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REGIONAL INTELLIGENCE REPORT™



Prepared by Beacon Economics, LLC.

Santa Clara County

Third Edition

March 2014

U.S. Economic Update

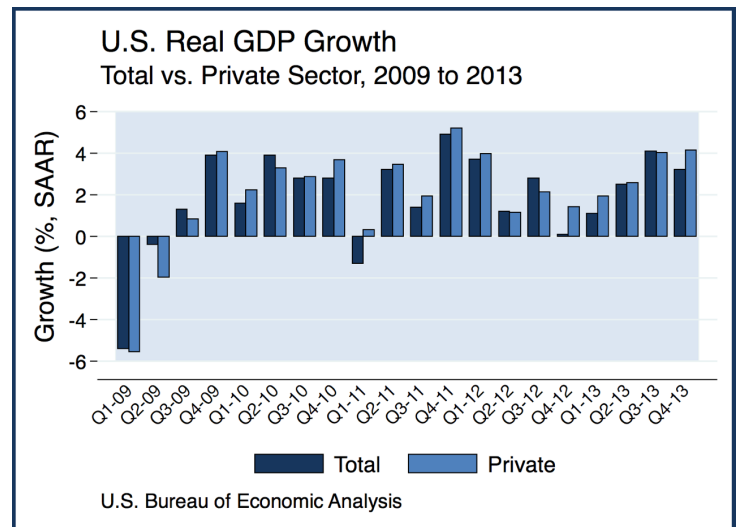
Last year clearly ended on an economic high note. Growth in the last two quarters averaged over 3.5%, industrial production levels reached an all time high, and unemployment dropped below 7%. And although the Federal government was shut down for a couple of weeks in October, the ultimate result was a budget being passed by Congress, removing one of the big points of uncertainty for 2014. The Federal Reserve started the process of unwinding its quantitative easing programs without the market gyrations (the so-called taper-tantrum!) that occurred last summer when then Chairman Ben Bernanke announced the program would come to an end. Furthermore, the global economy started to expand again, with Europe's recession ending and fourth quarter exports to the rest of the world taking off.

There are, however, some points of worry. Yes—labor force participation rates are historically low after a precipitous drop at the end of the year. But, while the household statistics suggest that the nation added only 1.37 million jobs last year, the payroll numbers suggest that 2.19 million jobs were added. Although the household numbers have the advantage of counting the self-employed, they also have the disadvantage of being based on a small survey—and one that often needs some substantial re-benchmarking. Beacon Economics' guess is that the revised household numbers will look better for both employment and participation.

Incomes are rising as well for workers. Some economists have lamented that disposable income is lower than it was last year. But this misses the fact that there was an enormous tax increase at the start of 2013, which caused a large spike in income in the last two months of 2012 as businesses pushed bonuses and dividends out to investors in anticipation of the increase in tax rates. Setting this aside, overall incomes are rising at their fastest pace since 2010.

Housing production and sales disappointed at the end of 2013. Investors, who had been the primary drivers of the market increases that began in 2012, pulled back as the number of available distressed units declined and price appreciation removed some of the arbitrage value between buying and renting. As a result, the market slowed somewhat, as did price appreciation.

But the key here is slowed, not stopped. Data on median prices that show declines in prices are not being matched in the more accurate price indexes created by Core Logic, Case Shiller, and other research firms. And with the national housing supply still below 5 months, it is very likely that price appreciation will continue through next year. Rising prices will create more equity, which in turn will start driving the 'move-up market' among owner-occupiers next year, picking up where the investors left off.



Sales of new homes and housing starts also sagged after strong growth in the first half of last year. But all evidence suggests that with household formation picking up and inventories of empty housing units falling rapidly, the market will need to deliver more units of some sort in 2014. If the credit conditions for mortgage lending start to open up again this year, housing will definitely be a strong positive. But if they remain tight, housing will be a growth factor for the year—just not as large a one.

Businesses are also doing well. Profits are at record high levels for corporations and small business owners. The only real oddity is why businesses aren't investing more to take advantage of this historic situation. Perhaps uncertainty is holding them back. Regardless, there is solid upside to business investment and seemingly little downside.

With all this positive news, predicting growth rates in the 3 to 3.5% range for 2014 would seem perfectly reasonable. Yet even at this writing, the equity markets are swooning—down 6% from their January peak—and 10-year bond rates are dropping rapidly as investors flee to the safety of government debt. What has spooked the markets so badly? The nominal reasons are problems in the developed world and some ostensibly bad news about the U.S. economy (in the last few releases) that has hit the media.

Let's start with the U.S. numbers—namely a decline in durable orders and shipments in December, a poor manufacturing report from the Institute for Supply Management in January, and weak auto sales. Durable orders did slow—but only from their record high November level. Durable orders are still up sharply from earlier in the year and the decline was well within the range of normal variance for these numbers. Similarly, the Institute for Supply Management number did drop, as did auto sales in January, but Californians have to remember that January was a hideous weather month for most of the rest of the United States. Snowstorms and polar vortexes closed schools, businesses, and governments in many parts of the nation. But weather delays business, it does not cancel it—watch for a bounce later in the spring.

