

EastBay



Q3 **06**

ECONOMIC OUTLOOK



**Created for the San Francisco Bay Area's
East Bay Economic Development Alliance
and the Contra Costa Council**

**by Christopher Thornberg
Senior Economist
And
Ryan Ratcliffe
Economist
UCLA Anderson Forecast**

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Introduction

When I wrote my first East Bay outlook report a number of years ago, the region was in turmoil. The crazy heady days of the late nineties, when IPO's flowed, venture capital poured into the region and office rents soared, were all built on the false promise of 'the new economy'. Of course there was no new economy; it was just the old economy with an .html attached to the end of it. The painful shift back to normality over the first few years of the new century was a stark reminder that the same fundamental rules of profit and investment still applied to business no matter how neat the technology or how slick the interface. At the time I made two clear predictions. This first was that the East Bay, which had not been swept up in the furor as much as its two neighboring economies, would not fall as far and would recover quicker. The second was that the Bay Area overall would recover and maintain its position as one of the premier centers of technology in the world, despite fears of outsourcing and change. Both predictions have proven to be true. And in the midst of this recovery the economy has emerged as an equal to its two neighbors, and the East Bay is not just a bedroom community and center for blue collar operations.

Now as I write the introduction for my final report for the EDA again we are looking at more economic turmoil in the region and nation. The roots of this current set of problems were clearly set in those heady days of the late nineties. While businesses and stock investors learned the importance of fundamentals, the lesson never spilled over to the consumer side of the economy. Households, having bought into the myths of the new economy, calculated that saving for the future was old-school. Consumer spending grew nearly as fast as business spending. And when the investment bubble broke, despite job losses and shrinking income and wealth, consumers fueled by cheap credit and tax cuts kept on spending like we were still heading for that mythical new economy.

When the housing bubble began in early 2003 and prices began to rise at a pace never before experienced the spending frenzy increased yet again pushing debt to new heights (depths?). Over the past year, for the first time since the Great Depression, consumers spent more than they earned. They take their lessons well from government. At both the

state and national level deficit spending has become de-rigueur. The US now has the largest trade deficit ever, and no one seems to be worried about it. Indeed the whole situation is reminiscent of the cycles that many a Latin-American economy has gone through but of course at a much larger scale. But spending on credit can only last so long. The demise of the real estate bubble has always been a function of when, not if. Throw in rising interest rates and inflation and we suddenly find ourselves in a very precarious point in the business cycle.

Not all is dark. The business side of the economy is booming, as the hard-learned lessons of the past decade have been taken to heart. And as the U.S. moves towards a service based economy with deep roots in the world economy, the business cycles of the past have become less fearsome. The U.S. might be able to move out of the current tough situation we are in with just an economic slowdown rather than a full recession. It remains to be seen. What is clear is that the East Bay and the Bay Area will certainly weather this slowdown with less pain than the last. Ultimately a highly educated workforce, solid long-run investments in future technologies, world class research institutions, and an overall great climate for living will keep the area as one of the premier places to live and work.

It has been a pleasure to get to know the East Bay economy and its leaders, press and businessmen and women. As I move on to my next career these relationships and the lessons I have learned will continue to have an influence on the work I do. Cheers to the sunny side of the Bay!

Christopher Thornberg

Beacon Economics
2478 Roscomare Rd
Los Angeles, CA 90077

Editor's note: Chris, we will miss your lively commentary, your unique insights and fearless opinions about our economy. You are clearly passionate about your work and you have made many friends in the East Bay. We wish you the very best in your new endeavors.

The Nation and State: The Fragile Economy

Christopher Thornberg

With low unemployment rates, a strong stock market and government coffers full of unexpected revenues, it certainly seems hard to think of the economy as fragile.

Sacramento's recent battles have been about what to do with their unexpected windfall.

Indeed, the second quarter GDP numbers were recently released, and all in all growth was not too bad. The economy expanded at a 2.5% pace SAAR (Seasonally Adjusted Annualized Rate). Admittedly this is slow relative to the torrid 3.8% rate averaged

Contributions to GDP Growth % Terms, SAAR

	<i>3 Yr Avg</i>	<i>Q4 05</i>	<i>Q2 06</i>
Gross domestic product	3.80	1.80	2.50
Personal consumption	2.57	0.53	1.74
Durable goods	0.59	-1.08	-0.04
Nondurable goods	0.84	0.79	0.34
Services	1.15	0.83	1.43
Gross investment	1.24	2.51	0.28
Nonresidential	0.70	0.52	0.28
Structures	0.08	0.31	0.36
Equipment	0.63	0.21	-0.07
software			
Residential	0.46	-0.06	-0.40
Change in inventories	0.07	2.05	0.40
Exports	0.79	0.97	0.35
Imports	-1.18	-2.04	-0.03
Government	0.36	-0.21	0.11

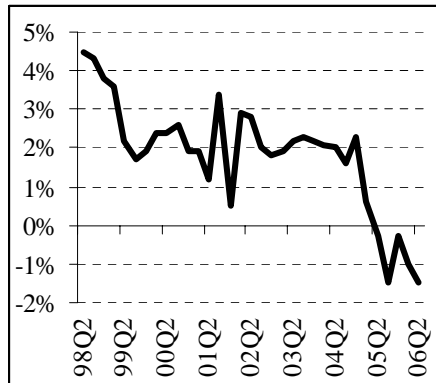
over the previous three years, but it still is within the statistical range of error of the long run average of 3.1%. And of course it is larger than the 1.8% rate hit in the fourth quarter of 2005, a number that was functionally dismissed as an anomaly when I wrote this report in the early part of the year. Indeed the economic spin-maestros have even proclaimed the second quarter number to be good news, saying that it implies inflation pressures will subside and reduce

the need for the Fed to continue to tighten interest rates.

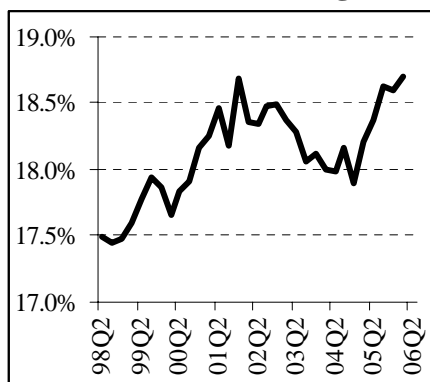
Alas, the true story of these second quarter numbers is a bit more ominous, and clearly reflects the impact of the many imbalances in the economy beginning to reach their breaking point. The following table shows contribution to GDP growth by the various sources of spending from within the economy. Consumer spending's contribution was 1.74 percentage points, higher than in the fourth quarter of 2005. However, the dip in the final quarter of last year was all in durables, an extremely volatile source of growth for

the U.S. economy. This time there is some decline in durables, but it has been accompanied by a slowdown in spending on non-durables, this being primarily driven by

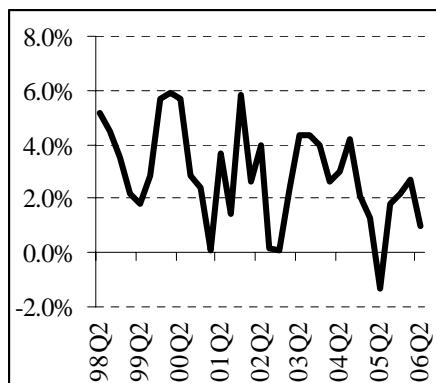
Consumer Savings Rate



Consumer Debt Servicing



Real Disposable Income Growth



the large run-up in prices for gasoline. But for a surprising increase in spending on services this could have been much worse. Also surprising has been the slowdown in business spending. Spending on structures remains decent for now, but there has been a slowdown in spending on equipment and software. Some of this is driven by a slowdown in spending on transport equipment, namely planes. But spending on less volatile information technology goods also dipped into negative territory. Residential investment has also, not surprisingly, begun to be a drag on the economy.

These numbers alone are certainly not cause for alarm. If the economy were in better condition, they could be read as mere blips. But when we consider where the economy is right now it becomes more worrisome. Consider consumer spending. The second quarter numbers saw the personal savings rate dip yet again into record territory as consumers spent 1.5% more than their disposable income. This has pushed consumer debt servicing levels back up to all time highs. With interest rates continuing to rise and with many recent home buyers facing resets on those wonderfully low but terribly short-run

‘introductory’ rates on their mortgages, over the next year it is clear that debt burdens are going to be a big issue.

This would not be such a worry if income and employment levels started growing fast enough to offset these rising costs. The labor markets have been doing fairly well.

