



## **Overview and Outlook: Recovery continues, but storm clouds forming on the horizon**

The recovery in the East Bay and Bay Region overall continued into the second quarter of 2005 as business activity continued to pick up speed. Vacancy rates are falling, the airports are busy, taxable sales growth is strong and exports are on the rise yet again. While payroll employment in the region continues to be anemic, household employment has been growing strongly. As a result, the gap between these measures of job growth that formed in the heady days of the late nineties has finally closed, and it seems likely that the region will begin to see better results on the job side of the equation over the next year. None of these numbers are spectacular—but then considering the depth of the downturn it still speaks highly of the quality of the local labor force and strong underlying business fundamentals in the area.

With all this good news, it would seem difficult to find anything to worry about, but unfortunately there is a big problem brewing out there that is unlikely to go away quietly: the massive run-up in real estate prices across the state. Housing prices have continued to grow at a truly spectacular rate across the state and again in the Bay Area. Rampant speculation continues to fuel the fire as investors have seemingly already forgotten the lessons learned so hard in the last major asset bubble that ended not even five years ago. While there are those who try to rationalize the rapid increase in prices, we see no justification for these increases—the fundamentals that drive the price of a housing asset have been pointing to a cool market, not a hot one. Rental growth remains weak, mortgage rates have been rising slowly, and contrary to common belief the pace of home building in the area is completely in line with the growth of the workforce—the so-called housing shortage does not exist. Yes, inventory levels are low but this is due to frantic behavior of buyers.

To say that the UCLA Forecast's view of the housing market is a bit controversial is a bit of an understatement. Many have taken issue with our assessment of the current state of the market, and claim there is little risk of housing prices falling. Yet this completely misstates our research. It is very unusual for a housing bubble to result in rapidly falling prices, and we have never made such a forecast. When a housing bubble cools you get a large drop in market activity and slowly declining prices, if they decline (in nominal terms) at all. Regardless, a cooling market will cause big problems for the economy. Construction jobs will go away, as the demand for new housing and home improvements decline. All those real estate and finance jobs that have profited from the rapid turnover in the markets will also find themselves pressed. And most importantly it must be remembered that the California home-owning consumer has been primarily responsible for the economic growth seen in many parts of the state. Despite slow job and income growth they have been spending away because they feel flush with new wealth. When prices stop growing, this feeling of wealth will begin to dissipate, and consumer spending will decline.

There are some preliminary data that show what may be the beginning of the cooling of the market. But a major slowdown is at least a year away, if not more. Expect the recovery to continue well into 2006 and job growth in the East Bay to pick up speed during these 12 months. The end of 2006 or early 2007 will be the beginning of trouble, however. And this time the East Bay is unlikely to escape the problems it had last time. Look for this slowdown to have at least as significant an impact on the local economy as the 2001 downturn did.

The State and National Economy:

## **The Real Worry *Remains* Real Estate**

The UCLA Anderson Forecast has been warning of the potential consequences of the distended real estate markets here in California and across the US for over two years now. Our last forecast conference at UCLA focused on the topic. Our work presented at the conference generated a fair amount of controversy within the industry, and many have largely mischaracterized our primary points and our predictions. Therefore this EDAB quarterly will focus on carefully explaining our point of view on the issue and debunking many of the rationalizations people are using to justify the current trends in the housing market.

The following section is an excerpt of a report written by the director of the UCLA Anderson Forecast explaining why we worry about housing at the national level, and why housing will likely lead the next economic downturn. When reading this section pay careful attention to the fact that not once are housing prices mentioned. Our worries about this sector have little or nothing to do with the path of housing prices once the market cools. This bubble need not ‘pop’ in order to cause problems for the nation. The following sections look more closely at what has been happening around the East Bay and explain what real estate may mean specifically for California and the East Bay.

## **Housing in the US Business Cycle**

*Authored by Edward Leamer, Director of the UCLA Anderson Forecast*

Based on data through March 2005, there is virtually a zero chance of having a recession start officially before April 2006. That’s the good news. The bad news is that we have real problems in the housing sector that will cause the economy a great deal of stress soon enough. We watch the housing market closely because:

1. The drop in spending on homes has been a major part of nine of ten downturns since WWII. Indeed, of all the components of GDP, only one is a leading indicator. That’s residential investment.

2. The temporal ordering of the downturns eight times out of ten has been: first homes, then consumer durables, both declining before the recession, then business equipment when the recession officially arrived, and business structures last.
3. Of the 10 components of the Conference Board Index of Leading Indicators, the second best predictor an oncoming recession is building permits.

The next recession is highly likely to get started in the housing market, which has been made very fragile by very high levels of appreciation in some markets and by high levels of residential investment nationwide. But don't worry now. Although the Conference Board Index of Leading Indicator is signaling some problems with the economy, my analysis that uses the components of the leading indicators to identify the year-before-recessions is suggesting the probability remains essentially zero that a recession will begin before April 2006.

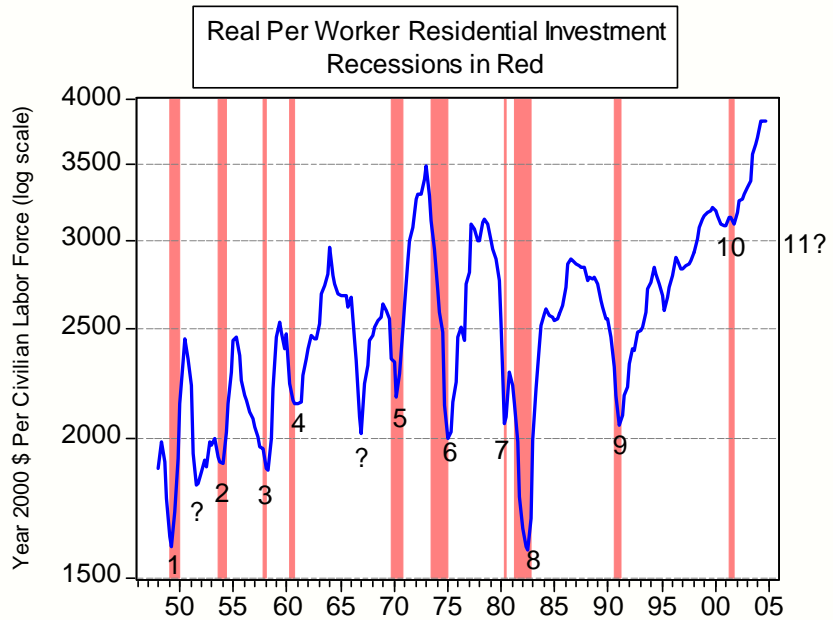
### *Real Estate Ups and Downs*

There is no better way to illustrate the cycle in real estate and the current problems in that sector than the residential investment per worker displayed in the following figure with the ten recessions shaded and numbered. This use of the term 'residential investment' has nothing to do with the appreciation of existing homes. This component of GDP is about production and jobs - building new homes and remodeling existing ones. Residential investment does include an estimate of broker's sales commissions, which in 2003 was \$80 billion out of a total of \$572.3 billion in residential investment. Those are jobs too.