U.S. Employment Growth by Survey, Household vs. Nonfarm

Indicator	Nonfarm Employment	Household Employment
Peak Month	Jan-08	Nov-07
Peak Employment (000s)	138,056.0	146,595.0
Trough Month	Feb-10	Dec-09
Trough Employment (000s)	129,320.0	138,013.0
Peak to Trough (000s)	-8,736.0	-8,582.0
Peak to Trough (%)	-6.3	-5.9
Current Month	Dec-13	Dec-13
Current Employment (000s)	136,877.0	144,586.0
Trough to Current (000s)	7,557.0	6,573.0
Trough to Current (%)	5.8	4.8
Remaining to Peak (000s)	-1,179.0	-2,009.0
Remaining to Peak (%)	-0.9	-1.4

Source: California Employment Development Department

As for global worries—the data here is similarly unconvincing. Yes—some of the currencies have slipped, but then again, haven't many of these emerging markets been complaining about their strong currencies in recent months? Some market watchers were nervous that the Argentine Peso dropped sharply—but any concern about the official rate dropping from 6.5 to the high 7's per dollar is laughable since the black market rate was running 10 to 1. Realistically, with the developed world starting to grow again, prospects for developing economies would seemingly be better now than one year ago.

So why the gyrations? Mainly because the markets have hit a record high level, and traders react to any tiny signal that a sell-off is occurring—so they can be the first out the door before the alarm really starts to ring. In other words, it is the stock market once again acting like the biggest spoiled brat of the economy.

To Beacon Economics, the data suggests the upside is better than the downside and the U.S. economy will do at least as well in 2014 as it did in 2013, and potentially much better.

California Still On The Mend

Despite a series of federal headwinds emanating from Washington D.C. during 2013, the California economy continued to move forward. Indeed, newly revised benchmark estimates of employment in California paint a completely different picture of the state's economic recovery than has previously been reported—one that shows California has not been trailing the nation in job growth, but has been leading it. In sum, California was home to 150,000 more jobs in 2013 than was reported by the California Employment Development Department (EDD) last year.

Notably, during the current round of benchmarking, a new category of previously excluded healthcare workers were included as nonfarm employees, and will be from now on. These workers had formerly been counted as private household workers and did not show up in the official statistics. The inclusion of this group in California's "total employment" figure added roughly 400,000 workers to the state's overall payrolls in 2013.

However, the new revisions show that nonfarm employment in the state was 555,800 jobs higher in December 2013 than was being reported under the previous benchmark established in March 2013. In other words, even after accounting for the inclusion of the new category of home healthcare workers, employment in California still grew by 150,000 jobs.

Aside from the inclusion of home healthcare workers, the primary beneficiaries of the revised employment figures were the Retail Trade, Information, and Construction sectors. The revisions to Retail and Construction employment in particular are much more in line with trends that have been occurring that drive these sectors. Geographically, every single region in the state had their total employment revised up as a result of the new benchmark. In particular, Los Angeles and the Inland Empire in Southern California, and the East Bay in the San Francisco Bay Area had consistently been reported as underperforming the overall state in terms of job growth. However, these three markets saw the largest increases to their respective nonfarm payrolls as a result of the updated benchmark. San Francisco and San Jose, two of the state's top-performing areas, also saw increases to their payrolls as a result of the revisions.

However, it isn't just the labor markets that continue to move forward in the Golden State. Tourism remains a solid driver behind the recovery. For example, hotel occupancy has increased and sales tax receipts generated at restaurants and hotels have continued to improve. In addition, airport traffic was up by more than 2% in 2013 after a year of solid increases in 2012, showing that California remains a destination of choice for both Americans and visitors from abroad alike.

And, according to tax receipts data from HdL Companies, every single category of spending increased last year with the exception of fuel stations, where a lower price of gas resulted in slightly lower tax receipts for that sector.

Real estate is also booming in California. Not only were median home prices up by more than 20% last year, but defaults and foreclosures continued to trend downward as well. In fact, both notices of default and filings of trustees' deeds were down by more than 57% by the end of 2013. With fewer distressed units in the sales mix, median price growth has been bolstered by an ever-dwindling supply of homes available for sale on the market. According to the California Association of Realtors, there were only 3 months of supply on the market in December, meaning that the inventory of homes available for sale would be exhausted in just three months at the current pace of transactions.

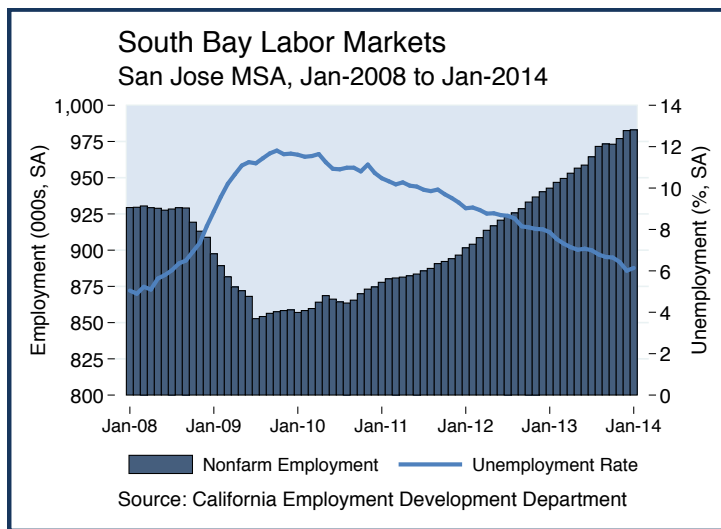
Fortunately, tight supply and rising prices have begun to incentivize builders back into the market in California. And, with over 33% growth in both single-family and multi-family building permits, new residential construction in the state outpaced the rebound nationwide in which residential permits were up 20% by comparison. Given the constricted supply of homes and the fact that home prices are aligned with incomes again – coupled with the broader economic improvement in California in general – the real estate market is expected to remain a bright spot in the economic landscape in coming years.