Unemployment rates remain at very low levels, for the U.S. at about 4.6%, while here in

California it has dropped to 5%. But

there has been a very distinct

slowdown in job creation since the

start of the year, both at the national

and state levels. At the national level

monthly job creation has trended

down from the range of 150,000 to

200,000 new jobs per month to

100,000. Here in California the

strong pace of job creation in the

latter part of 2005 has come to a

complete halt, with the total number

of jobs barely above where they

were at the start of the year. And this

time, we don't have a surge in

informal employment making up the

difference. Instead, this slowdown

is real. Not surprisingly aggregate

real disposable income growth rates

continue to be mediocre due to the

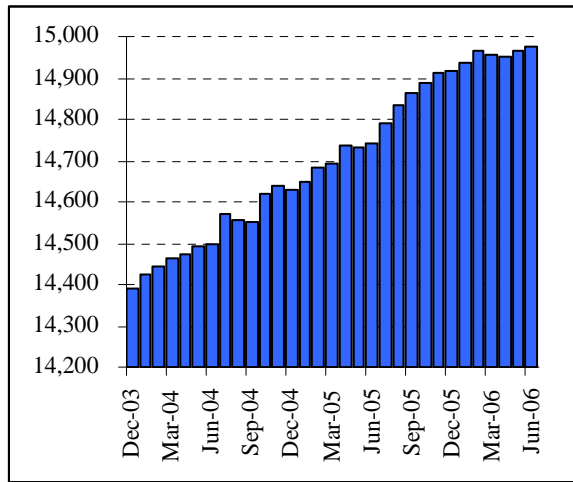
slowdown in job creation as well as

the rising cost of consumption in the

U.S. economy. In the second quarter

California Payroll Employment

Thousands, Seasonally Adjusted



California Payroll Growth by Sector

Seasonally Adjusted

	Jun-06	Growth
Civilian Employment	16,869	0.2%
Total Nonfarm	14,975	0.6%
Construction	922	-2.5%
Manufacturing	1,509	0.7%
Trade, Transportation	2,834	-0.7%
Information	471	2.4%
Financial Activities	941	0.6%
Professional Services	2,199	1.5%
Educational Health	1,613	2.1%
Leisure Hospitality	1,513	1.8%
Other Services	518	1.1%
Government	2,431	0.5%

of this year the pace of income growth was a tepid 1%, SAAR.

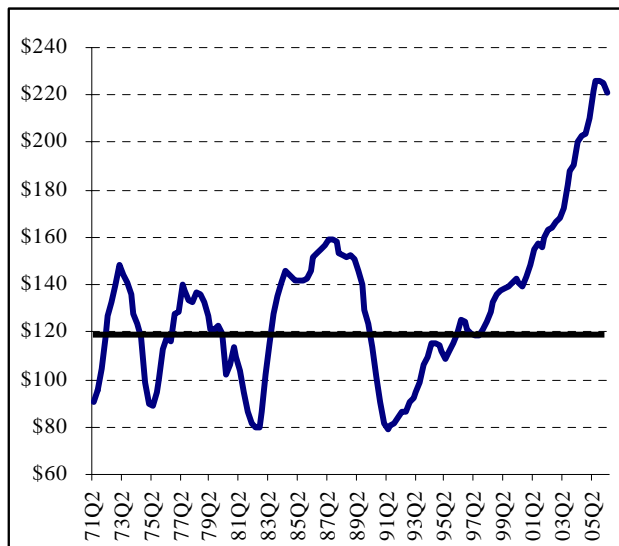
Another potential source of bailout might be housing wealth. The home appreciation

ATM machine has faithfully supported consumers' profligate spending over the recent

past, but here again things are looking bleak. According to numbers produced by the National Association of Realtors the only part of the U.S. where home prices are continuing to rise is the Northeast, which saw a year-over-year increase of 7% June to June. In the West appreciation has slowed to 0%, and prices have actually fallen moderately in the Midwest and South, -1.7% and -.5% respectively.¹ Overall sales continue to fall, and not surprisingly inventory levels have increased by 40% over this time last year.

Along with the slowdown in market activity is a slowdown in the building of new homes.

Residential Investment / Change in Population
\$000, SAAR



More on California's housing situation in the next section. The news has been filled with what is happening in the building industry. Nationally housing starts have fallen 13% since the beginning of the year and sales of new homes are also slowing even as the inventories of completed homes for sale continue to rise to record levels. The following graph shows the ratio of spending on new homes relative to new population growth. On average

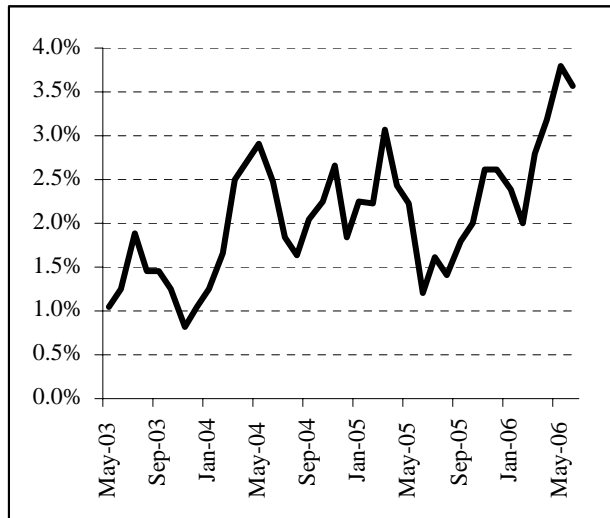
and in real terms the nation spends about \$120,000 for each new person added to the population base, or about \$360,000 for each new household. This has fluctuated between \$80,000 and \$160,000 through the business cycle. During the current housing boom it exploded to \$220,000 per new person, higher than ever before. This is just starting to turn down now, and clearly has a long way to go to get back to some semblance of normality relative to long run trends. This implies a long painful ride for the U.S. residential construction sector over the next few years. By itself this certainly isn't enough to sink

¹ [http://www.realtor.org/Research.nsf/files/REL0606EHS.pdf/\\$FILE/REL0606EHS.pdf](http://www.realtor.org/Research.nsf/files/REL0606EHS.pdf/$FILE/REL0606EHS.pdf)

the U.S. economy, but it is enough to sting. If spending goes to its historic low of \$80,000 over the next two years this still would imply a reduction of spending in the U.S. economy by about 3% of GDP. In short this expected decline in spending on housing could reduce aggregate spending by an amount of about 3% of the economy. This drain alone could halve our average economic growth of 3.1% per year over the next two years.

Of course this might all be avoided if interest rates drop back and keep the housing market from collapsing too rapidly. This would reduce the debt burdens on consumers and make those mortgage resets less painful. So where are rates heading? Two bits of

U.S. Core Inflation Rate, SAAR

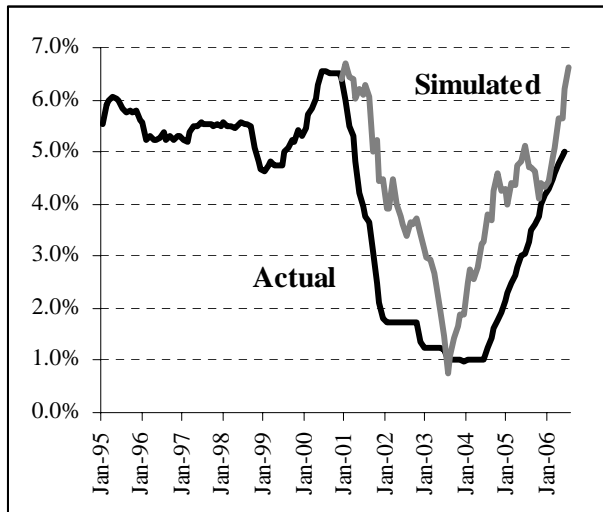


information make this perfectly clear. First and foremost has been the surge in core inflation over the past few months, with rates of up over 3.5%, higher than at any point in the last decade. Now some perspective is in order—it should be kept in mind that while this is unusual in current times, in the eighties this would have been below average. So this is hardly a crisis situation from a long run perspective. Of course it must also

be kept in mind that interest rates on 10-year bonds were running 8% to 12% during the eighties as well, rather than the 5.1% rates being seen today. The second bit of evidence comes from Bernanke himself, when earlier this month he made it clear to Congress that his number one priority was to prevent inflation expectations from creeping into the system. In plain speak, this means that he wants to squash inflation now before it becomes built into price and wage policy for businesses, thus creating momentum that can cause more serious issues for the economy in the future. Rates will continue to rise.