This picture reveals that real residential investment spending per worker has varied from a low in the depths of recessions of around \$2000 per worker to a high around \$3000 during the housing booms in the expansions. The numbers move up and down, closely associated with the official expansions and recessions. Usually, the down periods have closely preceded the official recessions.

But the housing sector plowed through the 2001 recession (number 10) mostly unscathed, and now, in 2005, each quarter, we are setting new records for home spending, which is pushing up toward \$4,000 per worker. If spending returns to what is a high level per historical standards, say \$3,000 per worker, that translates into a reduction in residential investment around \$150 billion, 1.4% of GDP, which is about the same amount of decline in business spending on equipment and software that

precipitated the 2001 downturn. If we go down to the recession low of \$2,000 per worker, that will be a heck of a hit to US GDP. Can you see recession #11 in this figure? I can.



This figure has a little ray of hope indicated by the two questions marks – points in time when a collapse in home spending did not lead into a recession. But in both those cases, the US economy was saved by a major ramp-up in spending by the Department of Defense – the Korean War and the Vietnam War. So be very careful what you ask for.

It thus seems highly unlikely that the US will be able to avoid an 11<sup>th</sup> recession in which housing plays a major role. We just don't know when it will occur. But later is not necessarily better. Each month that goes by with higher and higher levels of spending on homes, and higher and higher prices of existing homes, we are building a larger and larger mountain of adjustment-to-come.

*Temporal Orderings of GDP: It's a Consumer Cycle, not a Business Cycle*

GDP is of course the sum total of all economic output of a nation. The GDP accounts are typically divided into categories on the basis of who is doing the purchasing, such as consumer durables (private folks buying products with a life of more than 3 years), investments in structures (business spending on new buildings or renovations of existing structures) or the export of goods (consumption of US goods by other nations). Each of these sources of demand contributes to the overall growth of a nation's economy.

The largest contributor to "normal" growth (not including recessions, recoveries or spurts) is consumer services. They contribute 1.2 percentage points to the total normal annual growth pace of 3.3%. Next comes consumer non-durables (.6 percentage points), then equipment and software (.5 points), state and local government spending (.4 points) and then consumer durables (.3 points). For normal growth periods defense spending is rather unimportant, as is federal non-defense, homes, net exports and inventories.

Now consider instead the contributions of these components to growth during the first nine US recessions since WWII, or rather the lack of growth. Recessions are dramatically different from normal growth periods in that the sources of economic weakness are different from the sources

of economic strength during normal growth as listed above. Large business inventories are a big contributor to recessions, while business inventories contribute virtually nothing to normal growth. Falling home investment is a big negative during recessions, but rising home investment does little for normal growth. The comparison of the recession with normal growth tells us very clearly how a recession is different from normal. On the negative side, the biggest problem is inventory. Next comes homes, then consumer durables (cars and washing machines) and then business equipment. Those are important clues. Put it in your head, *inventories, homes, cars and equipment*.

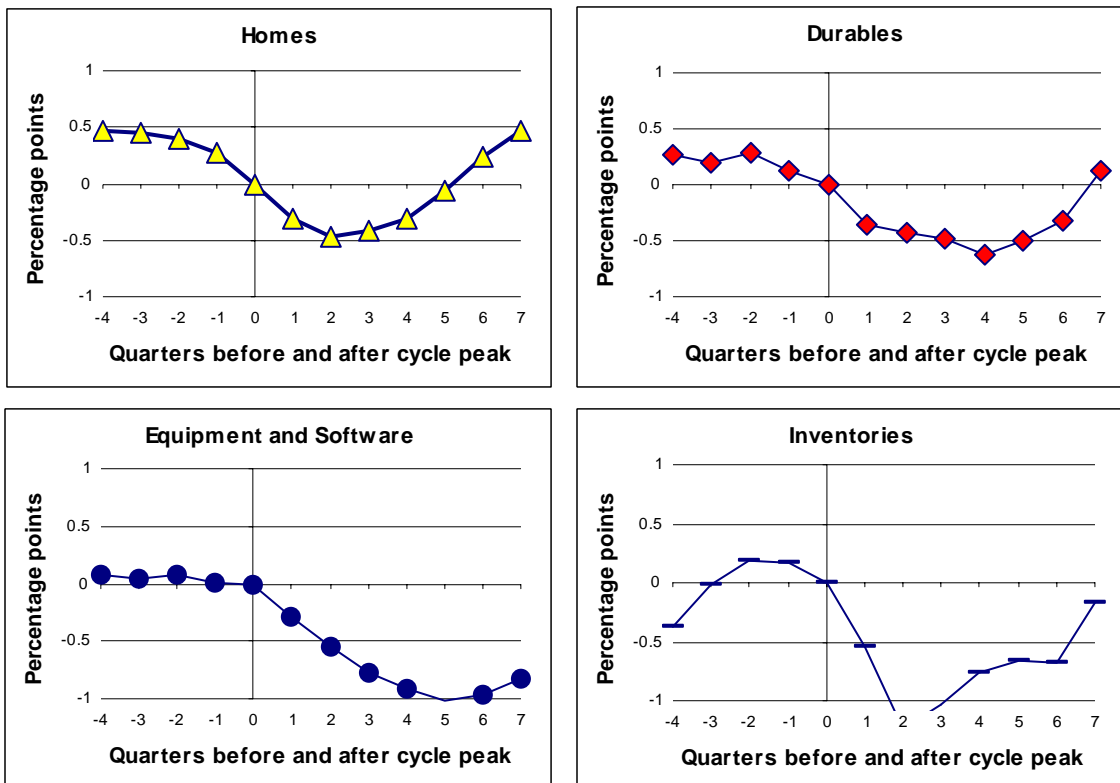
But weaknesses in GDP during recessions are only clues. The next step is to look at temporal orderings: do these weaknesses show up prior to the recession? The cumulative abnormal contributions of these factors to GDP during recessions are illustrated in the figure below. The horizontal scale is the number of quarters before and after the official peak of a business cycle as determined by the National Bureau of Economic Research. Period 0 is the peak and period 1 is the first quarter of the recession. The data are set to zero at each of the 10 cycle peaks and then averaged across all ten downturns. The vertical scale accordingly indicates the cumulative effect of the item on GDP compared with the cycle peak period. In looking at this figure, keep in mind that *flat means normal!* If the contribution to GDP growth were always normal then the data would form a horizontal line. When the contribution is less than normal, the line dips down. When it is greater than normal, the line moves up.

There are big differences in the timing and the amplitude of each of these investment cycles. The peak for homes occurs three quarters before the GDP peak, and the decline in spending on homes reduces GDP by about 0.45% before the recession officially begins. In the first two quarters of

the recession, declines in spending on homes reduces GDP by another 0.46%, but strong growth thereafter has home spending exceeding the previous peak in the 6<sup>th</sup> quarter of the recession.