The nonresidential side of the market was slower out of the gate during the first part of the recovery, but even there, California is beginning to see signs of life. Rents for office, retail and industrial space are rising while vacancy rates are falling. And, this improvement is starting to give way toward construction of new nonresidential structures. Indeed, nonresidential permit values were up nearly 50% in 2013, with growth in new office, retail, and hotels planned.

California has recovered much of the ground it lost during the downturn, but it still has room to improve. Fortunately, virtually every major sector in every major region in the state has turned the corner, and while 2013 was bogged down by policy-oriented Federal challenges, the Golden State is poised for an acceleration in growth as the economy hits its stride in 2014 and beyond.

Labor Market Shows Solid Growth over the Past Year

The South Bay continues to add new jobs at a rapid pace, with job growth exceeding that of neighboring regions. According to data from the California Employment Development Department, incorporating U.S. Bureau of Labor Statistics recent benchmark revisions, from January 2013 to January 2014, seasonally adjusted total nonfarm employment in the South Bay increased by 4.3% to 983,000 jobs. In comparison, total nonfarm employment grew by 3.2% in San Francisco to 1,086,000 jobs and by 1.7% in the East Bay to 1,041,000 jobs. The South Bay far outpaced the state overall, where total nonfarm employment increased by 2.1% during the same time. In turn, the South Bay unemployment rate, which was already well below the state average, decreased faster than in any other part of the Bay Area. The seasonally adjusted unemployment rate decreased from 7.9% to 6.1% between January 2013 and January 2014, compared to a decrease of 1.3 percentage points to 4.9% in San Francisco and a decrease of 1.7 percentage points to 6.6% in the East Bay. The South Bay also remains well ahead of the state overall, where the unemployment rate fell by 1.4 percentage points to 8.1%.



The South Bay leads the way in employment growth in the Bay Area. Some of this is attributable to the strength of tech-heavy sectors like Information and Professional/Business, as described below, but the growth spans all sectors of the labor market. From January 2013 to January 2014, nominal growth was fastest for the Private Education/Health sector, which added 10,000 jobs (7.2% growth). Professional/Business was not far behind, with 8,200 new jobs (4.4% growth). No other sectors could match that level of growth, but a number of sectors still added thousands of new jobs. For example, Manufacturing added 5,700 jobs (3.7% growth) of its own,

a sign that the sector remains a key economic driver in the South Bay with 160,300 workers in all. Even the beleaguered Government sector, which has held back the labor market recovery throughout much of California, added 1,900 new jobs (2.1% growth) over the last year.

Employment by Industry
San Jose MSA, January 2013 to January 2014 (SA)

	Jan. 2013	Jan. 2014	Annual Chg (%)	Annual Chg.
NR/Construction	36,400	39,900	9.6	3,500
Education/Health	138,900	148,900	7.2	10,000
Information	56,800	60,400	6.3	3,600
Transport, Warehouse, Util.	13,600	14,300	5.1	700
Leisure and Hospitality	84,800	89,000	5.0	4,300
Professional/Business	186,900	195,000	4.4	8,200
Manufacturing	154,600	160,300	3.7	5,700
Wholesale Trade	35,900	37,000	3.2	1,100
Other Services	25,100	25,600	2.0	500
Retail Trade	84,900	85,500	0.6	500
Financial Activities	33,000	33,100	0.5	200
Total Private	850,700	889,000	4.5	38,300
Government	92,100	94,000	2.1	1,900
Total Nonfarm	942,800	983,000	4.3	40,200
Farm	4,900	5,000	1.8	100

Source: California EDD, Seasonally Adjusted by Beacon Economics

As impressive an uptick as Private Education/Health made over the course of 2013, it was not the fastest-growing sector in the South Bay. Natural Resources/Construction employment grew by 9.6% in that time, or 3,500 jobs overall. This may not come as a surprise, as multifamily building permit growth picked up steam last year and home prices have increased precipitously in the South Bay, which will be detailed below. In addition, Transportation/Wareshousing/Utilities employment grew by 5.1%, although it was on a small base of total jobs—the sector added 700 new jobs over the course of last year. The sector continues to benefit from a relatively weak dollar, which has bolstered exporting statewide. Meanwhile, Leisure and Hospitality continues to benefit from the resurgence of Bay Area tourism, with employment growth reaching 5.0% (4,300 jobs) year over year.

The data suggest that Measure D, which implemented a \$10 minimum wage in San Jose last March, did not have the negative impact on employment some feared, or at the very least, the strength of the local labor market more than made up for the jobs that may have been lost. Some of the strongest job growth came in lower-wage sectors such as Leisure and Hospitality and Natural Resources/Construction. Retail Trade employment grew by 0.6% (500 jobs) year over year. These sectors were believed to be those impacted the most by a minimum wage increase, and so far, the employment outlook is quite positive. However, proponents of Measure D also believed that the minimum wage increase would spur consumer spending in the area, as lower-income workers would have more income to spend in the local economy. The section below shows that the evidence has not been clear.