How much will rates rise? This is the tougher question to ask. To help create some boundaries, a simple simulation of Fed policy was run, basing changes in current rates on the level of rates, unemployment, inflation and long term interest rates. The period of 1985 through 2000 was used as the base case—a period of time where the Fed pursued fairly logical policy given the economic situation of the time. The current burst of inflation is certainly in part due to energy and commodity costs, but also due in large part to loose monetary policy over the past few years. How loose? Starting in 2001 the Fed pursued a very aggressive program of cutting rates and keeping them very low for a long period of time—much more aggressive than might have been expected given the

Federal Funds Rate: Simulation Exercise



relatively shallow nature of the 2001 recession. During this time there was serious discussion about the risk of a Japanese style deflation in the U.S. economy, a fear that in hindsight seems even stranger now than it did at the time. This policy not only has been responsible for aggressive consumer spending and the current housing bubble, but it may have created the monetary conditions for just such a surge in inflation.

Despite troubling signs of price increases over the past few months the Fed has still remained relatively conservative in its rate increases. By the model's reckoning, Fed funds rates should now be almost a point and a half higher than they are today. Will they raise rates all the way to this level? Definitely not. As the Fed continues to tighten, the economy will continue to cool, taking away inflationary pressures and causing unemployment to trend up. This suggests the proper level of rates will fall. What this means is that we might expect at least another half point of tightening before the Fed

reaches a new level of comfort. Of course rising rates will put that much more pressure on the housing markets and consumer spending.

This all sounds like the ‘perfect storm’ as the press has been referring to the situation. But there is another side to the equation: production in the U.S. economy. Another important leading indicator of the U.S. economy is manufacturing hours worked and new orders. Hours being worked by production workers continue to rise as orders continue to rise at a very steady pace. Demand for U.S. exports continues to rise as well. Overall unemployment claims continue to fall, another positive leading indicator. Corporate profits are also very high, and continue to rise and the stock market remains robust. In short, it seems as if the business side of the U.S. economy remains very solid even as the consumer side looks bad, the mirror opposite of what was happening in the U.S. economy in 2000 and 2001. As we move through the next few quarters it is clear that overall economic growth will continue to slow. The big question for 2007 is if the business sector will install enough viability into the economy to keep the cooling consumer sector from tanking the economy. At this point in time there is no sign of an economic recession in the works, but it is clear the economy is currently very fragile.

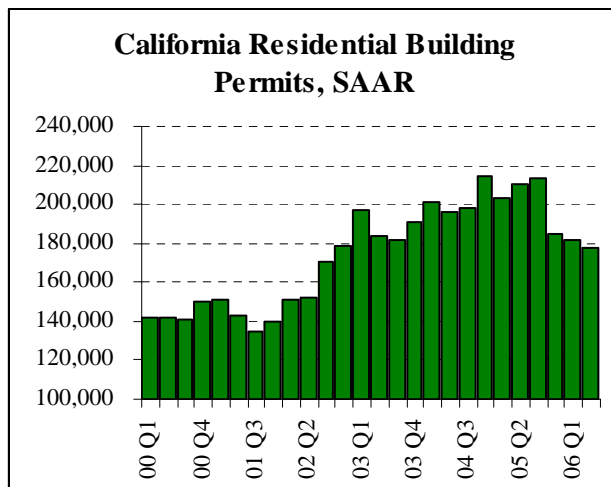
California: Singing the Housing Blues

Christopher Thornberg

The great housing bubble of the 00’s has finally popped. Overall sales activity, one of the leading indicators of the market, has fallen by 23% in the Bay Area and 16% in Southern California over the past year and with this decline, inventory levels (homes currently for sale) are rising rapidly. That downward trend is expected to continue for some time. Home price appreciation, which typically lags market activity by six months to a year, has stopped completely across the state. The same trend is occurring nationally with slowing existing home sales and a record inventory of new homes for sale. The once loud debate over the existence of the bubble has now been replaced by a debate over how hard a landing it will be, whether home prices will drop, and most importantly what it means for the rest of the economy. What we do know is that we have not come close to the

bottom of the market, and it promises to be painful. Even the California Association of Realtors recently retracted their prediction of a 'soft landing'.²

With all the discussion about bubbles in the news, we should be clear about what one is. As past readers of the Quarterly Forecast know, a bubble is when the market price of an asset becomes misaligned with its fundamental value. In the case of housing the fundamental value is the net present value of the rental streams the house offers to its owner over its life. Such mis-valuation is driven by speculators who are betting not on changes in underlying values but simply expected appreciation. This self-fulfilling prophesy can drive the market for a short period of time but must eventually come to an



Source: Construction Industry Research Board

end. What a housing bubble is not, is a period of time when asset prices fall sharply. This may happen at the end of a bubble in stock markets, but the fixed costs of transactions in housing markets causes overall market liquidity, rather than prices, to fall rapidly when the bubble ends. Housing prices fall slowly as a result. This suggests prices will remain overvalued for years.

This does not mean the pop will not be harmful to the economy. The real estate and mortgage industries will be hit hard, as will those recent buyers who put themselves in an unsustainable financial position by buying a house far out of their income range hoping for continued appreciation to bail them out of their problems. Consumer spending will take a hit as well, as the home appreciation ATM machine will suddenly run dry. And with the slowdown in the market, not surprisingly there has been a slowdown in the supply of new homes being built since it is current home-owners who buy new homes. If

² *Housing Expert: 'Soft Landing' Off Mark* Los Angeles Times, CA - Jul 20, 2006

people are not selling their current residence they will not buy a new one. The number of residential permits fell to 175,000 in the second quarter (SAAR) the lowest number since the third quarter of 2002. By all accounts we can expect this statistic to also continue its downward trend for some time.

But what of the much-touted housing ‘shortage’ in the state? Many a housing bull used this issue as justification for the rapid increases in prices in the state that have given California the dubious distinction of having the highest housing costs in the nation. At the

Residential Permits and Change in Adult Population, 1996 to 2006

Source: Construction Industry Research Board, RAND

<i>County</i>	<i>Permits</i>	<i>Population</i>	<i>Ratio</i>
Los Angeles	183,119	891,872	4.87
Orange	103,998	326,072	3.14
San Bernardino	103,237	296,037	2.87
Ventura	33,231	88,522	2.66
Alameda	46,914	121,908	2.60
Fresno	44,920	109,902	2.45
Stanislaus	31,363	75,608	2.41
Kern	49,646	115,776	2.33
San Joaquin	49,124	106,927	2.18
Contra Costa	51,992	112,641	2.17
San Diego	148,288	316,061	2.13
San Francisco	24,203	49,487	2.04
Solano	23,032	46,044	2.00
Santa Clara	67,434	132,870	1.97
Sacramento	91,239	176,795	1.94
Riverside	213,172	411,183	1.93
Sonoma	24,068	45,356	1.88
Placer	51,823	84,076	1.62
U.S. Average			1.47

highest level the numbers would seem to support this point of view. Over the past two decades the U.S. economy has built, on average, about one new residential structure for each 1.7 new adults in the population (net). In California the long run ratio is one new residence for every 2.25 adults, a considerably lower pace and certainly an issue given the high pace of population growth in the state.

It is worth noting that the housing gap is not spread equally across the state. Most of the issues are in

Southern California. Los Angeles County has the largest gap with 4.87 new adults for each new residential permit for the last 10 years. Orange, San Bernardino and Ventura are close behind. The pace of building in the Bay Region is also slower than the U.S. average, but not by nearly as much. The recent price boom has caused the pace of construction to rise, but it still lags far behind population growth.

Technically speaking we don’t have a housing ‘shortage’ in the state. A true shortage is

when demand is larger than available supply, causing product to simply not be available—in short, massive homelessness in the area. Such problems are typically caused by price ceilings such as rent control.

In the case of housing where there are no housing price controls except in limited circumstances, we instead have very high rental prices which equilibrate the existing short supply with demand. For ease let's call this a housing shortfall.

The result of this relatively slow pace of building and resultant high prices has been the creation of one of the worst crowded housing situations in the nation. Currently almost one million households in California live in conditions of having more than one person

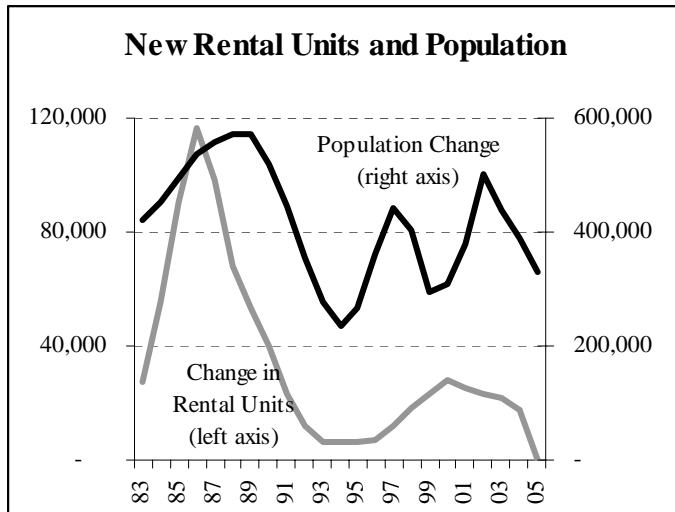
Over-Crowded* Households by State			
<i>Rank</i>	<i>State</i>	<i>Total ('000s)</i>	<i>Percent</i>
1	Hawaii	37.8	8.8%
2	California	997.5	8.3%
3	Texas	367.2	4.7%
4	Alaska	10.4	4.6%
5	New York	310.6	4.4%
6	Arizona	92.8	4.4%
7	Nevada	35.0	4.0%
8	DC	9.6	3.8%
9	Utah	29.6	3.8%
10	New Mexico	25.9	3.6%
	U.S. Total	3,390.7	3.1%

** Defined as more than one occupant per room.
Source: 2004 American Community Survey*

per room. To put this in perspective this implies 5 or more people in a standard two-bedroom apartment. On a percentage basis this totals 8.3% of all occupied housing in the State, only behind Hawaii in terms of the total proportion. Not surprisingly the largest problem exists in the greater Los Angeles region where there are over 620,000 residences in overcrowded conditions. This represents two-thirds of the state total.

