting the chance of Trump making it through his first term is only slightly over 50%.

Then there is the Federal Reserve. The Fed has now raised rates three times in the last 6 months—a very sharp pace. The justification for the increases has been typical—that a full labor market implies a need to back off the stimulus before creating inflation. But such a concern is of limited value in today's economy. First, inflation is still low by historical standards and money supply growth is also constrained (hard to see any nascent issues here).

Second the Philips curve (the inverse relationship between inflation and unemployment) is hardly existent in a low inflation world. Lastly, the Fed typically chases a rise in the 10-year bond rate—responding to a steepening yield curve. The current move keeps the spread at well below 2 percentage points—very low from a long-term standpoint and even low relative to the spreads since seen the start of the Great Recession.



Trying to ascertain what is on the minds of people at the Federal Reserve Banks is impossible during the best of times. Are they really concerned about inflation? Or are they more concerned about the potential of a new Trump driven bubble? Or is there some other motivation—such as heading off an effort by Congress to take control of the Federal Reserve after years of complaints about the Fed's loose monetary policy (even though those complaints have no basis). We don't really know so it is difficult to say just how far the Fed will go in flattening the yield curve.

All this mystery only adds to the overall confusion about where the economy is headed next. If there were a well-defined policy direction from the Trump administration or the Federal Reserve, even if the policies were unwise, it would allow for some clarity on the direction of the economy. But the chaos within this administration leaves us, as forecasters, with little idea as to what might actually occur. As we move through the year, beware the unknown unknowns.

California

Slower Growth Ahead

California has good reason to be concerned about the disruptive political environment that has characterized President Donald Trump's first two months in office. With a large foreign-born population (foreign-born residents made up more than one-quarter of California's population in 2015, compared to 13% for the United States as a whole) and a significant amount of the nation's trade passing through its ports and over its borders, the state economy is hard-wired to the rest of the world. The Administration's desire to enact a travel ban along with its hardline positions on trade have significant implications for many parts of the California economy. So it's little surprise to see California government officials and business leaders challenging the Administration on these issues and other policy fronts such as environmental regulation and infrastructure investment. State leaders have their work cut out for them as they try to ensure decisions from Washington neither trip up the California economy, nor work against its businesses and residents.

The California economy generally tracked the national economy as it advanced throughout 2016. The state's unemployment rate fell to it lowest in 10 years at 5.1% in January 2017, marginally higher than the U.S. rate. California's real Gross Domestic Product in the third quarter of 2016 (latest available data) grew 3.3% over the prior quarter in annualized terms, approximately on par with the nation's 3.5% rate in that period. For all of 2016, the pace of economic growth in both California and the U.S. was slower than in 2015. Meanwhile, California continues to get significant contributions from the tech sector, which accounted for 30% of the state's economic growth in the third quarter. Two other sectors, Transportation and Logistics and Finance and Insurance each accounted for 14%, and Durable Goods Manufacturing accounted for 12%.

The state has continued to experience steady but somewhat slower job growth as it has entered 2017. Wage and salary jobs rose by 2.0% year-over-year in January 2017, considerably lower than the 3.2% growth rate a year earlier. In the private sector, Health Care made the largest contribution, followed by Leisure and Hospitality, Professional Services, and Information. The Government sector also saw a significant gain mostly due to hiring by local school districts. These five sectors accounted for two-thirds of the 330,500 jobs added during the period. Private Education, Information Health Care, and Logistics experienced the largest percentage gains, while job losses occurred in Manufacturing (4,800 jobs or 0.4%) and Administrative Support (400 jobs or less than 0.1%). Having finished the 2016 with the highest annual employment on record despite the drought and the strong dollar, Agriculture posted an impressive 2.4% yearly job gain in January 2017.