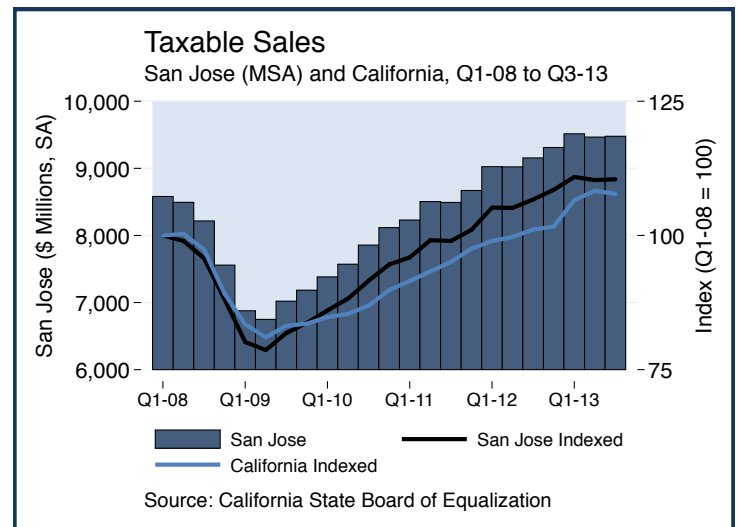
Although the minimum wage increase does not appear to have stunted employment growth in the South Bay, young people, who fill many of the lower-wage positions in the region, are still having difficulty finding work. A study by the Brookings Institution found that out of 100 metropolitan areas throughout the country the South Bay had the fifth lowest teenage employment. According to the study, the region's demographics fit the conditions for areas with low teenage employment. There are higher numbers of very wealthy residents, whose children often do not look for work; there are high numbers of minorities below the poverty line, who have difficulty finding work; and there are higher numbers of immigrants, who are hired over younger workers with less work experience.¹ Even as the employment outlook remains very strong for the South Bay moving forward, it will be important for area leaders to continue to encourage youth employment, as a lack of work experience leaves even well-educated youths at a critical disadvantage against other job-seekers after graduation.

Consumer and Business Spending on Different Trajectories

Since the end of the Great Recession in mid-2009, each quarter seemed to bring an increase in consumer confidence in the South Bay, as taxable sales increased almost unilaterally over the course of the following three years. Employment growth during this time no doubt played a role in consumer spending growth. However, in the second quarter of 2013, for the first time since early 2009, the South Bay saw a noticeable drop in taxable sales growth from the previous quarter. Note, though, that the drop was just 0.5%, but flat growth followed in the third quarter of 2013, leaving taxable sales growth below the trajectory set in late 2012. In all, from the third quarter of 2012 to the third quarter of 2013, South Bay taxable sales increased by 3.5%. In comparison, South Bay taxable sales increased by 7.8% from the third quarter of 2011 to the third quarter of 2012. Some of the slowdown is attributable to consumer spending exceeding its pre-recession peak, and thus it is a return to a more average, historical rate of growth. That said, how does the South Bay compare to the rest of California?

From mid-2012 to mid-2013, consumer spending growth in the South Bay trailed the state somewhat. Statewide taxable sales increased by 6.6% from the second quarter of 2012 to the second quarter of 2013. Across the Bay Area, San Francisco led the way, with a 7.5% increase in taxable sales in that time, while the East Bay saw a 5.9% increase. Clearly, the boost in consumer spending some expected had not yet materialized, though, as recent examples, such as the expiration of some payroll tax cuts at the beginning of 2013, have shown, it generally takes around two quarters before broad-based income changes show through in

consumer spending. It takes time for individuals to alter their spending patterns in response to changes in take-home pay. Yet, while one should not have expected a big jump in consumer spending in early 2013, the slight decrease may come as a surprise, especially since spending in other parts of the Bay Area—and the state overall—was so strong. However, given that the local recovery started much earlier and progressed more quickly, the South Bay remains ahead of the game relative to most other parts of the state.



According to taxable receipts data from HdL Companies, Business and Industry spending stands out. From the third quarter of 2012 to the third quarter of 2013, taxable receipts in that sector decreased 8.1%. This may be a sign that South Bay business owners were less confident about the health of the economy in 2013 than were consumers. That said, Business and Industry spending grew by 2.8% in the third quarter of last year. It may grow even further in the coming year, as the State of California implements a partial sales and use tax exemption for certain manufacturing and research and development equipment expenditures that takes effect on July 1.² A turnaround would be a good sign for an industry like commercial construction, as Business and Industry spending growth suggests that business owners are confident that the business will remain strong, which promotes investment in new developments and renovations. It also bodes well for professional and business services employment, which is one of the South Bay's largest labor market sectors.

Although much of the slower growth of overall spending in the South Bay is attributable to the decrease in Business and Industry spending, a number of sectors remain very strong. Autos and Transportation spending, which was highlighted in the December report, continues to show strong growth, up 10.1% from the third quarter of 2012 to the third quarter of 2013. The State of California, and especially the Bay Area,

¹Artz, Matthew, "Study Shows Bay Area Teens Struggle to Find Work." Oakland Tribune, March 14, 2014.

²"Manufacturing Exemption," California State Board of Equalization. http://www.boe.ca.gov/sutax/manufacturing_exemptions.htm.