Contrast homes with the pattern of spending on equipment and software. There is just a tiny bit of weakness prior to the onset of the recession- the line is virtually flat. Spending on equipment and software gets very soft immediately at the onset of the recession, and doesn't return to normal again until the 6<sup>th</sup> quarter of the recession. The cumulative impact of weakness in spending on equipment and software is to knock a full percentage point off of GDP. So who moves first: businesses or consumers? It's consumers. *It's a consumer cycle, not a business cycle!!* Businesses are the passenger, not the driver.

### Contributions to Growth by Sector



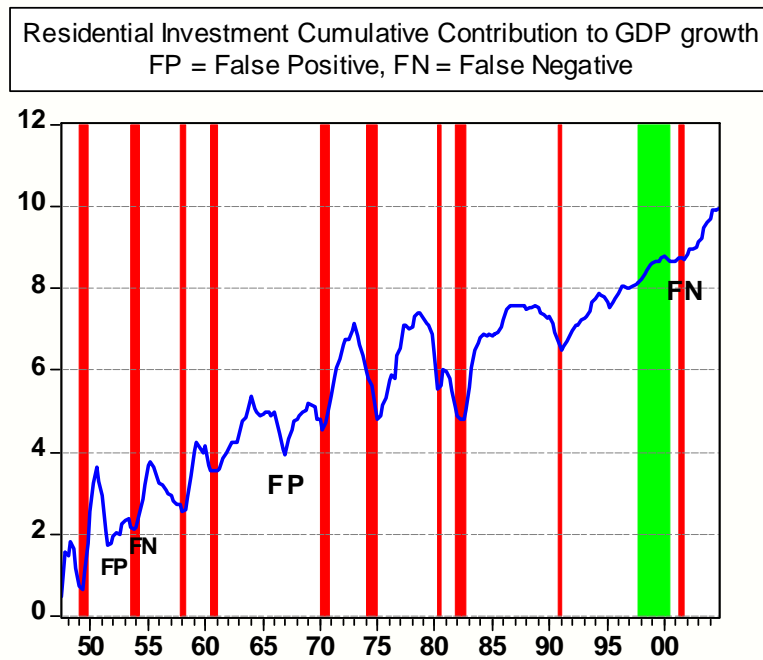
What about the durables and structures? They tell a similar story. Spending on consumer durables softens considerably one quarter before the GDP peak. The total reduction in GDP is about the same for residences and for consumer durables, but the cycle in residences is one to two quarters ahead of the cycle in consumer durables. The cycle in equipment is also about the same in amplitude (a little over 1.0) but it is about one quarter later than the durable cycle.

The cycle in business spending on structures (not included) has the smallest amplitude and is the most delayed of these four, not returning to normal until the 6<sup>th</sup> and 7<sup>th</sup> quarters of the recession. As far as the overall recession is concerned, we can pretty much forget non-residential structures.

*Real Estate As a Predictor of Recessions Has only Two False Positives*

The following graph displays the cumulative contribution of residential spending to GDP growth with the recessions highlighted in red. You can see in this figure that

declines in spending on homes preceded eight of the 10 recessions since WWII. There were two false negatives – recessions that were not preceded by significant declines in residential investment. The 1953 recession was caused by a sharp turnaround



in spending for the Korean War after the armistice was signed in June 1953, and the 2001 Internet Comeuppance was caused by the collapse of business investment after disappointing profits from their web investments.

There are only two false positives – dips in housing that did not presage a recession. Housing was very weak late in 1950 and early in 1951, and housing was weak also in 1966. So why didn't problems in housing at those points in time precipitate a recession? It was war spending in both cases. That's what saved us both times. Thus when we start having troubles in housing again, we'd better hope for a war as big as Vietnam. On second thought, we'd be better off with the recession.

You might note that in the aftermath of the recession of 2001, thanks to the extraordinarily low interest rates, the residential contribution to GDP has generally exceeded 0.5%, accurately predicting the strong GDP numbers during the period. In summary, although spending on residences makes a rather unimportant contribution to *normal* growth, it is spending on residences that is the most important of the GDP components for predicting the highs and lows: the recessions and the recoveries. So say it again: homes, cars, equipment and offices. That's the order of the downturn. That's the order of the recovery. Homes, cars, equipment, offices. And if you are interested in GDP prediction, just say HOMES.

## California and the Bay Area

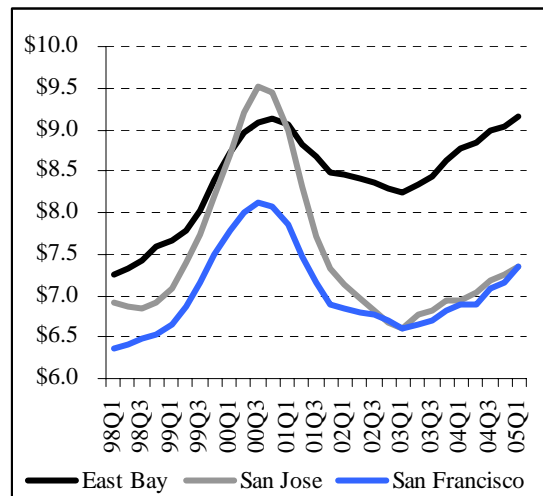
*The recovery continues... for now*

Optimism has returned to the California economic landscape. The newspapers are no longer filled with stories about the bad business climate that was causing businesses to ‘flee’ the state in record numbers, or the inexorable hollowing of the state’s manufacturing sector due to outsourcing and the accompanying tales of tech-company failures. Indeed it was likely to have been a surprise to many of the doom-sayers when California had a higher payroll job growth than the US overall and our unemployment rate has been falling at a faster pace. The state added 1.7% to its payroll workforce over the past year, compared to 1.6% for the balance of the US. On the Current Population Survey side the relative gains are even more surprising. California has added a full 2.5% to its household employment workforce, as compared to the balance of the US that added only 1.7%.

Indeed our retail stores seem to be packed. Preliminary estimates for the state show taxable sales growing something on the order of 8% to 10% in the 4<sup>th</sup> quarter of 2004 (year over year) and 4% to 6% for the 1<sup>st</sup> quarter of this year.

Even the economically hard hit Bay Area saw some very solid numbers over that period. Alameda and Contra Costa both saw taxable sales growth rates of greater than 7%, while Santa Clara saw an increase of almost 9%. The pace of growth slowed somewhat in the first quarter of this year, but all in all this is a substantial improvement over the past few years. Local governments have been experiencing revenue exceeding forecasts due to increased transfer and property tax receipts, and the state government is arguing over what to do with the \$3 billion plus surplus they are seeing.