So here is the conundrum. Rents in the state are high due to the shortfall of supply. Home prices are even higher due to the asset price bubble we are currently experiencing. The two are related, but not the same since one is a long run issue while the latter is a short run phenomenon. Despite the shortfall, the bubble is popping and this is going to make the already severe housing shortfall that much worse because of the falling rates of construction.

The paradox of falling rates of construction and the massive housing shortfall can be explained by the fact that the surge in building over the past few years has simply not matched what is needed in the state, namely rental units and entry level homes for sale. Consider the rental unit situation first. There was a boom in the construction of rental



Total for Greater Los Angeles, San Diego, the Bay Region and Sacramento. Sources: RAND and Portfolio & Property Research

units in the mid-eighties, with almost 120,000 new units put into place in 1987 alone for the 500,000 new residents in the urban areas included in the data. The Eighties overall saw the addition of one new rental unit for each 8 people added to the local population. Since then, however, the number of new units coming on line has fallen sharply. Through the nineties and to today the major

urban areas of the state added only one new apartment for each 24 people added to the population, one third the previous rate. In 2005 estimates are that only 232 apartments were added to the entire urban areas of the state. This is partly because the building that was going on was offset by a massive number of condo conversions.

Of course during this period rental units have been needed the most. Increased levels of migration from Latin America and the steep recession created by the loss of the aerospace industry in the early nineties caused substantial demographic changes in the state's economy, particularly across the southern urban areas. Real median household income in the state actually fell from 1987 to 1995 and only surpassed the previous peak in 1999 in the midst of the tech rush. Today median household income is only 5% higher than 20 years ago. At the same time there has been a tremendous widening of the overall income distribution, with those at the top of the scale doing better than ever while a large proportion of the population struggles to maintain their current living standards.

These demographic changes reflect labor supply issue as much as changes in the underlying economy and demand for skills. Even as the education premium (the gap in average wages received by those with different levels of education) in the U.S. has grown over the past two decades, due to trade and technological change, the number of low-skilled workers in Southern California has grown substantially. Over 20% of all people in the greater Los Angeles regional workforce currently do not have a high school degree. This is twice the national rate, and the highest rate for any major metropolitan region. Not surprisingly a large majority of these people are ethnically Hispanic and new immigrants. Indeed a full quarter of all Hispanic families in California live in overcrowded conditions, and they account for three quarters of the overcrowded residences in the state.

Of course the state has seen a large increase in the building of new residential units for sale, but the real estate bubble has pushed the price of these units up to unattainable levels for the vast majority of people. In 2004 the median price of a new home was 4.88 times the median household income for the U.S. overall. In Los Angeles the ratio was

9.9, in Alameda County 8.91 and in Contra Costa 7.91. Only in San Bernardino were prices somewhat in line with current income levels, a ratio of 6 to 1. These ratios have only gotten worse in recent years as housing prices continued to grow at double digit rates through 2005 and median income levels barely kept up with inflation. The reason many California families have been able to afford these incredibly inflated prices is that they have been upgrading from their existing homes. By using the equity accumulated in their

Household Income and Median Prices for New Residential Units, 2004 figures

	<i>Median Price New Home</i>	<i>Median Household Income</i>	<i>Ratio</i>
San Mateo	\$699,750	\$68,782	10.17
Ventura	\$657,021	\$65,260	10.07
Orange County	\$640,542	\$64,416	9.94
Los Angeles	\$455,104	\$45,958	9.90
San Francisco	\$581,296	\$60,031	9.68
San Diego	\$477,896	\$51,012	9.37
Alameda	\$528,438	\$59,325	8.91
Santa Clara	\$626,458	\$74,509	8.41
Sonoma	\$509,667	\$62,206	8.19
Contra Costa	\$536,667	\$67,823	7.91
Solano	\$449,167	\$57,334	7.83
Riverside	\$352,438	\$47,772	7.38
San Bernardino	\$282,979	\$47,221	5.99
U.S. Total	\$217,861	\$44,684	4.88
U.S. 1996	\$139,823	\$35,172	3.98

Source: DataQuick, U.S. Census

current residence to purchase a new home they have been able to maintain an affordable monthly mortgage payment. In a very real way this process has helped the current housing situation. Those fortunate enough to have invested in housing at the start of the bubble are moving up, thus opening lower priced units for purchase by those waiting to get into the market: trickle-down housing so to speak.

Unfortunately with price appreciation at an end, this trickle-down system will come to a halt, hence the decline in new permits that we are already seeing in the data. As noted, prices are unlikely to fall, hence California will continue to be saddled with the current very high prices for some time to come. When lack of new appreciation causes owners to stay put in their current residences, demand for new homes is reduced. Overall we expect to see a fairly large drop in the pace of construction over the next two years. Thus the popping of the current real estate bubble will lead, seemingly paradoxically, to a sharp worsening of the housing shortfall in the state.

Why should we care about over-crowded housing conditions in our rental markets? Cynically some might argue that many of these low-skilled immigrants came to Southern California with their eyes open, and understand that even in our expensive housing market they are still better off than where they came from. But there are a number of reasons why this issue needs to be addressed. At the highest level a lack of affordable housing is a basic issue of equity in our society. But beyond this lofty social goal there are very immediate reasons to be concerned. Social scientists have linked over-crowded housing conditions to higher crime rates, reduced academic performance for school age children and adverse health effects, all of which spill over into public expenditures in a state that is already strapped for cash.

Lastly, over-crowding at the lower end of the income distribution drives up the cost of housing at all levels. The lack of available affordable housing may not have created, but it certainly has stretched, the California's housing cost bubble. According to the National Association of Realtors California cities make up five out of the six most expensive markets in the nation. Even the 'affordable' Inland Empire region tallies in at number 12, just about even with Boston. For those at the higher end of the income distribution this may not be a big issue. However for those who make up the administrative backbone of most modern firms and for new workers entering the labor force this can be a very large

problem. This spills over to firms when mid-skill workers move to more affordable places. Indeed a lack of skilled workers is consistently mentioned as one of the most severe problems faced by businesses along the coastal portions of the state.

Similarly rents have also begun to rise sharply as the economy has begun to grow. The average monthly rent of a class B apartment in Los Angeles is now nearly \$1,200, almost 60% of the median worker income in the region -- one of the highest ratios in the nation.

Rents as Share of Income, 2006 Q1

	<i>Monthly Rent^a</i>	<i>As % of Income^b</i>
Los Angeles	\$1,183	58.8%
New York	\$1,197	51.8%
Honolulu	\$1,156	49.7%
Orange County	\$1,172	43.5%
Inland Empire	\$859	42.7%
Boston	\$1,145	42.0%
San Diego	\$983	41.0%
San Francisco	\$1,279	40.7%
Oakland-East Bay	\$1,109	39.0%
Northern NJ	\$1,036	37.4%
Nassau-Suffolk	\$1,092	37.3%
San Jose	\$1,115	36.5%

a: Based on 800sf Class B Apartment, Source National Real Estate Index

b: Based on median personal income in region, Source U.S. Census, BEA

Why do we have such a crisis on our hands? Simply, because building affordable housing and low-end rental units in California is not a profitable venture for developers. There are numerous reasons for this, too many to be fully examined here. One substantial reason, however, is the high fixed costs of constructing residential units in California. Higher fixed costs mean developers necessarily must focus their efforts on higher margin construction jobs that can offset these upfront costs—namely high-end single family homes and condominiums. Some of these fixed costs come from a variety of regulatory sources, such as building quality codes, parking requirements, impact studies, and

permitting fees.