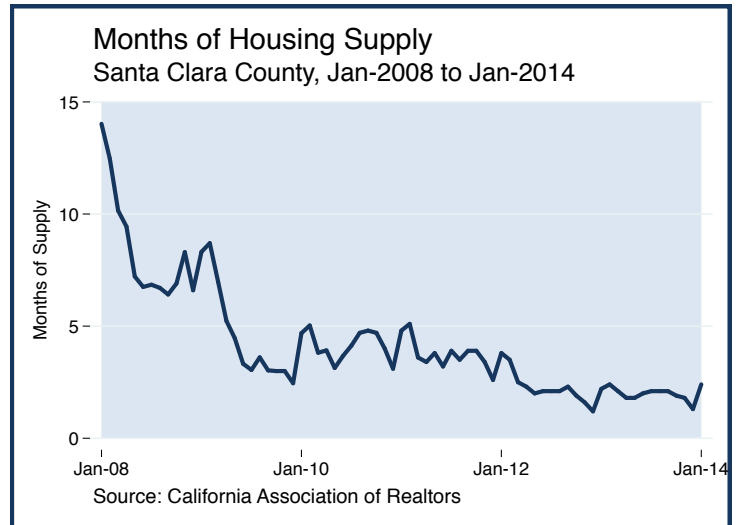
continues to be forward-thinking about automotive technology. Tesla Motors clearly shows how an auto company that looks toward the future of automobiles can quickly move from emergent to prominent. With its strong foothold in the Bay Area and its expected increase in production in the coming years, Tesla should continue to bolster auto sales in the South Bay.

Restaurants' and Hotels' spending saw the second-highest growth from the third quarter of 2012 to the third quarter of 2013, at 8.8%. This is perhaps unsurprising, as tourism continues to increase throughout the state. As shown above, Leisure and Hospitality employment increased significantly over the course of 2013. According to data from Visit California, from December 2012 to December 2013, the revenue per available hotel room for hotels in the South Bay increased by 16.8%. Hotel occupancy increased 3.5 percentage points in that time to 76.1%. Total passenger traffic out of Mineta San Jose International Airport increased by 9.0% from September 2012 to September 2013, to 737,800 passengers. Expect Restaurants' and Hotels' spending to continue to increase in the South Bay as the local, state, and U.S. economy grow in the coming year, adding more jobs locally and encouraging travel spending in the South Bay. In addition, the health of the national economy, as well as the health of the local tech sector, should encourage business travel to the South Bay. Traveling contractors and consultants contribute substantially to Restaurants' and Hotels' spending, and economic growth should lead to more business travel in the year ahead.

Building and Construction spending also grew strongly from the third quarter of 2012 to the third quarter of 2013, at 7.6%. Although it is one of the smallest categories of spending by total dollars, it suggests that the growth of residential real estate in the South Bay will persist into 2014, adding some much needed relief to tight housing inventories, as described below.

Residential Real Estate Affordability Still Concerning

The small supply of available housing is much of the reason the home prices in the South Bay have increased so steeply of late. Data from the California Association of Realtors show that Santa Clara County currently has 2.4 months of home supply. That is, it would take 2.4 months to sell all of the available inventory. In fact, this is actually a big increase from December, in which housing inventories stood at just 1.3 months of supply, but it is only a slight increase from January 2013, at 2.2 months of supply. In comparison, in January 2008, when the housing bubble had yet to fully collapse, housing inventories stood at 14 months of supply. Indeed, the 2.4 months of supply in January is a near-low since the peak of the housing boom.



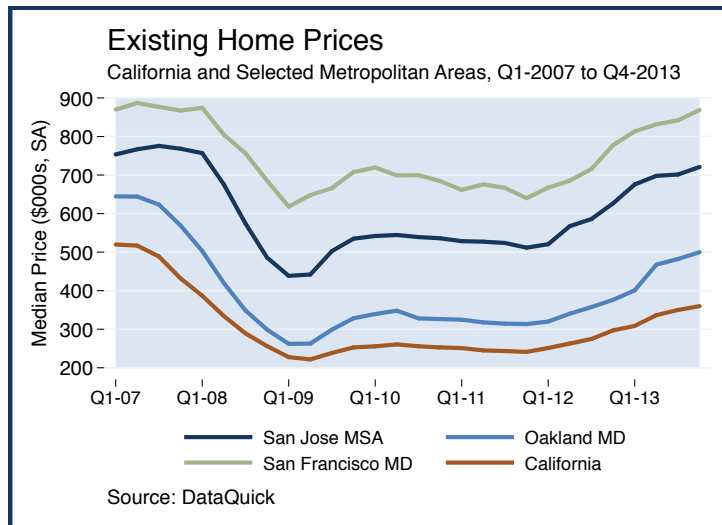
Much of the decline in inventories is attributable to a steep drop in foreclosures. On the one hand, it is a very good sign that fewer and fewer South Bay homeowners are facing foreclosure each quarter, but alternatively, those foreclosed homes provided a supply of housing stock at lower-than-market value prices that kept home prices low. Indeed, the 120 foreclosures on a seasonally adjusted basis in the fourth quarter of 2013 were lower than in any quarter since the peak of the foreclosure crisis, and represents a decrease of 65.7% from the fourth quarter of 2012. As the South Bay economy continues to grow, foreclosures should remain at that low a level, or decrease even further, which will play a large role in keeping available housing stock low.