**Taxable Sales by MSA: Bay Region**  
*Seasonally Adjusted, smoothed*



**Taxable Sales Growth by County**  
*Preliminary estimates, year-over-year growth rates*

	Q4 04	Q1 05
Alameda	7.4%	1.4%
Contra Costa	7.9%	3.5%
Marin	5.3%	1.0%
Sacramento	11.9%	3.7%
San Francisco	5.7%	6.4%
San Mateo	15.7%	2.7%
Santa Clara	8.9%	3.9%

## California International Exports

Source: MISER Data

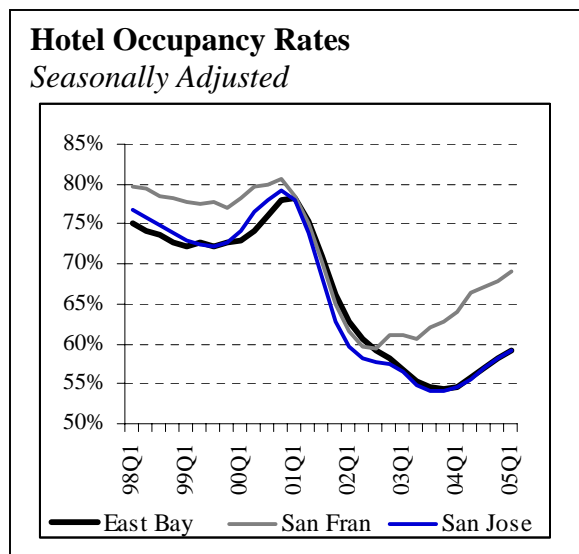
	2004	Gr.	Q1 05	Gr.
<b>Total</b>	109,968	17.0%	28,304	4.6%
Computers and Electronics	42,247	15.1%	10,252	-1.0%
Transport Equipment	11,759	36.0%	3,485	-1.5%
Machinery	12,593	33.5%	3,250	9.5%
Chemicals	6,644	11.4%	1,716	8.1%
Misc. Manufactures	5,641	15.5%	1,480	16.7%
Agricultural Products	5,204	8.8%	1,364	12.3%
Food Products	4,159	-0.2%	1,120	15.5%
Electrical Equipment	3,440	17.2%	860	11.5%
Fabricated Metals Products	2,590	12.7%	639	-2.1%

Our external economy has also seen some solid expansion over the past year or so. International exports out of the state grew sharply in 2004 and the preliminary numbers from the first quarter of this year show similar strength.

Computers and electronics remain the number one export from California, tallying in at nearly 40% of total exports by value. These grew by 15% in 2004 over 2003. While export growth was slower in this area for the first quarter of 2005, overall exports still rose by 4.6% year over year driven by growth in other categories.

Our infrastructure is certainly feeling the stress. The airports are humming with both domestic and international travelers and the ports are crowded with products both coming and going. Oakland's airport has seen traffic increase by another 3% over last year, as it continues its expansion as an important regional hub, particularly for Southwest. It now carries 40% more traffic than it did in 2000. SFO is experiencing a slower increase in domestic traffic (2.3%) than Oakland but has seen international traffic increase by over 7% relative to this time last year, as tourists taking advantage of a cheaper US dollar are returning to California.

Hotel occupancy rates are showing the gains. San Francisco has seen occupancy rates climb back to nearly 70% from a low of 60%, while San Jose and the East Bay have seen their rates rise to 60% from below 55%. These numbers are nowhere near the heady days of the late nineties tech rush, but must still be a welcome relief to the hospitality industry.



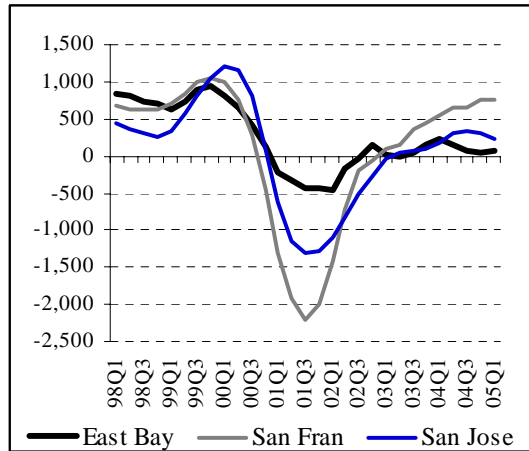
To the detriment of the California commuter, the highways are yet again packed with people.

Indeed while many think of highway traffic as a barrier to growth, it is also a good short-run indicator of how well the economy is doing. If you are wondering about the Bay economy, a

good measure is how long it takes you to get across the Bay Bridge at 5:30 PM. The longer it takes, the better things are.

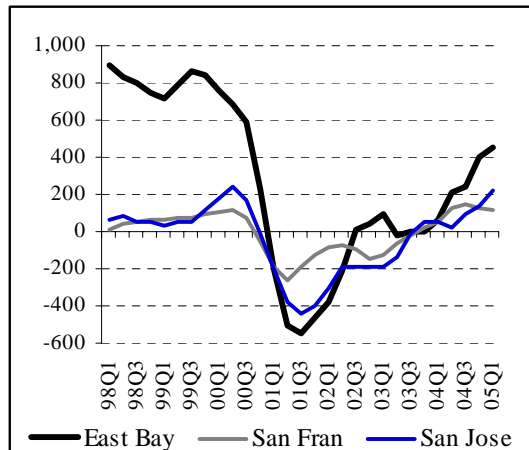
**Office Net Absorption (000's sf)**

*Seasonally Adjusted, Smoothed*



**Warehouse Net Absorption (000's sf)**

*Seasonally Adjusted, Smoothed*



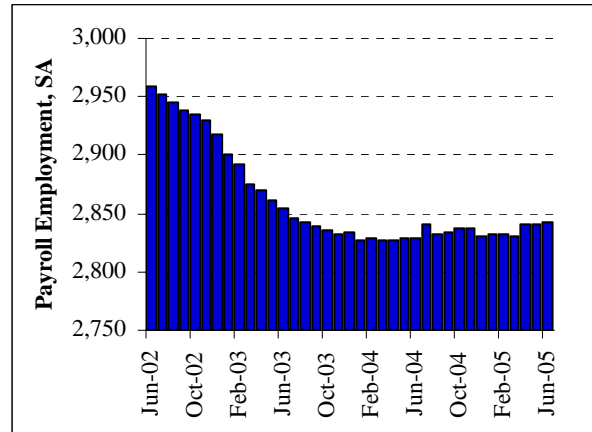
Source: PPR

The commercial sector is also showing some signs of strength. Office net absorption (the change in the amount of rented space within a region) has hit 775,000 square feet per quarter in San Francisco, the largest office market in the region. San Jose has seen about 1.2 million square feet of space taken up over the past year as well. The East Bay has not seen very much absorption recently, but due to the less painful loss of jobs during the downturn still has an overall lower vacancy rate. The East Bay, however, has seen a strong surge in new demand for industrial space recently, with 1.3 million square feet of new rentals over the past year. San Francisco and San Jose added about 1 million between the two economies. Still, vacancy rates remain at very high levels all-in-all, so it will take a while for this new demand to translate to higher rents or an accelerated pace of building.