Developers can often offset such fixed costs by increasing the density of development projects—putting more units on a single lot. However here they run afoul of the many density restrictions put in place by local zoning boards. Not only do these density restrictions prevent the construction of affordable housing, but they also drive up the overall cost of land by preventing substantive infill. This further skews low-density development towards higher end units. All in all these costs create a situation where, except under rare circumstances, no affordable housing units are built without some direct subsidy, such as through federal tax credit programs.

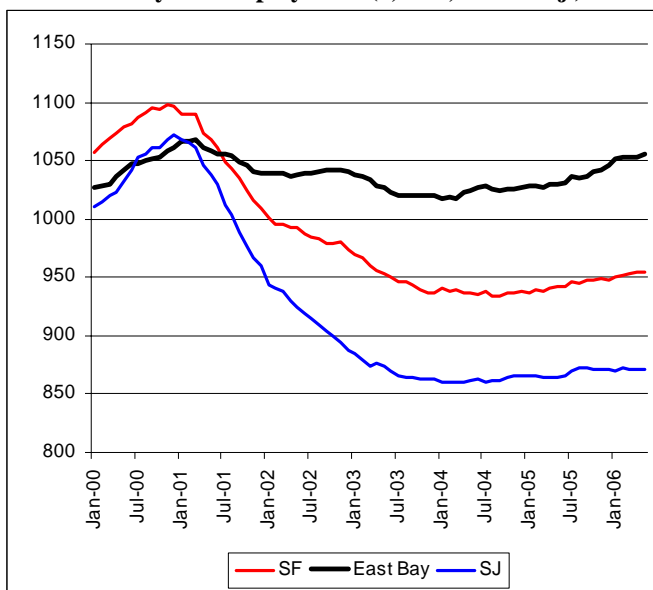
Maybe the most important reason for a lack of affordable housing is the intransigence of local zoning boards towards such projects. Property tax rules, worries about traffic and spill-over effects and a general unease with economic growth causes such boards to immediately resist affordable housing projects, even if the finances of such a project work out. And in a state where these boards have tremendous clout at the local level NIMBY-ism has prevented many of the infill projects needed to address not only the affordable housing crisis but also the many other infrastructure needs of the state. These boards create massive uncertainty in these projects and can delay their construction for years, if they are allowed to go through at all. In the meantime the cost of the project rises as expensive land sits idle.

The solutions proposed to date are simply not sufficient to handle the crisis. The state government has passed a variety of laws designed to give developers methods of using the courts to force local compliance. The problem with these methods are that developers who work within a community for many years are unwilling to use such extreme methods since they are highly likely to cause a breakdown in relations with the board that can affect other projects being lined up. Price controls and inclusionary housing rules create all sorts of secondary effects that in the long run may make the problem worse by making new construction even less profitable. There is no free lunch, and shifting costs from point A to point B does not solve the problem. The state simply can't afford the level of

subsidies necessary to handle the situation from the cost side, and there is not much likelihood of the federal government stepping up to the plate on this count. At best, bond issues can provide minimal relief. And in any case, often such subsidies come with new problems such as prevailing wage rules which drive up costs even further.

What is clear is that some solution needs to be found, and if there is any time to do it, this is it. The construction industry will be taking a heavy hit over the next few years as the market continues to cool, putting many people out of work. The high cost of housing will begin to become a serious drag on the economy's ability to expand over the next five years. And while government programs to date have helped, the level of need at this point is clearly beyond more public programs and subsidies. Quite simply the market is the answer and that means changing the current system to encourage the private market to meet the current housing needs of the state. That means local governments need to step to the plate to make the process profitable again. For sure this is politically difficult. Entrenched local NIMBY special interests will fight hard against efforts at free-market reforms. But the solution to our problems lies in the source: the political and regulatory system that currently governs residential construction in the state.

Non-Farm Payroll Employment (1,000s, Seas. Adj.)



The East Bay Outlook

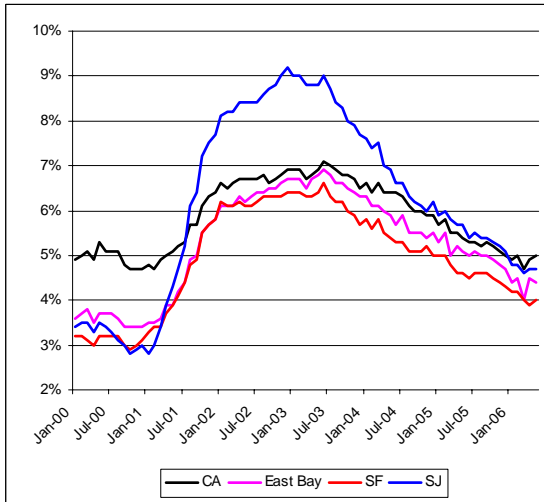
Ryan Ratcliff

Sluggish Bay Area Job Markets

Show Signs of Life

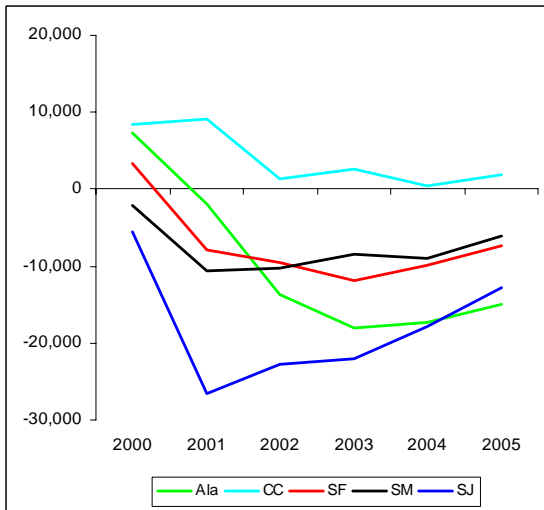
Overall, Bay Area employment is still reeling from the 2001 recession, long after the rest of the state has recovered. Total non-farm payroll employment in the Bay Area's three metropolitan areas (San

Unemployment Rate (Seas. Adj.)



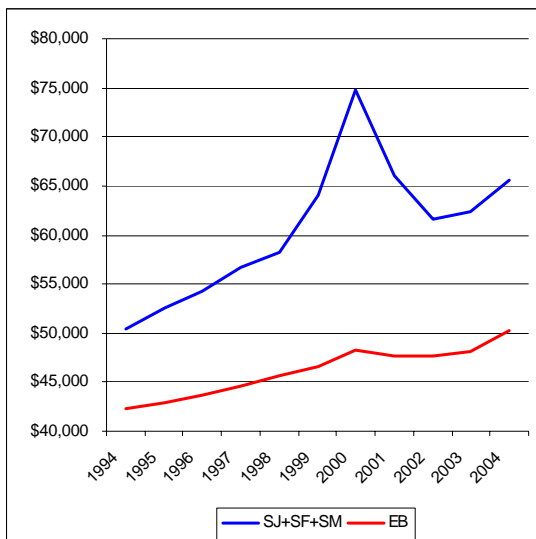
Francisco, San Jose, and the East Bay) is still down 11% from the beginning of 2001. However, 2006 so far has offered a glimmer of hope in the midst of this otherwise dismal picture: year-to-date, the Bay Area is the only region in California to see faster job creation in 2006 than in 2005.

Net Domestic Migration by County



The recent history of Bay Area labor markets differs significantly from previous recessions. In previous downturns, the region has shown a more typical business cycle: a shock to the economy leading to a contraction in labor demand, creating a period of slow job growth and higher unemployment. As the recovery began, demand for workers recovered, with unemployment falling and total employment recovering to the pre-recession level.