With housing stock falling over the course of 2013, home prices rose precipitously during that time. The median existing single-family home price in the South Bay increased by 15.1% (\$94,000 overall) from the fourth quarter of 2012 to the fourth quarter of 2013 to \$721,000. This is faster than in San Francisco, where the median price increased by 11.7% (\$91,000 overall) to \$869,000. However, growth in the East Bay was significantly faster, up 32.9% (\$124,000 overall) year over year to \$500,000. In fact, statewide home price appreciation was much faster than in the South Bay, with the median price increasing 21.2% (\$63,000 overall) year over year to \$360,000.

With strong price appreciation throughout the region, home price appreciation in the South Bay cannot be attributed to any one municipal housing market. From the fourth quarter of 2012 to the fourth quarter of 2013, the median existing single-family home price in San Jose increased 19.1%, by 18.7% in Santa Clara, and by 10.4% in Sunnyvale.

The multifamily market has grown substantially, as well. The average rent for Class A apartments grew by 5.2% from the fourth quarter of 2012 to the fourth quarter of 2013 to \$2,006, although the vacancy rate remained flat year-over-year at

3.4%, while the average rent for Class B and C apartments grew by 3.6% to \$1,464, with a 0.4-percentage-point decrease in the vacancy rate to 1.7%. The multifamily housing supply is every bit as constricted as the single-family housing supply. However, both single-family and multifamily residential construction appears to be growing quickly.



Over the course of 2013, 6,295 building permits were issued for multifamily units in the South Bay. In comparison, just 1,131 multifamily building permits were issued during the worst of the housing crisis in 2009. The 6,295 permits issued last year also represents a 15.2% increase from 2012. The multifamily construction boom in the South Bay that began in 2010 persisted through 2013, and with building and construction spending and employment on the rise in 2013, expect that pace of construction to continue into 2014. San Jose, which is historically a community of predominantly single-family homes, is encouraging a transformation toward a much more diverse mix of single-family and multifamily housing. It is a direction in which all parts of the Bay Area should be moving, to alleviate an already tight supply of housing that will only intensify with an increase in population motivated by healthy regional economic growth.

Meanwhile, at least some relief appears in sight for the tight supply of single-family homes on the market. In total, 1,861 single-family residential building permits were issued in the South Bay in 2013, an increase of 25.7% over 2012. Permit issuances peaked in the fourth quarter of 2013, at 491, and construction should have commenced for many of these properties in early 2014. The market for both single-family and multifamily real estate should see some relief in the coming year, and price appreciation should be less severe than in 2013.

Commercial Real Estate Remains Strong

While it has not experienced the price appreciation that residential real estate has, commercial real estate is growing for both office and retail developments. Among office spaces in the South Bay, the average rent per square foot increased 4.8% from the fourth quarter of 2012 to the fourth quarter of 2013, to \$32.11, while the vacancy rate, still relatively high at 18.0%, decreased by a full percentage point in that time. Meanwhile, the average rent of retail space per square foot remained flat at \$31.24 year over year, but the vacancy rate fell 0.5 percentage points to 5.2% year over year. The strength of commercial property in the South Bay reflects the growth of the labor market in both retail and professional and business services, as well as the overall growth of consumer spending over time. The significant drop in business spending in 2013 could have an impact on office construction down the road.

The research and development real estate market, a keystone of South Bay commercial real estate, remained relatively flat over the course of 2013. The asking rent per square foot increased by \$0.05 to \$13.79, while the vacancy rate increased by 0.5 percentage points to 17.4, which is roughly in line with the asking rent since mid-2012. As discussed in the next section, although venture capital funding for tech in Silicon Valley was down in 2013, the sector should continue to grow over the course of 2014. As equity valuations remain very high, and many tech firms are cash-heavy, which could translate into new local R&D.

Building permit values for commercial construction suggest that the South Bay is headed for a very strong year of growth in commercial real estate. Total non-residential building permit values in 2013 were 90.5% higher than in 2012. Credit for the surge in planned construction lies with retail, industrial, and hotel property. Retail building permit values increased 177.9% from 2012 to 2013. That said, 2012 may not have been a strong year for retail planned construction, but 2013 building permit values were still 112.3% higher than at pre-recession levels in 2007. Industrial building permit values in 2013 were 191.1% higher than in 2012. Hotel building permit values saw the largest increase, as 2013 values were 194.8% higher than in 2012. However, overall growth was limited substantially by a 14.6% decrease in total values for office property—one of the largest categories of commercial construction and nearly twice as large as retail construction—from 2012 to 2013.

Construction Permit Values for Commercial Property (\$ Millions)

San Jose MSA

	Total	NR Alterations	Office	Retail	Industrial	Hotel
2007	1,969.3	1,056.7	446.4	129.0	60.0	15.2
2012	1,856.1	1,109.2	495.3	98.6	24.8	13.6
2013	3,536.5	1,283.7	422.9	273.9	72.3	40.1
2013YTD	168.4	84.3	40.1	11.0	21.0	0.0
2014YTD	537.3	150.7	22.7	25.7	0.0	0.0

Source: Construction Industry Research Board

Note: Year-to-date is month of January.