Employment growth for the state also continues to accelerate, albeit at a fairly modest pace. The state added 240,000 payroll jobs between Q2 2004 and Q2 2005, a 1.6% growth rate. One reason for this relatively slow growth, of course, is that the Bay region is still in the beginning stages of its recovery. During this same period the Bay Area added about .5% to its overall payroll workforce.

The East Bay and San Francisco both added about 8,000 jobs, a growth rate of about .8%, while San Jose’s employment base has basically stayed flat. San Jose has seen some solid growth over the last three months, but in an unstable environment these short-term results must be viewed with some skepticism. Do not expect San Jose’s trend to continue at the same pace.

**Bay Area Payroll Employment**  
*Seasonally Adjusted / Smoothed*



It would initially seem that these numbers are quite discouraging. But remember that economies take time to heal from large shocks, and the tech boom-bust represented one of the largest local shocks seen in the US. As has been noted in past reports, the region has been recovering at a relatively fast pace given the loss of payroll jobs in the region at the outset of the 2001 recession. The region lost over 12% of its total payroll workforce during this period. Few other areas have seen such losses, and have recorded any positive growth so soon after.

**Payroll Employment Growth By Region**  
(compared to prior periods)

	Jun-05	1-Qrt	1-Year	2-Year
East Bay	1,031	0.4%	0.8%	0.6%
SF MSA	946	0.0%	0.7%	-0.9%
San Jose	864	0.7%	-0.2%	-1.1%

This quick ‘recovery’ of sorts may have something to do with the resilience of the area, but it may also have something to do with the fact that the payroll numbers may not have been the best measure of growth of the Bay Area economy over the past decade. Remember that there are two ways of measuring employment, one way by surveying employers, the other by the Current Population Survey (CPS) of households. The latter method allows us to count the self-employed as well as the unemployed, but due to its smaller sample size it is quite noisy and economists tend to overlook it.

Like the rest of California, the pace of growth on the CPS, or “household”, side of the equation paints a much better picture of what is happening in the Bay Area than on the payroll side, as has been the trend for a number of years. The East Bay added 2.1% to its workforce over the past

year as measured by the household survey, well over twice the pace of payroll job growth. San Francisco saw a similar pace of growth. Hard hit

**Bay Area Household and Payroll Survey Statistics**  
*Seasonally Adjusted Data*

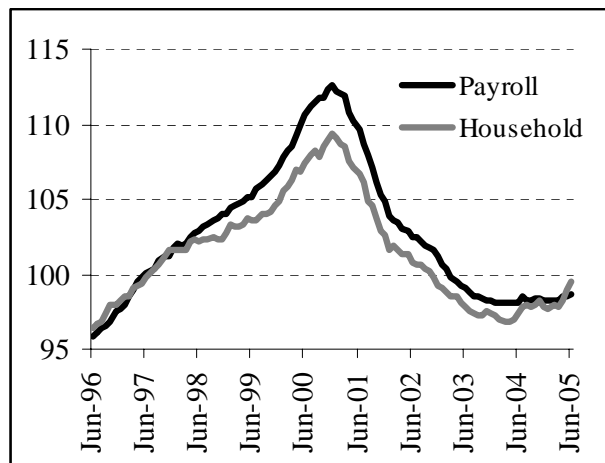
	East Bay		San Francisco		San Jose	
	Q2 05	1 Yr	Q2 05	1 Yr	Q2 05	1 Yr
Payroll	1,030.7	0.8%	947.3	0.8%	863.5	-0.2%
Household	1,207.5	2.1%	884.6	2.2%	803.3	1.2%
Labor Force	1,268.8	1.1%	925.2	1.1%	849.3	-0.4%
Unemployment	4.8%	-1.0%	4.4%	-1.0%	5.4%	-1.4%

San Jose actually experienced a 1.2% growth in household survey employment, a substantial improvement over the loss of .2% of their payroll jobs. This explains in part the falling unemployment rate in the region despite the weak job growth.

But which number to believe? It certainly does present two different pictures. But this quandary shows up not just in the Bay Area numbers but also in the national statistics, where household survey employment has been growing much more strongly than payroll employment up until the last year. One of the reasons for this has much to do with the unusual expansion of the late nineties period. For the most part payroll and household survey employment figures move together. But the late nineties growth spurt on the payroll side of the equation was not reflected as much on the household side of the equation. It is not clear why this is the case, but there are two possibilities. One is that many normally self-employed people were brought into the formal economy as a result of the IPO craze. Additionally the payroll numbers have an interesting flaw in that people who work for two companies will be double counted. The opportunities were far and wide, and many people were working for multiple companies.

The graph to the right shows an index of payroll and household employment for the overall Bay region, with 1997 = 100. These two series grow in parallel through most of the nineties, but when the boom hit in mid-1998, payroll employment began to grow much faster. The 18-month run up in employment at the end of the nineties saw a 9.6% increase in payroll employment, but only a 6.2% increase in

**Index of Payroll and Household Survey Jobs**  
*Seasonally Adjusted, Smoothed*



household employment. Afterward, the size of the decline in jobs measured by the household survey was also smaller, 11% compared to 13%, though still a tough decline. The last two years saw the convergence of the series yet again as household employment has bounced back. This would seem to imply that whatever the imbalance was that caused the initial divergence of the two series has worked itself out of the system, and payroll growth may start to see solid signs of expansion along with household employment as we move towards 2006.

Not all this growth in household employment is good news, however. The overall gap between household and payroll employment now stands at 1.65 million in the state, or 11% of payroll employment. This is up from 1.1 million in 2001. Many of these jobs that do not show up on the payroll statistics have formed in the greater LA region. Informal jobs often are created due to the fixed costs of formal employment in the state such as unemployment insurance, workers' comp costs and so on. Add to that the large number of illegal workers within the state, and it is hardly surprising that informal jobs have shown strong growth. Not much is known about the informal sector, as no comprehensive effort has yet been made to track down who these people are and what they do. Yet it seems likely that these jobs are, for the most part, low-skilled and low-paying. People in these jobs have to rely on the social safety net in case of some personal emergency. In short, an indicator of good news for the Bay Area may be bad news for the southern portion of the state.

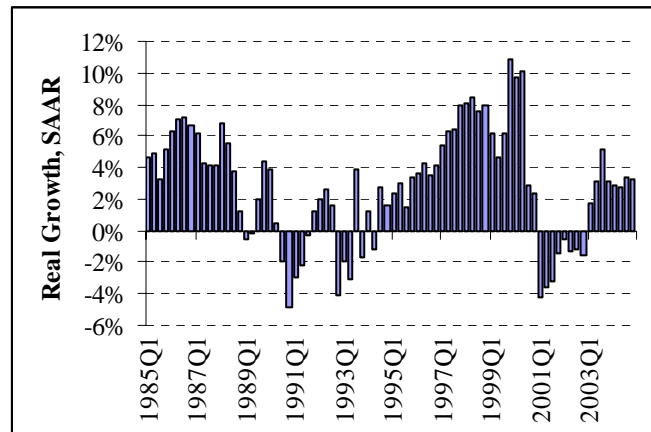
While it is clear that the state is on a positive growth trend, and the Bay region continues on its recovery path, the numbers as shown are little more than what might be defined as mediocre. First consider one of the best measures of quarterly output for the overall state, personal income received from place of work (this includes wages, salaries and proprietors' income). In real terms, by this measure, the pace of growth over the past two years has been about 3%. This is decent, but nothing worth getting terribly excited over. The pace of growth in the eighties expansion was roughly 5% in real terms, while in the nineties growth averaged about 6% per quarter. More significantly there is no sign of the acceleration that was seen during the past expansions. This time growth rates have remained relatively flat. One has to wonder how people are spending record amounts of money purchasing goods when they are not seeing record increases in income. As with the US overall, it appears that California and East Bay consumers are spending beyond their means.