Table 1 - Industry Employment for California (jobs in thousands)

Industry	Jan-16	Jan-17	Yr-to-Yr	YTY % Change
NR/Construction	787.9	800.4	12.5	1.6%
Manufacturing	1,309.3	1,304.5	-4.8	-0.4%
Wholesale Trade	719.4	732.2	12.8	1.8%
Retail Trade	1,671.1	1,680.1	9.0	0.5%
Logistics	572.1	589.7	17.6	3.1%
Information	511.8	531.7	19.9	3.9%
Financial Activities	814.6	833.2	18.6	2.3%
Prof Sci Tech	1,206.2	1,239.0	32.8	2.7%
Management	224.9	227.2	2.3	1.0%
Admin Support	1,089.7	1,089.3	-0.4	0.0%
Education	350.0	364.1	14.1	4.0%
Health Care	2,147.7	2,226.2	78.5	3.7%
Leisure and Hospitality	1,874.6	1,917.9	43.3	2.3%
Other Services	550.4	564.9	14.5	2.6%
Government	2,486.8	2,546.5	59.7	2.4%
Total Nonfarm	16,317.1	16,647.6	330.5	2.0%

Source: EDD Compiled by Beacon Economics

Regionally, virtually all the metro areas of the state saw yearly job gains in January 2017. Among the MSAs with more than 100,000 jobs, the Modesto MSA led the way with a 3.6% increase from January 2016 to January 2017, followed by the Inland Empire, the Fresno MSA, and the Oakland MSA. As usual, Los Angeles County led in terms of absolute job gains adding 84,500 jobs.

Housing Outlook Mixed

The picture for California housing continues to be mixed. In general, prices have advanced modestly despite hurdles that have limited sales activity. Outside of the San Francisco Bay Area, home prices have yet to surpass their pre-recession peaks. Demand for homes has been sustained by low interest rates but has also been impeded by limited inventories, high underwriting standards, and large down payment requirements. On the supply side, existing home sales have been well below their long run averages, while new home construction has been relatively weak since the recession. Meanwhile, with the homeownership rate at its lowest level in decades, high demand for rental units has driven rents up and rental vacancy rates down.

Table 2-High Rents Across California's Metro Areas

Location	Annual Wages ($)	Monthly Rents	Rent as % of Wage/Mo
Santa Cruz	49,364	1,954	47
Sonoma	51,878	1,598	37
San Joaquin	45,401	1,084	29
Orange	62,666	1,799	34
Monterey	47,141	1,418	36
Tulare	39,552	878	27
Santa Barbara	53,240	1,511	34
San Bernardino	46,874	1,262	32
Riverside	45,622	1,262	33
Contra Costa	67,516	2,112	38
San Diego	61,233	1,669	33
San Francisco	106,151	2,932	33
Alameda	73,889	2,112	34
Fresno	42,616	915	26
Kern	45,901	957	25
Sacramento	58,979	1,178	24
Santa Clara	120,947	2,468	24

Source: QCEW, REIS, Compiled by Beacon Economics

The outlook for housing in 2017 is mixed. With growing incomes, more households will seemingly be in a position to become homeowners. However, interest rates are expected to rise, as will prices, and it appears that lenders are ratcheting up their lending requirements.

A just released Federal Reserve Bank Senior Loan Officer Survey suggests that already tight consumer credit standards have become more stringent as the economy's expansion has lengthened and raised concern in the lending community about a forthcoming slowdown. Meanwhile, the rental market will offer little relief as renters face yet another year of rent hikes, prompting concern about affordability in many communities around the state.