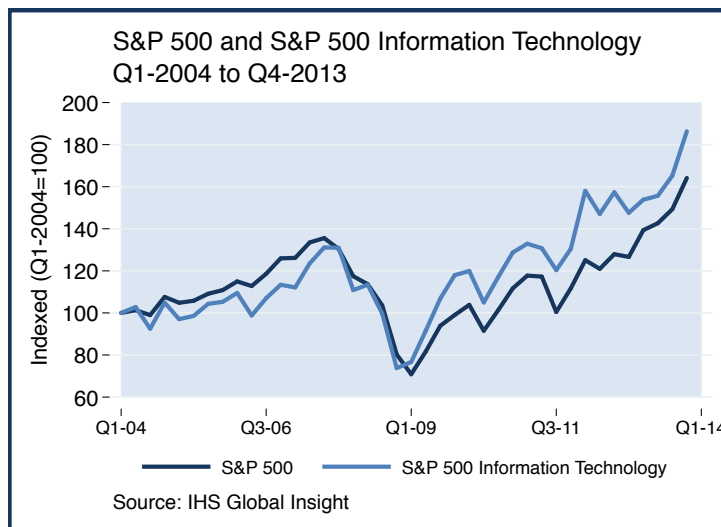
Even as new commercial construction projects were booming in most sectors in 2013, alteration and addition projects grew strongly in 2013 as well. Building permit values for alterations and additions were 15.7% higher in 2013 than in 2012. The health of the South Bay economy seems to be signaling to local business owners that new or previously tabled expansion projects are becoming less of a risk. Consistent growth in gross receipts since the onset of the economic recovery appears to have given business owners confidence to build, providing a substantial benefit to commercial real estate in the South Bay.

Is Silicon Valley in a Tech Bubble?

Are concerns about a new tech “bubble” legitimate? Alarm bells were set off recently following the high valuation of a number of tech companies in advance of their initial public offerings (IPO), and the anxieties have intensified with U.S. equity markets growing faster than corporate profits.

Much of the worry is connected to the valuation of social networks. In 2012, Facebook purchased Instagram for \$1 billion, and in 2013, Facebook offered \$3 billion for Snapchat.³ Neither company had adopted a reliable revenue model prior to going public. The valuation of Facebook itself at its 2012 initial public offering was \$104 billion, the highest valuation ever for an American company at IPO,⁴ before the company had even begun to fully tap into the revenue stream from its mobile app. At that time, Facebook had one billion users, but even so, its earning potential remained unclear.

Facebook appeared to be following a precedent set a year earlier when LinkedIn's IPO valued the company at over \$3 billion,⁵ despite the fact that LinkedIn's earnings were based on subscriptions and advertisements that left its revenue expectations far short of its equity valuation. That valuation now seems miniscule in light of Facebook's recent purchase of WhatsApp for a total of \$4 billion in cash, \$12 billion in Facebook stock, and \$3 billion in additional restricted Facebook stock that will vest over the next four years.⁶



Indeed, the recent growth of the S&P 500—and, even more, growth of the Information Technology (IT) sector of the S&P 500—has outpaced pre-recession growth significantly, such that S&P 500 IT is over 80% higher and S&P 500 over 60% higher than the levels that the two groups maintained in the mid-2000s. Price-to-earnings (P/E) for firms in the S&P 500 IT sectors stand at just under 15, compared to roughly 17 for S&P 500 firms. Meanwhile, the average of the NASDAQ composite index, which includes tech stocks like Facebook, has increased by 31.8% from the fourth quarter of 2012 to the fourth quarter of 2013. As of December 2013, the NASDAQ composite index stood at roughly 2.3 times the S&P 500 index. In comparison, NASDAQ was roughly 2.1 times the S&P 500 in both December 2012 and December 2011. The spread between the tech-oriented NASDAQ and the S&P 500 appears to be widening somewhat, although not to the extent that it widened in the tech bubble at the turn of the 2000s. In December 1998, the NASDAQ composite index was 1.8 times the S&P 500 index, but that spread widened to 2.8 by December 1999, and to as high as 3.4 in February 2000. The growth in the NASDAQ/S&P 500 spread is slower in the present day, but the spread itself is reminiscent of late 1999.

Economist Robert Shiller, who correctly warned of an impending crash in the housing bubble in the late-2000s, now claims that tech may face the same fate. In his words, “We do have a bit of bubble thinking...people are very impressed by high tech, probably too impressed....I like to look at long-term earnings. You can't do that with WhatsApp. That's for adventurers.”⁷

³David Gelles and Vindu Goel, “Facebook, WhatsApp \$19 Billion Deal Dwarfs the \$1 Billion Instagram Buy.” New York Times, Feb 20, 2014.

⁴Shayndi Raice, Anupreeta Das, and John Letzing, “Facebook Prices IPO at Record Value.” The Wall Street Journal, May 17, 2012.

⁵Clare Baldwin and Alina Selyukh, “LinkedIn Share Price More than Doubles in NYSE Debut.” Reuters, May 19, 2011.

⁶Gelles, np.

⁷Lawrence Lewitinn, “Robert Shiller: We Have a Bubble.” Yahoo! Talking Numbers, Feb 26, 2014.

But however staggering Facebook's investment in WhatsApp may appear, and however surprising the valuation of some prominent examples may be, today's tech equity market really does not compare to the market that collapsed in the early 2000s. According to data from MoneyTree, Tech venture capital funding actually fell substantially in Silicon Valley from 2012 to 2013—by 21.2%. Growth was mild across the state overall, at 0.9%, although somewhat faster across the United States, at 7.5%. Perhaps unsurprisingly, venture capital funding in software grew precipitously in that time in both the California (27.3%) and the United States overall (27.5%), but it fell by 0.1% in Silicon Valley. That said, software remains by far the largest tech sector for venture capital funding, at roughly \$11.0 billion nationwide, compared to \$29.4 billion nationwide for all tech sectors.