Speaking of spending beyond means, let's consider that surge in revenues in Sacramento. It is true that revenues have been growing, but not unexpectedly so for the most part. Up until February, 8 months through the fiscal year, total revenues had come in at \$368 million over what had been forecasted by the California Department of Finance—a gain of less than one half of one percent, and certainly not enough to fix California's budget problems. On the other hand March revenues came in well above forecast, to the tune of \$2.95 billion for that one month. Fairly impressive and also large enough to give your standard seasonal adjustment algorithm a conniption.

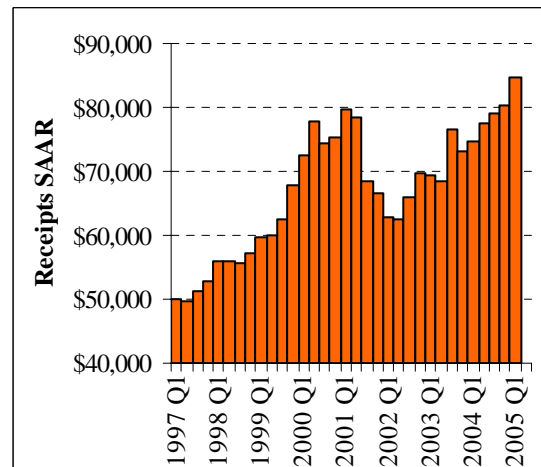
Unfortunately this windfall came almost completely from one source: corporate taxes. This would be good news if it truly reflected some surge in corporate profits within the state. But the overage seen is way beyond any believable increase due to an economic expansion—things simply do not change that rapidly. Instead what the state is reaping are the benefits of its tax amnesty program that was in place in February and March. This is truly a one-time revenue source, and indeed it

is even thought in some quarters that many firms paid in extra money, just-in-case. Some of this might be lost in future tax collections if the firms decide that they have indeed overpaid.

**Growth in Real Income in California**  
Wages, Salaries and Proprietors' Profits  
*Source: Bureau of Economic Analysis*



**California General Fund Revenues**  
*Source: Department of Finance*



**March General Fund Revenue Update:**  
**Actual receipts compared to DOF forecasts**

*Source: Department of Finance*

	Total		Corporate	
	YTD	Mar.	YTD	Mar.
Forecast	\$54,630	\$5,345	\$5,758	\$1,661
Actual	\$57,947	\$8,294	\$8,757	\$4,346
Diff.	\$3,317	\$2,949	\$2,999	\$2,685

It is hoped that the State takes this one time gift and uses it for debt reduction or some one-time investment in infrastructure. But to use such revenue for ongoing expenses will do little to fix the budget problems that still hamper the State's ability to make investments in its future. The discussions over major tax reform in the State, particular in its over-reliance on income and business taxes and the horribly regressive nature of property taxes due to Proposition 13 seem to be completely off the table now, which is a terrible shame. With a solid look at the current tax system and substantial reform it would be easy for the State to increase revenues even as it makes the State a more tax-friendly place for businesses and people.

Employment figures are similarly unimpressive, even though they are positive. The current rate of growth is only half of our average long run growth of 2.5% to 3%, and there is little sign of acceleration. And the *types* of jobs that are being added to the economy are similarly worrisome. Consider the recovery period from the deep downturn in the early nineties relative to the recent recovery. The two downturns were similar in overall size and length for the state. After both troughs the state added about 160,000 jobs in the following two years. But where the jobs are being added is completely different.

The table below shows the pattern of job changes by sectors during these two recoveries.

### Changes in Employment by Sector

*Data in 1000's*

	93Q1- 95Q1	03Q1- 05Q1	Diff.
Total, All Industries	159.1	159.0	-0.1
Construction	14.5	51.1	36.6
Finance & Insurance	-21.9	14.4	36.3
Retail Trade	8.3	21.0	12.8
Accommodation & Food	22.1	34.2	12.2
Federal Government	-11.7	-4.8	6.9
Health Care & Social Asst.	14.8	19.5	4.7
Real Estate & Rental	1.0	4.3	3.4
Entertainment & Recreation	4.5	6.8	2.3
Wholesale Trade	6.5	4.4	-2.1
Educational Services	8.5	6.4	-2.1
Information	12.9	7.6	-5.4
Transport and Warehouse	9.1	2.1	-7.1
Other Serv.	10.7	3.5	-7.2
Manufacturing	-3.2	-14.6	-11.4
Administrative & Support	42.6	25.1	-17.6
Professional & Management	15.7	-5.5	-21.3
State & Local Government	26.0	-17.8	-43.8

Looking at the third column of the table, we see the trend differences between the two periods. The sectors are ranked from high to low. During this recovery the big new drivers have been Construction, Finance, Retail and Food Services and to a lesser extent Federal Government jobs and jobs in Healthcare and Real Estate. Missing from the mix during this recovery has been State and Local Government, Professional Services and Management of Companies, Administration, and Manufacturing and to a smaller extent Other Services, Transportation and Information.

Look carefully and you will see that the jobs at the top of the list are those that service internal demands inside the California economy, while those at the bottom with the exception of State and Local government service the external economy. This is very similar to the pattern of changes within the Bay Area. The sectors that have been propping up the local economy over the past two years have been Construction, Education, Healthcare, Leisure and Financial Services. Wholesale Trade, Information,