Real Wage/Salary Disbursements per Worker (2000 \$)

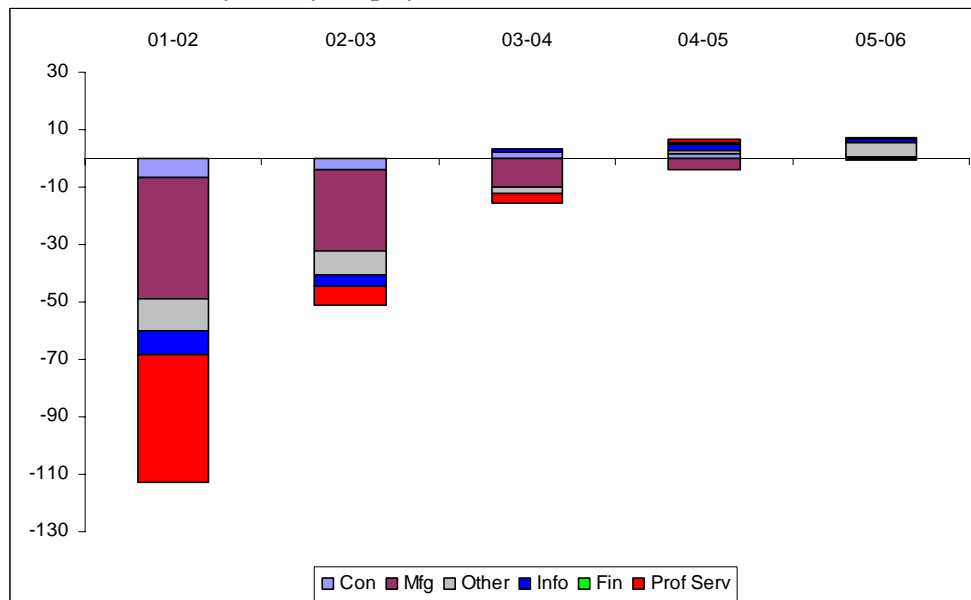


In contrast, the 2001 recession and its aftermath look more like a fundamental reorganization of the regional economy. Labor demand has remained at this new lower level, and unemployment has been brought down with a combination of workers

leaving the regional labor force (either moving away, returning to school, or choosing not to work) and an unusual decline in average wages through 2002-3. Although unemployment is currently running at about the same level as California, this is still high for the Bay Area, where unemployment is historically well below the California average thanks to the region's above average concentration of highly educated workers.

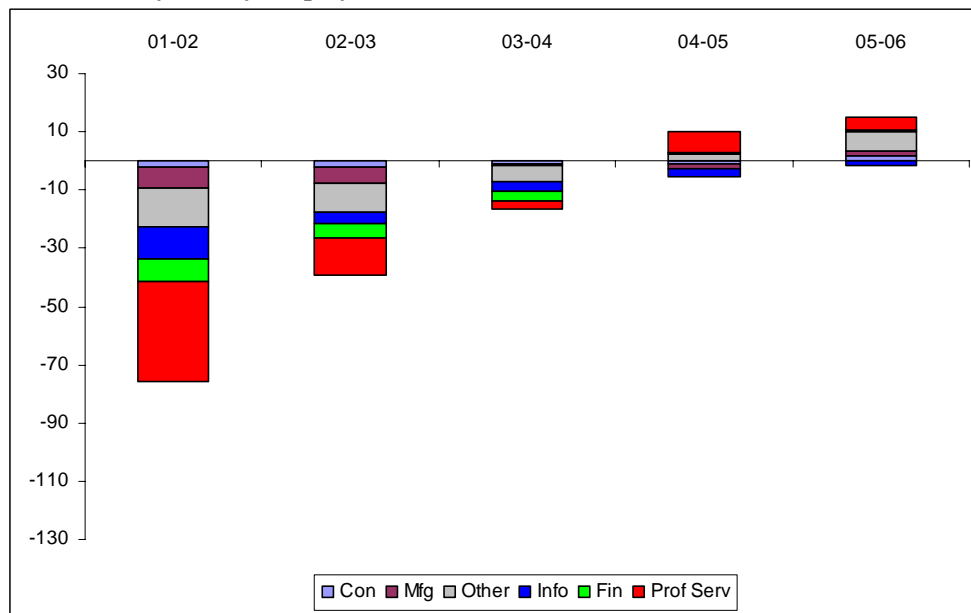
While recent job growth has accelerated in each of the three metro areas, the specifics have been quite different. The San Jose area was the hardest hit of the three in the recession, as substantial losses in computer-related Manufacturing and internet-related jobs in Professional Services snowballed into the loss of over 175,000 jobs from 2001-03. From May 2003 to May 2006, San Jose has added only a net 9,700 payroll jobs. Most of these new jobs represented a recovery in locally-oriented service employment: retail trade, health and education, etc. -- technology-related employment has yet to recover. There have been some positive developments in software employment as San Jose has recovered approximately one-third of the 12,300 Information jobs lost in the recession; however, these small gains have been unable to offset continuing stagnation in the high-tech Manufacturing and computer-related Professional Services employment that have been the foundations of Silicon Valley's success.

San Jose Metro May to May Employment Growth in Selected Industries



The San Francisco metro area (San Francisco, San Mateo, and Marin Counties) has had a more middle-of-the-road experience. In contrast to San Jose, it has been able to recover a significant fraction of the technology jobs lost in the recession. While San Jose faced the double whammy of losses in high-tech manufacturing and losses in the software/knowledge sectors of Information and Professional Services, San Francisco's losses were concentrated in the latter sectors. Since 2003, the San Francisco metro area has recovered 22% of the Professional Services jobs lost in the recession, but continues to

SF Metro May to May Employment Growth in Selected Industries

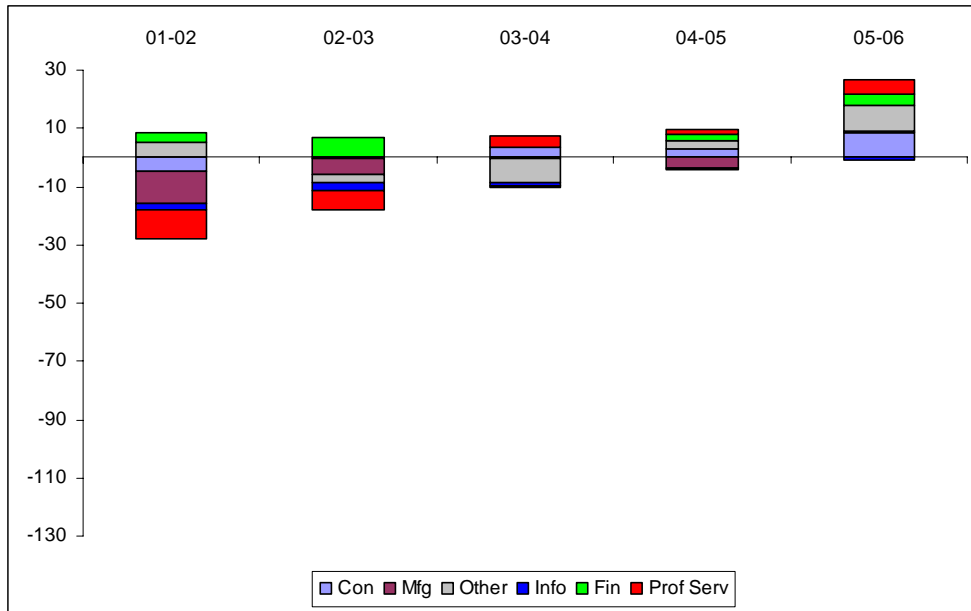


lose Information employment even in 2006 (although, the bulk of these lost jobs have recently come from non-internet publishing like magazines and newspapers). Somewhat surprisingly, San Francisco has been one of the few metro areas in California to see increasing manufacturing employment in 2006, thanks largely to steady increases in biotech-driven Chemical Manufacturing.

The bright spot in the Bay Area has certainly been the East Bay. Alameda County did experience a miniature version of the San Jose double whammy, losing about 20,000 jobs in computer-related Manufacturing and Professional Services. However, the combined

jobs losses from 2001-03 in Alameda and Contra Costa Counties amounted to only 5% of total employment, compared to 15% for San Francisco and 20% for San Jose. So while the recovery in the rest of the Bay Area has been rather unique due to the severity and persistence of the downturn, the East Bay's relatively mild experience meant that it has followed larger California trends. More specifically, inland areas of Alameda and Contra

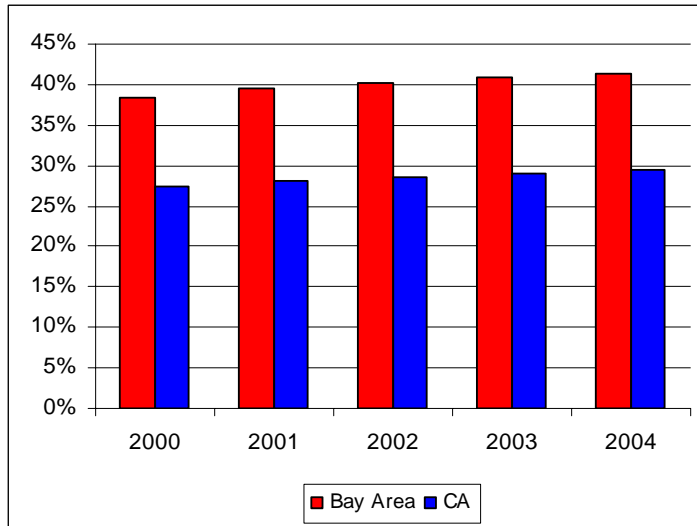
East Bay May to May Employment Growth in Selected Industries