In addition, IT investment as a share of total U.S. gross domestic product is not showing the same level of growth that it had in the midst of the tech bubble. According to data from the U.S. Bureau of Economic Analysis, between 1999 and 2000, IT investment increased by roughly 0.5 percentage points before falling 0.3 percentage points the following year, upon the burst of the tech bubble. By comparison, from 2011 to 2012, IT investment increased by only 0.29 percentage points and from 2012 to 2013, only 0.1 percentage points. Growth was quite strong in from 2009 to 2010, at 0.6 percentage points, but much of that is due to the onset of the economic recovery, during which investment was catching up to more historical averages. From 2008 to 2009, IT investment had decreased as a share of GDP by 1.1 percentage points. At the same time, the percentage of total investment in IT stood at 9.9% in 2013, which is higher than in 2000, at 9.2%, but very close to 2007, at 9.7%. In all, IT investment is not especially high as a percentage of total U.S. output.

Nonetheless, it is the nature of the American tech sector in 2014 that leads to hesitation about declaring a tech bubble. Ben Horowitz, co-founder of venture capital firm Andreessen Horowitz, notes that in January 2000 the S&P 500 P/E hit 44x.⁸ As mentioned above, the current S&P 500 P/E is less than half that. Moreover, examples like LinkedIn and Facebook do not tell the whole story of today's IPOs. Finance professor Jay Ritter of the University of Florida notes that IPOs in 2000 were selling at a median price-to-sales ratio almost six times higher than IPOs in 2013.⁹ In addition, Andreessen Horowitz COO Scott Kupor comments that leading up to the tech bubble in the late-1990s and early 2000s, the average VC-backed firm issued its IPO after roughly four years. Today, it is closer to a decade.

At the same time, 80% of firms at IPO had annual revenues of less than \$50 million at the height of the tech bubble, while in 2013, the average tech IPO had annual revenues of \$104 million.¹⁰

Firms that go public today are much older, larger, and more profitable than firms that went public during the tech bubble.

Furthermore, firms that seem to have “over-invested” in their acquisitions, such as Facebook with WhatsApp, or, as is sometimes argued, Google with its \$3.2 billion purchase of Nest, are expansive enough that not only are these purchases relatively low-risk for them, but they also provide a means for these firms to expand into what may prove a lucrative new market. WhatsApp and Instagram help Facebook to expand its mobile business, while Nest provides Google with a foothold into electronics for the home, through which Google can leverage its existing technology. These are acquisitions that could offer Facebook and Google a very positive net return but will not do much harm to either firm if they do not.

Even if Silicon Valley is not in a bubble, what does a booming tech sector mean for the region? For one, it seems to be contributing to solid year-over-year growth in Information sector employment, at 6.3%, and Professional/Business sector employment, at 4.4%, from January 2013 to January 2014. Over 11,800 new jobs were added in these two sectors over the course of last year—3,600 in Information and 8,200 in Professional/Business, or 29.4% of all new jobs added in total nonfarm employment in that time. Silicon Valley tech sector venture capital funding growth was negative from 2012 to 2013, but not across every sector. Computers and peripherals funding increased by 18.1% to \$276 million. At the same time, local venture capital firms are making big moves. Technology Crossover Ventures, a Palo Alto firm, raised \$2.2 billion in funding for later stage growth investments in tech companies. The firm, which has provided funding to Netflix, Groupon, Spotify, and Facebook, will continue to distribute funding to internet, software, infrastructure, and business and financial services companies with the new capital.¹¹ Accel Partners, also in Palo Alto, has raised nearly \$1.5 billion in venture capital funding for later stage growth investments. Accel has supported tech firms such as Facebook and Etsy in their early stages.¹² In general, though, the tech sector in 2013 appears to have expanded outward rather than from within, and while we would have liked for more of this growth to have taken place locally, we shouldn't be too concerned about how the tech sector is growing—as long as it continues to grow at a reasonable pace. Even then, there are signs of local tech sector expansion. In late March, the City of San Jose approved a 2-million-square-foot construction project near Mineta San Jose International Airport for a company that has yet to be named. The project has space for 8,000 to 10,000 employees, which makes it more than twice the size of the Facebook campus in Menlo Park.¹³ The tech world still goes through the South Bay, and it will continue to do so in the years ahead.

⁸Economist Debates: Tech Bubble,” The Economist, Jun 14, 2011.

⁹Leslie Pickler and Ari Levy, “Is This the Next Tech Bubble?” Bloomberg News, Mar 09, 2014.

¹⁰Scott Kupor, “Don't Believe the Tech Bubble Hype.” Fortune. Jan 23, 2014.

¹¹Schubarth, Cromwell, “Netflix, Facebook Backer TCV has \$2.23B to Invest from New Fund.” Silicon Valley Business Journal. Mar 19, 2014.

¹²Primack, Dan, “Exclusive: Jim Breyer Reducing Role at Accel Partners.” Fortune, Mar 19, 2014.

¹³“Massive Tech Campus Sparks Mystery in San Jose.” The Associated Press, Mar 20, 2014.



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