**Bay Area Employment Changes by Sector**  
*Thousands, Seasonally Adjusted, 2 Year Change*

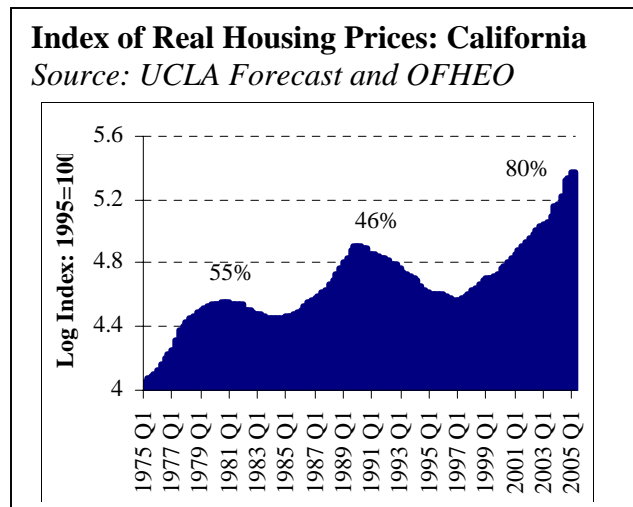
	East Bay	San Francisco	San Jose	Total
<b>Total</b>	<b>5.7</b>	<b>-8.3</b>	<b>-10.0</b>	<b>-12.6</b>
Construction	6.4	1.1	1.3	8.8
Education / Health	4.9	0.8	2.7	8.4
Leisure	1.9	3.6	-0.9	4.6
Financial Services	2.1	-0.7	0.5	1.9
Professional	2.3	-0.5	-2.5	-0.7
Retail Trade	0.6	-0.9	-1.5	-1.8
Wholesale Trade	-2.3	-0.7	0.7	-2.3
Information	-2.1	-3.5	3.1	-2.5
Other Services	-1.2	-1.1	-0.4	-2.7
Transport	-1.6	-2.2	-1.4	-5.2
Manufacturing	1.9	-0.1	-8.2	-6.4
Government	-6.5	-3.8	-3.9	-14.2

Transport jobs, Manufacturing and Government are the largest weaknesses. In short, this recovery in the state and local areas is being built upon internal demand for services produced within the region, not external demand from outside the region.

**How big is big? Pretty big.**

What could be driving such a local boom in demand? Why of course it is real estate and the tremendous run up in prices we have experienced here in California, as well as the rest of the US, over the past few years. Recently it was announced by the National Association of Realtors that the US saw a 15% increase in prices, year-over-year, the largest increase since 1980. Of course this ignores the very important fact that in

1980 the US was a high inflation place, whereas today we are in a low inflation environment. When you control for inflation the picture changes completely and we can see California and the US in the midst of one of the longest and largest run-ups in prices ever. To put some perspective on this, take a look at the inflation adjusted price index for California, as based on the numbers created by



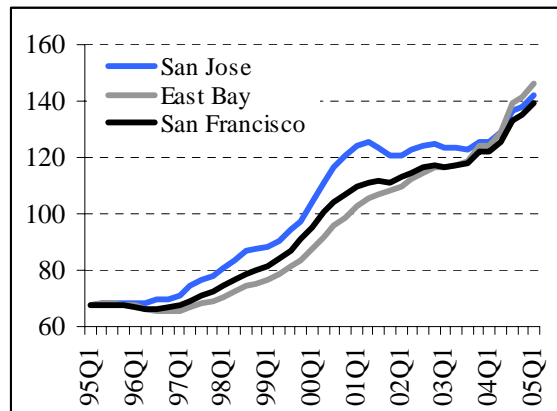
the Office of Federal Housing Enterprise Oversight (OFHEO). I use these numbers since they

have a quality adjustment component that many of the median price indexes lack.

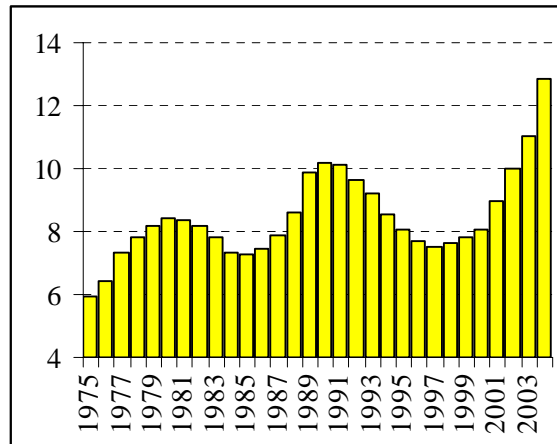
In the late seventies, during the period of time that ushered in Proposition 13 real housing prices in California increased by 55%, trough to peak. In the late eighties, during the bubble that most everyone remembers, prices increased about 46% trough to peak. And this time? So far prices have risen an incredible 80%, and we have not even hit a peak yet. And remember that most of this appreciation has taken place while the economy has been weak. Over the past two run-ups in prices the bubble occurred while the economy was booming. The Bay Area saw its run up in prices occur in two phases. The first started in 1997 and ended in 2001 as the local economy slowed tremendously. However prices never fell—surprising given the level of the local downturn. And about 6 quarter ago, even as the economy had just bottomed out, prices started to rise again. It has risen about 20% over the past year and a half.

How out of whack are we? The graph on the right shows the ratio of housing prices in California relative to per capita income. The recent increases are way beyond what was experienced in either the seventies or eighties.

**Index of Real Housing Prices: Bay Area**  
*Source: UCLA Forecast and OFHEO*



**Ratio of Average Housing Cost to California Per Capita Income**



How can people continue to afford such crazy prices? In part it is due to low interest rates, but of course this cannot come close to explaining all the increase and the continued dropping of the affordability index as calculated by the California Association of Realtors. Part of it is a shell game, where homeowners use their current equity to finance their next purchase. And part of it is that buyers are willing to take enormous financial risks through the use of interest-only ARM loans.

Fiscal prudence by investors in the market has been completely thrown out the window as they flock to what seems to be the easiest money around. Unfortunately like any pyramid scheme, this one is bound to end, and those that enter last are the ones that are going to be hurt the most.

California has seen the largest increase in real prices of any state across the nation, with the exception of Washington DC. Nonetheless there are substantial increases elsewhere in the nation. Rhode Island and Massachusetts weigh in at numbers 3 and 4 in terms of overall appreciation with a 67% increase. Perhaps what is most astonishing about this run up in prices at the national level is how ubiquitous it is. In the late eighties, even as the housing markets heated to an unsustainable level in many regions, there were others that

**Bay Area Prices and Market Activity**  
**Q2 Figures, Source: Dataquick, Changes year-on-year**

<b>Q2 Prices</b>	<b>New Homes</b>		<b>Existing Homes</b>		<b>Existing Condos</b>	
Alameda	\$591,417	-2.7%	\$606,333	20.3%	\$448,000	23.8%
Contra Costa	\$657,083	27.6%	\$551,000	19.4%	\$406,000	21.7%
Marin	\$714,167	34.2%	\$908,333	22.6%	\$549,167	16.3%
Napa	\$692,167	13.0%	\$568,000	17.5%	\$452,333	21.3%
San Fran.	\$663,417	21.9%	\$803,333	19.5%	\$722,333	15.9%
San Mateo	\$830,250	33.0%	\$796,500	17.7%	\$515,083	18.2%
Santa Clara	\$664,833	5.2%	\$692,167	17.7%	\$458,333	20.1%
Solano	\$481,083	11.9%	\$432,667	23.3%	\$267,333	16.8%
Sonoma	\$683,917	31.5%	\$566,833	22.4%	\$379,000	32.1%
<b>Q2 Activity</b>	<b>New Homes</b>		<b>Existing Homes</b>		<b>Existing Condos</b>	
Alameda	733	1.0%	4,805	-11.0%	1,591	-12.1%
Contra Costa	1,010	-3.0%	4,824	-6.5%	1,154	-10.8%
Marin	163	83.1%	904	-16.3%	297	-20.8%
Napa	106	-7.8%	423	-3.0%	67	3.1%
San Fran.	243	-38.0%	1,162	-9.9%	697	-1.0%
San Mateo	100	-26.5%	1,921	-11.6%	551	-5.2%
Santa Clara	620	-4.8%	6,002	-12.3%	2,266	-7.8%
Solano	728	111.6%	2,269	-4.7%	285	19.2%
Sonoma	118	-27.2%	2,021	-5.8%	420	-9.7%