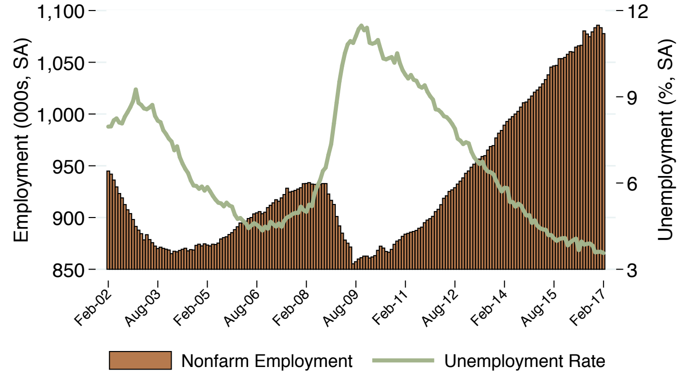
Conclusion and Statewide Policy Issues

It will take time for policy changes in D.C. to work their way through the political process. As such, California and its regions should experience continued growth in economic activity and jobs throughout 2017, with the largest contributions to employment coming from Health Care, Leisure and Hospitality, and Professional Services. Meanwhile, California must deal with its own homegrown issues. In addition to housing affordability concerns, the state must face up to long-run water problems, even though the precipitation of recent months has alleviated severe years-long drought conditions across most of the state. And as situation at Lake Oroville has demonstrated, decades of neglected maintenance and repairs have contributed to a significant infrastructure investment deficit. The state and its regions must do more to ensure that the all-important statewide water system, which ties north to south and inland California to coastal California, will be up to the task in the future. More generally, California must find ways to address and finance its infrastructure needs in transportation and other systems to support a growing state economy in the decades ahead.

South Bay

Employment

Through early 2017, the South Bay economy has continued to gain ground, albeit at a slowing rate. Nonfarm employers expanded payrolls by 1.6% between February 2016 and February 2017. While year-over-year gains have generally been much stronger in the last five years, it bears mentioning that the current expansion is the longest in recent memory, and the local labor market is close to full employment.



Source: California Employment Development Department

For one, the local labor force has barely budged over the past year, with a net gain of 750 jobseekers over the most recent yearlong period. As a result, unemployment rates have been falling, and are currently nearing historic lows at 3.53%. Comparatively, the state's unemployment rate stands at 5.0% as of February 2017. Since the South Bay labor force has a large proportion of highly skilled and educated workers, who generally spend less time between jobs, unemployment rates are likely to fall still further before the region reaches what can be considered full employment.

Mixed industry performance belies the tepid overall rate of job growth in the South Bay. Given the region's technology industry dominance, it's not surprising that the Professional, Scientific, and Technology (+4.8% YTY) and Information (+3.0% YTY) sectors together accounted for 44.4% of net job gains between February 2016 and February 2017. Still, job gains have not been limited to the South Bay's tech sector: Leisure and Hospitality has been the strongest industry contributor to job creation, as employers in that sector increased payrolls by 5.9% in February 2017, year-over-year.

However, other local sectors that often offer temporary and seasonal employment shed jobs since last year, offsetting some of the job growth in primary industries. Most prominently, Retail Trade (-2.7% YTY) and Administrative Support (-2.3% YTY) accounted for close to 3,900 job losses.

While the service oriented side of the local technology sector (broadly encompassing Information and Professional, Scientific, and Technology sectors) has continued to make strides, the production side has seen mixed gains. The South Bay's Manufacturing sector, which is dominated by the Computer and Electronic Product Manufacturing subsector (this subsector accounted for 78% of total Manufacturing jobs in the South Bay in 2016), posted gains of 0.2% in February 2017, year-over-year. Detailed annual breakouts indicate that local Semiconductor and Electronic Component Manufacturing continued on a downward trajectory in 2016, axing 2,600 jobs since 2015. However, losses appear to have been more than offset by gains in Electronic Computer Manufacturing (+ 5,200 jobs).

The South Bay's Retail Trade sector posted job losses of 2,400 between February 2016 and February 2017. Job losses in the local Retail Trade sector are somewhat belated; nationally the sector has long been grappling with changing consumption trends as consumers increasingly embrace online purchasing. According to Moody's Investor's Service, the number of distressed U.S. retailers has tripled since the Great Recession.[1] While the South Bay has been exempt from the wave of major retailer closures across the nation to date, local taxable receipts data indicates that spending on general consumer goods at brick and mortar retail stores has been trending downward. Another factor that may be stalling job growth in lower wage sectors in the South Bay are the prohibitive and growing costs of living near the area, in addition to worsening traffic conditions.

[1]https://www.moodys.com/research/Moodys-Number-of-distressed-US-retailers-triples-since-the-Great--PR_362722

In response to local affordability issues, the San Jose City Council has opted to increase the local minimum wage to $15.00 per hour by 2019, with the first increase going into effect this July.[2] Additionally, city employers with at least 36 employees will be required to offer additional shifts to qualified part-time workers before hiring new staff, under San Jose's Opportunity to Work Measure.[3]

The U.S. Bureau of Labor Statistics reports that South Bay workers in food preparation and serving occupations and personal care and service occupations currently make less than $15.00 per hour, and stand to be the most impacted by these changes. These occupations primarily fall under the Leisure and Hospitality sector, which accounted for the most absolute jobs added in the South Bay over the most recent yearlong period. Since the Opportunity to Work measure directly limits an employer's ability to hire new staff, the impact will likely limit local job creation in this sector.