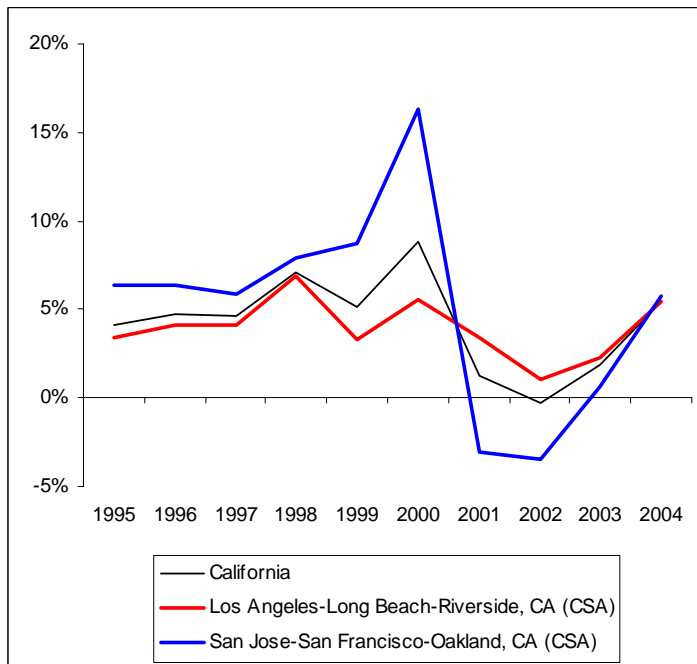
Costa counties have seen a significant increase in construction activity. Like many other regions of California, this building boom has been a major source of growth for otherwise tepid economies. Growth in Construction employment has accounted for one-third of total non-farm payroll growth in the East Bay from May 2005 to May 2006, with growth in real-estate related Finance employment contributing another 5-7% of total payroll growth. Outside of real estate related job gains, the big gains in externally-oriented job growth have come in Professional Services. While the reliance on real estate to generate job growth does make the East Bay vulnerable to a deepening real estate slowdown, the East Bay is on track to reach its pre-2001 employment peak sometime in late 2006.

Per Capita Incomes Still High, Sales Growth Accelerating

Population 25 and older with a Bachelor's Degree



Annual Growth in Nominal Per Capita Income



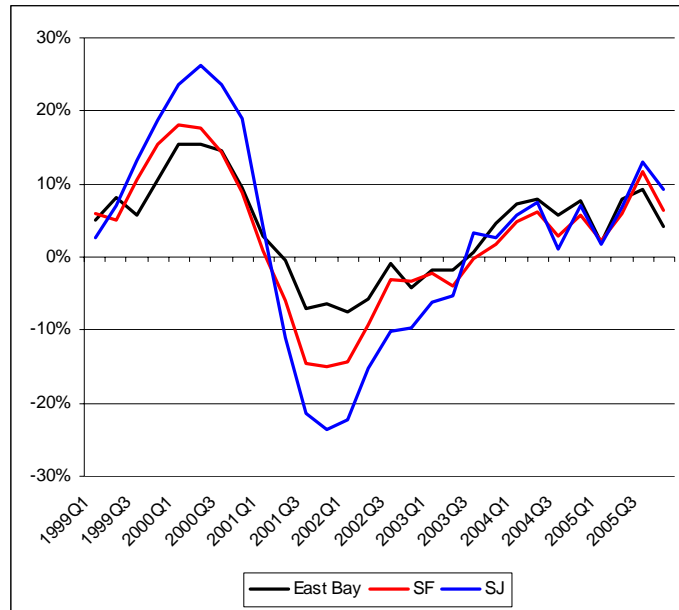
While the recent Bay Area labor market history has been dismal, recent developments in per capita income have been more of a “good news, bad news” story. The good news is that even with the emigration seen in the wake of the recession, the share of the Bay Area’s population with at least a bachelor’s degree has actually risen since 2000. And it is still substantially higher than the state as a whole. Not surprisingly, the Bay Area per capita income of \$47,000 is still the highest in California. However, the continued drag on wage growth from the weak regional labor market has kept income growth weak in recent years. The most recent

data available for 2004 shows Bay Area income growth picking up steam, and the acceleration of job growth in 2005-06 suggests this trend has continued.

Taxable sales growth also points to a strengthening economy throughout the Bay Area. Preliminary estimates of year-over-year taxable sales growth in 2005 averaged a healthy 6-7% across the region, corresponding to the recovery of retail employment in the region. Sales growth on the peninsula outpaced the East Bay, reflecting a recovery of spending power in San Jose and San Francisco. The slowdown in taxable sales growth in 2005Q4 looks a bit ominous, but

there are two reasons to take this with a grain of salt. First, only the Q1 number is final: the preliminary estimates for taxable sales are notoriously volatile, with extremes in both directions generally being revised back to a more consistent average. But more fundamental than that, this slowdown in taxable sales growth likely reflects the

Year-Over-Year Growth in Taxable Sales

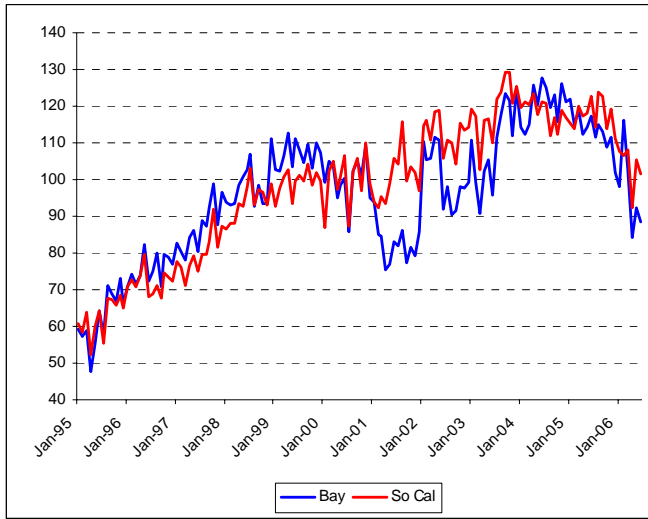


same weakness shown in 2005Q4 real GDP growth (1.6%) – a weakness that was more than wiped out by the strong 5.6% GDP growth in 2006Q1.

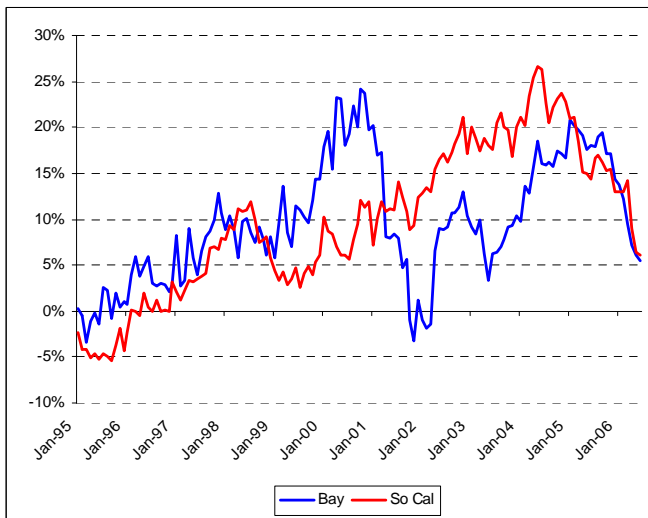
Bay Area Real Estate: A Post-Bust Mini-Boom

While the rest of California’s housing markets barely paused during the recession of 2001, the severity of the local downturn meant that Bay Area housing took a more substantial tumble. Sales fell by almost 25% in the first half of 2001, and median sales prices dropped in the first half of 2002. The Bay Area was the only region to see median home prices fall in California, reinforcing the historical evidence that nominal home prices only tend to fall in severe local recessions. Given this unique mini-crash, the housing boom in the Bay Area has been markedly different than the rest of California.

Total Home Sales Index (Seas. Adj., 2000=100)



Year-Over-Year Growth in Median Price

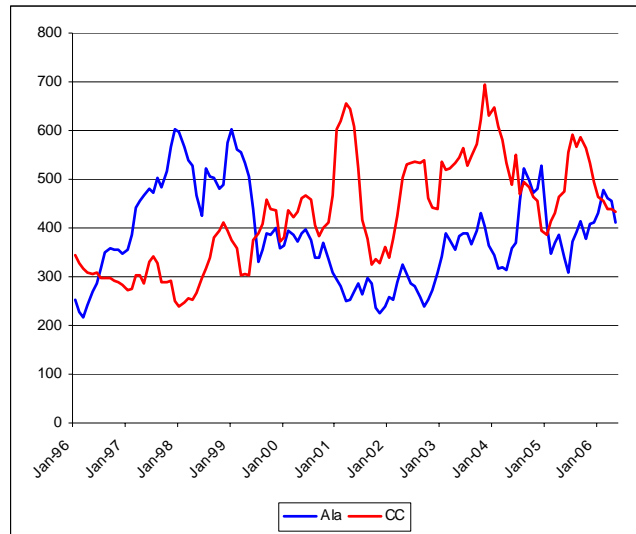


Extremely low interest rates caused the same surge in sales volumes seen in other regions, but price appreciation remained relatively muted compared to white-hot Southern California markets. The more moderate pace of price appreciation likely came from two sources: the explosion of appreciation immediately before the recession coupled to the overall weakness of the economy in its aftermath. Of course, median home prices in the Bay Area remain among the highest in California, and this moderate price appreciation paired with weak income growth has squeezed affordability in the region.