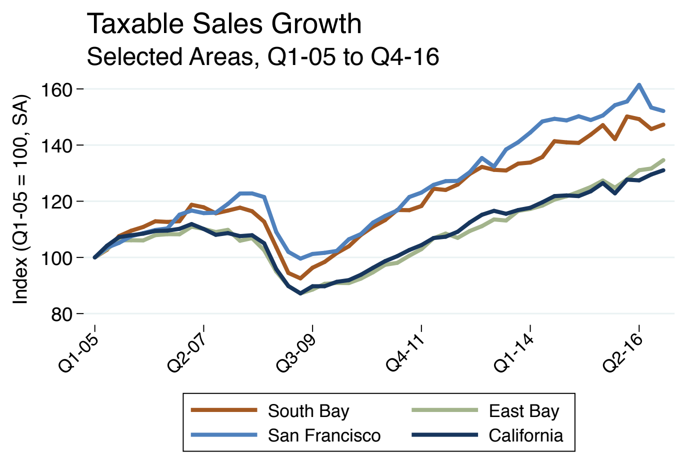
Employment by Sector, San Jose MSA

Sector	Feb-17 (000s)	YOY Change (000s)	YOY Change (%)
Transport/Warehouse	14.2	0.8	6.1
Leisure & Hospitality	103.0	5.8	5.9
Information	75.9	3.0	4.1
Prof, Sci, & Tech	151.1	4.8	3.2
Education/Health	163.5	3.5	2.2
Government	94.5	1.9	2.0
Management	12.9	0.2	1.5
Real Estate	14.2	0.2	1.3
NR/Construction	48.0	0.6	1.2
Finance & Insurance	21.6	0.2	0.8
Manufacturing	164.0	0.3	0.2
Wholesale Trade	36.9	-0.5	-1.4
Admin Support	62.7	-1.5	-2.3
Retail Trade	85.7	-2.4	-2.7
Utilities	1.7	-0.1	-5.7
Total Nonfarm	1,077.7	17.4	1.6

Source: California Emloyment Development Department

Local Spending

As payrolls have continued to grow, so has consumer activity and taxable sales have been on the rise in the South Bay. In 2016, total taxable sales of $42.5 million mark a 3.3% increase over 2015 levels. However, taxable sales growth in the region is behind the state as a whole where 2016 taxable receipts grew by 4.3% over 2015. As economic gains have generally been spreading inland, both the South Bay and San Francisco have seen growth decelerate, as gains in the East Bay remain robust. This has also held true in terms of spending, and at 4.9%, the East Bay posted the strongest taxable sales gains in the San Francisco Bay Area over the last year.



Source: California Board of Equalization

To some extent, breakouts of taxable receipts reflect larger economic trends. As noted earlier, spending at local brick and mortar retail has been declining, thanks in part to the convenience and reliability of online alternatives. This has been corroborated by categorical breakouts of taxable receipts, which indicate that spending on General Consumer Goods fell 1.8% between the fourth quarter of 2015 and the fourth quarter of 2016. On the other hand, taxable receipt data reflects that consumers are spending more on dining out and big ticket items. In the fourth quarter of 2016, Restaurants and Hotels taxable receipts posted year-over-year gains of 3.5%, and Autos and Transportation posted 6.5% year-over-year growth.

In addition to General Consumer Goods, spending in a few other categories declined in the fourth quarter of 2016. Employers spent 5.6% less on goods in the Business and Industry category, which largely consists of industrial and office supplies and equipment. Taxable receipts in the Fuel and Service Stations category continued to fall, posting a 1.4% drop from the fourth quarter of 2015 to the fourth quarter of 2016, as residents saved more at the pump. Spending in the Building and Construction category also fell by 5.6%, but since planned construction is on the rise,

[2] http://www.sanjoseca.gov/minimumwage

[3] http://www.mercurynews.com/2017/03/13/san-jose-new-law-giving-part-timers-access-to-more-hours-begins-today/

particularly in commercial real estate, this trend is unlikely to persist.

Taxable Receipts by Category, San Jose MSA

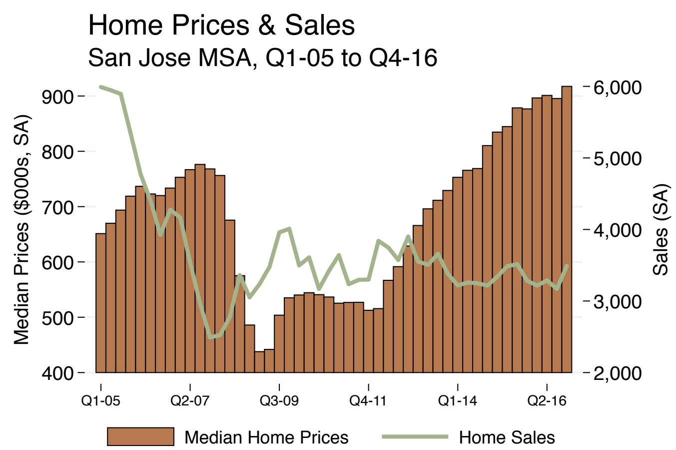
Category	Q4-16 ($000s)	YOY Change ($000s)	YOY Change (%)	3 Yr Change (%)
Autos & Transportation	14,651.3	889.9	6.5	22.4
Restaurants & Hotels	12,589.6	427.9	3.5	21.9
Food & Drugs	4,264.2	88.1	2.1	3.6
Fuel & Service Stations	5,528.5	-75.9	-1.4	-27.0
General Consumer Goods	19,806.4	-363.0	-1.8	3.9
Building & Construction	7,644.0	-310.4	-3.9	8.8
Business & Industry	24,464.5	-1,442.1	-5.6	2.0
Total	**107,306.4**	**1,108.8**	**1.0**	**10.1**

Source: HdL Companies

Residential Real Estate

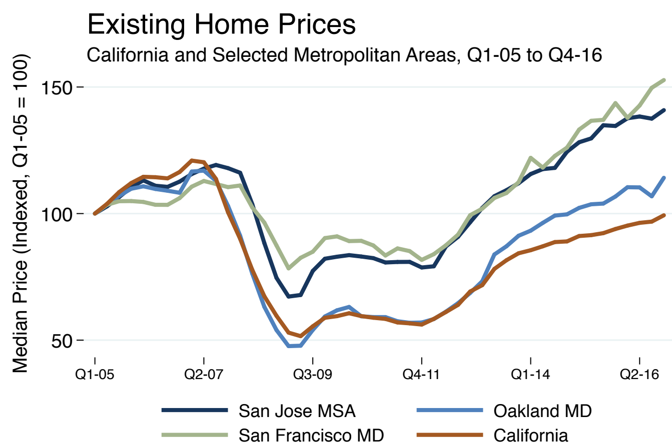
Based on U.S. Bureau of Labor Statistics estimates, net migration to the South Bay dipped into negative territory in the second quarter of 2016, marking the first time this has occurred in years. However, overall population growth is still positive, thanks to strong but slowing rates of natural increase (births less deaths).

Falling population growth has implications for the South Bay's housing market where, at 4.7% growth from the fourth quarter of 2015 to the fourth quarter of 2016, the median home price is still appreciating at a faster rate than in the state as a whole. Although local price appreciation has slowed relative to recent years, at $917,400, the median South Bay home price was twice as much as the state median in the fourth quarter of 2016. At the same time, metro wide home sales fell 3.3%, enabling inventories to recover to 2.2 month's supply in January 2016, up from 1.9 month's supply last year.