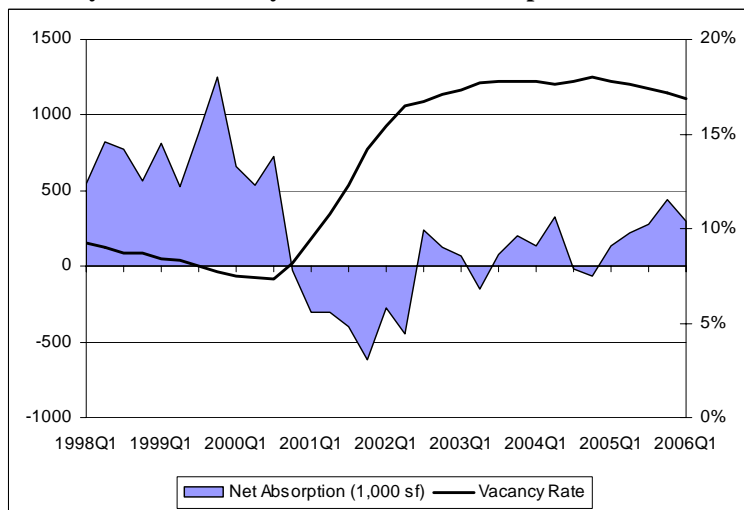
Since it was a little late getting started, it's no surprise that the Bay Area housing market hit its peak a little later than the rest of the state. While sales activity hit a peak in late 2003 in Southern California, sales did not peak in the Bay Area until the summer of 2004. Similarly, Bay Area price growth was still accelerating even through the beginning of 2005, six months after appreciation had slowed in Southern California. But while the timing was different, the end results have been the same in both markets in 2006: sales volumes are off 20-30% from their peaks. Both the Office of Federal Housing Enterprise Oversight's (OFHEO) quality adjusted Home Price Index and DataQuick's median sales price data show home price appreciation has dropped into single digits across the state.

The East Bay counties have largely followed these broad Bay Area trends, with one notable addition: both Alameda and Contra Costa counties have seen a significant increase in building activity. Interestingly, the timing of the building booms was different in each county. Permits for construction of single family homes in Contra Costa County

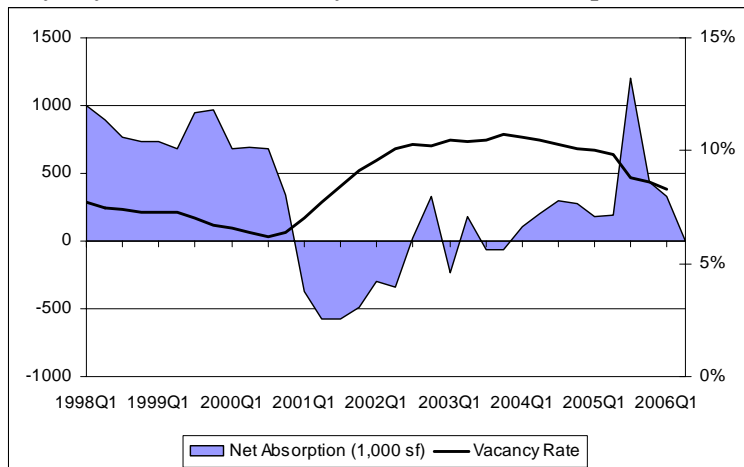
**Residential Building Permits
(Seas. Adj., 6-mo. Moving Average)**



East Bay Office Vacancy Rates and Net Absorption



East Bay Warehouse Vacancy Rates and Net Absorption

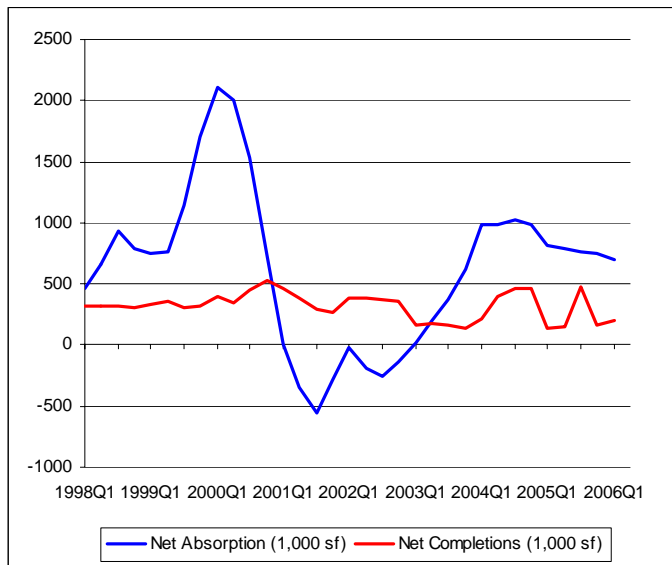


increased dramatically in 2003, and even though permit activity has fallen a bit since, it still remains near historic highs. In contrast, Alameda County saw a building boom at the end of 1990s, followed by a predictable slump after the 2001 recession. However, permit activity has been rising steadily since 2003. Like many other regions in California, the combined effect of these two building booms has made real estate a significant contributor to the recent acceleration of employment growth in the East Bay. Unfortunately,

this also means that the East Bay's recent success may also be vulnerable as slowing real estate markets act to stifle this building boom.

Commercial real estate markets in the East Bay are for the most part still suffering from

East Bay Retail Net Absorption and Net Completions



the lingering effects of the 2001 recession. Strong demand for office and warehouse space in the late 1990's kept the building pipeline full even as demand dried up in the recession, leading to a spike in vacancy rates. Office absorption has increased somewhat in response to the recent increase in Professional Services employment, but

vacancy rates still remain high by historical standards. Surprisingly, warehouse vacancies are falling even though Wholesale Trade and Transportation/ Warehousing employment have not had any significant growth since the recession. Some reports indicate that the source of this new demand is from home improvement and furnishing retailers – another positive side effect of the building boom. In contrast to these stories of overhang, the steady rebound of retail employment has caused absorption to outpace completions in retail space since the middle of 2003.

Looking Ahead: Real Estate Slowdown + Continued Recovery = Moderate Growth

The main short run economic question for California is how the real estate slowdown will play out: will we see a “soft landing” with lower sales volumes and stable prices, or will we see a repeat of the 1990's, with a collapse in sales and a 10% decrease in average home prices? The answer depends on the overall economy: average nominal home prices

historically have only fallen in the wake of severe local recessions – like the Bay Area experience in 2001. It seems highly unlikely that the Bay Area will experience another downturn of this magnitude in the coming years. Thus, the most likely scenario for average home prices in a cooling Bay Area market is flat but not falling: up one month, down one month, but not consistently lower.

As housing markets continue to cool, construction activity slackens and the real estate finance craze abates, growth through most of California should also slow. This is some cause for concern in the East Bay economy, as a significant portion of the 2005-06 growth spurt has come from the construction boom. However, the recoveries in San Jose and San Francisco should be insulated from the direct effects of the real estate slowdown, since construction and finance have played only minor roles in recent job growth there. Put it all together: spillover effects from improvements in the peninsula's economy should offset some of the real estate drag in the East Bay. While there is some downside risk, the outlook for the East Bay is some slowing, but no radical departure from current trends.

The longer term prospects for the Bay Area are less clear. If the internet boom was a 20th Century Gold Rush, is Silicon Valley destined to be a 21st Century ghost town? The seemingly permanent contraction of employment and continuing emigration could certainly be interpreted as the first step in this direction. However, the current slump has two sides: the collapse of high-tech manufacturing, and the collapse of the knowledge industries that complement this technology: software, business process / systems integration consulting, etc. The recent recovery in Professional Services and Information suggests that the Bay Area's cluster of experienced workers in the knowledge side of the business still have a comparative advantage. In contrast, the continuing slump in manufacturing suggests that large scale production of these high-tech goods has moved to lower cost locations elsewhere in the U.S. or overseas. While there are some uncertainties surrounding the structural transformation still underway in the regional economy, the Bay Area's winning combination of high quality of life, a highly educated workforce, and a continuing ability to nurture innovation suggest a solid foundation for future success.