Source: DataQuick

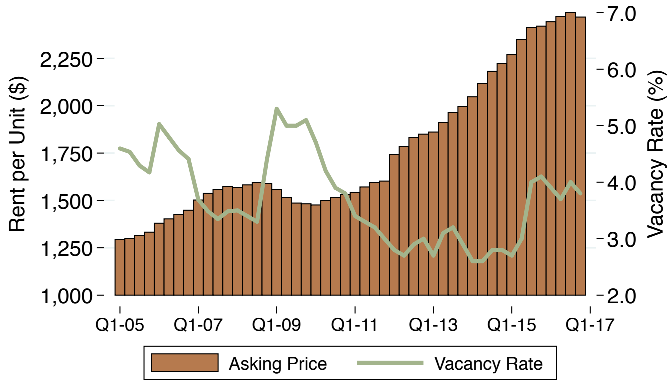
Within the South Bay, we are seeing a shift towards the lower end of the market. Annual sales were strongest in San Jose, which has retained a strong affordability advantage compared to the cities of Santa Clara and Sunnyvale. While annual home sales in San Jose fell 2.6% below 2015 levels, the City still accounted for 53% of all metro wide sales in 2016. Median home prices in San Jose have therefore been rising at a faster rate than the South Bay as a whole, with year-over-year gains of 6.3%. With median home prices in the cities of Santa Clara ($1,020,400) and Sunnyvale ($1,1436,700) climbing over the $1 million mark, San Jose remains a comparatively affordable option.



Source: DataQuick

Strong demand coupled with a tight supply in the single-family market has shifted many households to the rental market in recent years. In the fourth quarter of 2016, metro apartment absorption (2,532) rose at a faster rate than the addition (2,258) of new units, resulting in vacancy rates falling to 3.8%. However, while the market remains tight, rental rate appreciation appears to be decelerating: between the fourth quarter of 2015 and the fourth quarter of 2016, average rental rates increased by 2.0%. This is a marked slowdown compared to gains over the prior annual period (the fourth quarter of 2014 to the fourth quarter of 2015), when rental rates increased by 8.9%.

Similar to the single-family housing market, gains in apartment rent prices appear to be largely centered in San Jose. Based on Reis, Inc. data, the Northeast San Jose submarket saw rental rates increase by 2.2% in the fourth quarter of 2016, year-over-year. This submarket also commands 36% of new construction (recently completed, planned, and proposed). On the other hand, the Cupertino-Saratoga submarket, one of the metro's hottest, saw asking rents fall by 4.8% over that time frame.



Source: Reis, Inc.

Overall residential permitting decreased by 3.2% in 2016 in the South Bay. Planned construction in 2016 reveals that developers are increasingly favoring the single-family market: while single-family units still made up a minority of total residential permitting, the 3641 units added to the pipeline in 2016 represent a 5.8% increase over 2015.

Meanwhile, multi-family development has been slowing alongside rental rate appreciation. Planned multi-family units made up 64.9% of total residential permits in 2016, but that represents a 7.5% decrease from 2015. However, major South Bay employers may play a larger role in high density housing development in the future. In recent news, the Mountain View City Council is considering the environmental impacts of a 9,850-unit apartment project that Google is hoping to add to its North Bayshore campus.[4] The project would add 1.8 times as many housing units (apartment and single family, combined) as the South Bay has approved in the last year.

Commercial Real Estate

Annual Permit Values, 2016

Category	2016 ($000s)	1-Yr. Chg. ($ 000s)	1-Yr. Chg. (%)
Office	1,311,382.84	355,923.94	37.3%
Retail	285,972.38	51,172.30	21.8%
Industrial	66,627.78	-599.79	-0.9%
All Nonresidential	4,368,410.05	837,209.19	23.7%

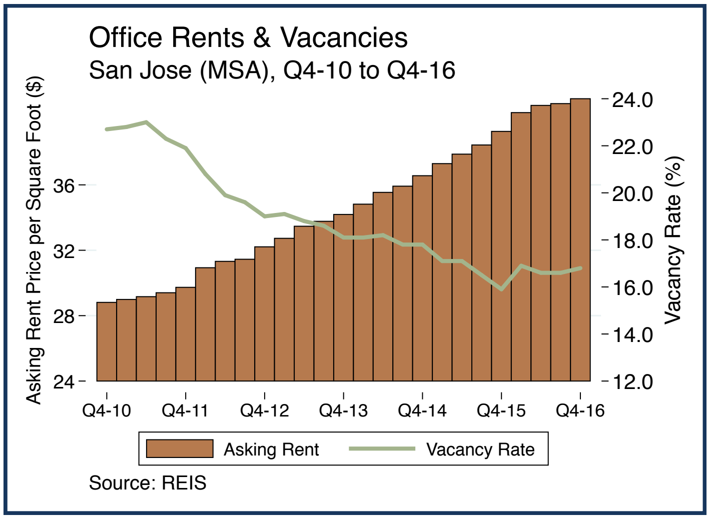
Source: CIRB

Commercial real estate turned in another strong performance in the South Bay in 2016. Total values for planned nonresidential projects amounted to $4.37 billion, marking the most investment the area has seen in the last 21 years, and a 23.7% gain over 2015. New development for office properties saw the largest absolute increase with planned construction values totaling $1.31 billion and representing 37.3% growth over 2015. Moreover, this activity came as metro office rents posted year-over-year gains of 5.1% in the fourth quarter of 2016.

In total, developers added 1.41 million square feet of office space from the fourth quarter of 2015 to the fourth quarter of 2016, which translated to a 2.4% increase in the metro office base. However, new office space was added to the market at a faster pace than it was absorbed and the vacancy rate increased 0.9 percentage points to reach 16.8%. According to the Construction Industry Research Board, office development moving forward will be strongest in Sunnyvale. More than 14 million square feet in office space are currently in the pipeline in that City.

Overall, office properties continue to be in high demand in the San Francisco Bay Area at large. From the fourth quarter of 2015 to the fourth quarter of 2016, the cost of rent increased 8.1% in Oakland (MD), and 4.0% in San Francisco (MD). At the same time, the office vacancy rate fell by 1.7 percentage points to 13.6% in Oakland (MD), and by 0.6 percentage points to 9.4% in San Francisco (MD).

[4]http://www.bizjournals.com/sanjose/news/2017/03/08/google-mountain-view-north-bayshore-campus.html

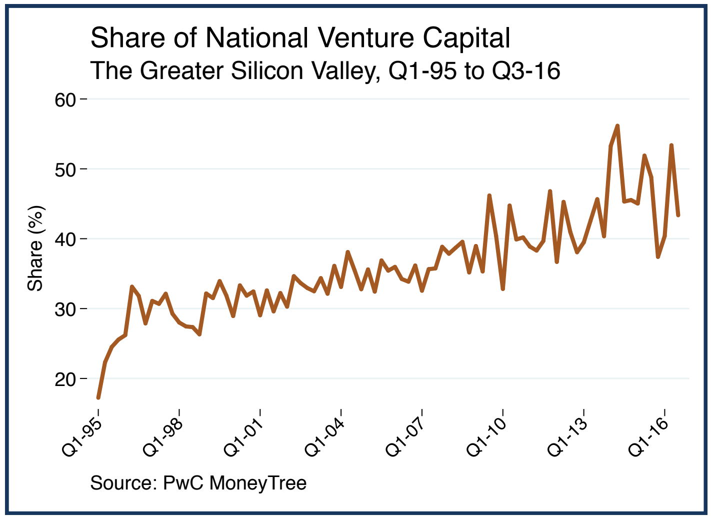


Developers also added retail projects to the pipeline valued at $285.97 million over the last year, representing a 21.8% increase. Retail rents posted gains of 3.8%, despite a nominal (-0.6%) drop in occupied retail stock, year-over-year. Vacancy rates remained tight, but increased over the most recent year long period, due to both falling occupancy of existing stock, and the influx of 130,000 square feet in new retail space. In the fourth quarter of 2016, metro vacancy rates for retail properties rose to 5.5%, representing a 1.2 percentage point increase year-over-year.

Compared with other types of commercial property in the South Bay, industrial development has been sluggish. In 2016, permit values for industrial projects fell 0.9% to $66.63 million. Still, the average rent for Research and Development space increased by 2.1% to $14.83 per square foot from the fourth quarter of 2015 to the fourth quarter of 2016. Available stock has also continued to fall, and vacancy rates dropped 0.7 percentage points to 14% in the fourth quarter of 2016. Still, the South Bay has substantially more available space than San Francisco (MD), where rental rates are comparable. In the fourth quarter of 2016, vacancy rates in San Francisco were the tightest in the Bay Area at 4.1%.

Venture Capital Funding in 2016

Nationally, venture capital funding fell from 2015 highs, and annual investments posted a year-over-year drop of 25.1% from 2015 to 2016, based on PwC data for the United States. The Greater Silicon Valley saw venture capital investment fall more than in the nation overall. Total annual venture capital in the region amounted to $24.9 billion in 2016, representing a 27% decrease from levels seen the prior year. While the Greater Silicon Valley continued to claim a large share of national venture capital, that share fell 4 percentage-points to 42.5% in 2016. As investors have grown more cautious over the past year, the average deal size also fell. In 2016, a total of 1,484 deals were executed across the Greater Silicon Valley, for an average amount of $16.8 million each. This represents a 14% decrease from the average deal size of $19.5 million in 2015.



Investment in the South Bay is trending sharply downward compared to the first three quarters of 2015: from the fourth quarter of 2015 to the fourth quarter of 2016, total venture capital fell 44%. More detailed breakouts of regional investment data indicate that funding has dropped across most industries. However, even though year-to-date funding levels were 44.3% lower in 2016, Software has continued to attract the lion's share of new deals. Through the first three quarters of 2016, Software accounted for 59% of total venture capital investment in the South Bay.

The Software industry did capture its share of large deals in 2016. Palo Alto based mobile application firm Muscial.ly Inc. grabbed $100 million in early stage funding. The social video application has found popularity among teenaged girls, and has recently been used as a way for mainstream popular artists to promote their work.[5]

[5]http://www.rollingstone.com/music/features/how-teen-craze-musically-got-too-big-for-pop-to-ignore-w468324

Another primary recipient of funding in the Software sector was vIPtela Inc., a provider of software-defined wide area network (SD-WAN) technology that obtained $75 million in expansion funding.

Information Technology (-28.4% YTY) and Industrial Energy (-16.6% YTY) also continued to be top performers in the first three quarters of 2016 despite lower levels of year-to-date investment. One of 2016's largest venture capital recipients was Information Technology startup Upthere Inc., a cloud computing and hosting service that obtained $77 million in "B" round financing. Meanwhile, strengthening sales of electric vehicles has intensified the push to expand charging infrastructure. Chargepoint, the world's largest charging network, obtained $50 million in later stage funding in 2016, and has raised an additional $82 million in early 2017 with plans to expand into Europe.[6]

On a global scale, venture capitalists are becoming more cautious and are favoring safer bets. Based on a recent analysis of global venture capital activity by KPMG Enterprise, the largest declines in investment have been in angel and seed stage investment, as venture capitalists have been leaning towards larger and more established firms.[7] With investors making more measured assessments, the days of inflated valuations are likely behind the South Bay.

Venture Capital Investments, San Jose MSA YTD

Industry	Q1-16 to Q3-16 ($ millions)	YTD Chg. ($ millions)	YTD % Chg.
Healthcare Services	3.0	-79.0	-96.3
Consumer Products and Services	15.0	-61.6	-80.4
Electronics Instrumentation	16.5	6.0	57.1
Retailing Distribution	33.1	9.4	39.6
Biotechnology	33.8	10.7	46.1
Financial Services	37.3		
Semiconductors	38.9	-104.4	-72.9
Networking and Equipment	49.0	3.0	6.5
Telecommunications	52.7	-79.2	-60.0
Media and Entertainment	71.1	-121.7	-63.1
Computers and Peripherals	74.1	-169.7	-69.6
Medical Devices and Equipment	126.3	-95.5	-43.1
Industrial Energy	190.0	-37.8	-16.6
IT Services	279.3	-110.9	-28.4
Software	1473.1	-1172.7	-44.3
Total VC	**2493.1**	**-1966.2**	**-44.1**

Source: PwC Moneytree

[6]https://www.greentechmedia.com/articles/read/chargepoint-raises-82m-to-take-smart-ev-charging-to-europe

[7]Venture Pulse Q4 2016. KPMG Enterprise, January 2017. The publication isavailableat<https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2017/01/venture-pulse-q4-2016-report.pdf>

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