**Real Housing Price Increases by State**

Source: UCLA Anderson Forecast and OFHEO

<b>State</b>	<b>97-05</b>	<b>83-89</b>	<b>State</b>	<b>97-05</b>	<b>83-89</b>
CA	80.7%	45.7%	OR	28.3%	-1.4%
RI	67.4%	60.6%	MI	28.1%	22.6%
MA	66.6%	57.0%	MO	27.4%	7.5%
NH	63.3%	48.7%	AK	24.8%	-54.8%
FL	57.4%	0.8%	SC	24.7%	9.8%
NJ	56.6%	52.7%	SD	22.8%	-2.1%
NY	55.8%	48.1%	KS	22.7%	-6.0%
ME	53.3%	43.6%	LA	22.1%	-31.5%
NV	52.4%	-1.0%	ND	21.1%	-17.0%
MD	51.9%	34.0%	TX	20.3%	-26.8%
MN	50.0%	5.1%	IA	19.7%	-3.0%
VA	48.4%	27.7%	OK	19.5%	-41.4%
CT	47.9%	53.8%	NC	19.3%	12.8%
DE	42.7%	37.0%	KY	19.3%	6.4%
AZ	42.6%	-2.4%	WV	19.2%	-4.7%
HI	41.6%	44.8%	ID	18.9%	-12.7%
VT	40.4%	39.9%	AR	17.6%	-12.2%
CO	35.7%	-15.9%	NE	17.5%	-7.8%
WA	34.8%	19.3%	OH	17.3%	9.8%
PA	31.1%	35.2%	AL	17.1%	4.3%
IL	29.8%	23.8%	NM	16.8%	-9.7%
WY	29.2%	-35.9%	MS	16.5%	-10.8%
MT	29.1%	-16.6%	TN	16.5%	8.7%
WI	28.9%	3.7%	IN	13.9%	8.2%
GA	28.5%	10.4%	UT	9.0%	-15.6%

actually saw real housing prices fall, including places like Oregon, Arkansas, Nevada, Arizona and Colorado. This time the price increases have been everywhere, with the smallest increase in the US occurring in Utah, where prices have grown a comparatively paltry 9%--which, by the way, for the '97-'05 period, matches the long run national average annual increase in housing prices of 1% annually.

Of course the standard line in the Bay Area is that the increased prices are legitimate due to a shortage of housing. While this sounds good on paper, it doesn't really pencil out. For one thing, the price of housing is an indirect function of the supply and demand for housing services. If the supply of housing is not sufficient to meet the current level of demand then rents increase. When rents increase housing prices follow. Rents in the Bay Area have been falling since 2000, and only in recent months have they actually started to rise again. This doesn't strike me as being indicative of a major shortage in housing.

And the "shortage" of housing units doesn't pan out either. The US has averaged building .9 new residential units for each new worker entering the economy over the past thirty years. Over the past ten years the Bay Area overall has built roughly 200,000 new residential units and added 157,000 new workers (measured using the household statistics). This works out to 1.3 new units for each new worker, a higher pace than the national average. Part of this is due to the economic problems in the region of course, and when recovery returns so will a new group of workers who need housing. But all in all, this is not indicative of a major housing shortage.

**Bay Area Housing and Employment  
1995-2005**

	New Units	New Workers	Ratio
East Bay	93,105	146,000	0.6
San Francisco	41,519	40,150	1.0
San Jose	64,857	-28,800	n.a.
Total	199,481	157,350	1.3

Now there are some differences between this run-up in housing prices and previous bubble periods. One major change was the change in tax laws in the late nineties that made profits from selling your primary residence tax free up to a very high level. Another major change was the fall in mortgage rates between 2000 and 2003, which also added a certain amount to the value of a house in the US. Mortgage rates stopped falling in 2003, thus having no more influence on prices. Remember that it's the change in rates, not the level that has an influence on prices. Even with these two important factors added in, prices have still clearly moved way beyond any rational level.

And it is this run-up in values that has been keeping the California economy moving forward. How much money has been dumped into California as a result of the run-up in prices? In 1997 a rough estimate would put the gross value of all residential real estate (owner occupied and apartments) in California at approximately \$1.7 trillion dollars. As of the first quarter of 2005 this number is well over \$4 trillion. Most of this increase occurred over the past two years. Your average California adult found himself or herself richer to the tune of \$40,000 on the basis of housing appreciation over the past two years, an amount roughly equal to 50% of what that same adult earned in the way of income over that two year period.

The issue here is that housing wealth accumulation, unlike equity wealth accumulation, has a much more direct impact on consumer spending by all estimates. In fact the magnitude of the difference is on the order of 6 to 8 times the impact. One reason for this difference is the different tax ramifications of cashing out on your house. Another is that it is much easier to borrow against housing equity than it is to borrow against other types of equity. And of course housing wealth is more widely distributed in the population than other forms of wealth, and is more likely to be held by an individual investor than an institutional one. Add it all up and we have an economy, nationally and particularly locally, that is being fueled in large part by housing prices. People feel flush and they are spending accordingly. Unfortunately that \$40,000 check your average Californian has received is mostly illusion, and not real. And the feelings of being flush are also incorrect.

No matter how you slice it, it is not a good situation. Many people in the housing industry have an issue with the characterization of this market as a bubble. But this is because most people associate the term with a 'pop' at the end. But that is not what a bubble is. A bubble is when an asset price becomes disassociated completely from the fundamental. Rental prices remain weak. Mortgage rates are flat. Income growth is mediocre. There is no reason that a house should be worth 30% to 40% more today than it was two years ago. This is a bubble. And this housing market is heated far beyond the point of sustainability.

Housing market bubbles don't pop, this is true. They deflate. Prices tend to go flat and liquidity in the market drops. But don't kid yourself. This process will have a detrimental impact on the

economy even if prices don't fall. The wealth creation that has fueled consumer spending will go away. All those people who were banking on continued appreciation of their house to finance their children's college education will suddenly find they need to go back to the old fashioned way of saving for the future—spending less.

And the construction industry will feel the pinch as well. Most new homes are bought by those trading up from their current house, while new entrants into the housing market tend to buy existing structures. With prices flat, turnover will slow and the demand for new houses will fall. Expect construction to slow and perversely enough the crowded housing situation at the bottom of the income distribution to become that much worse. The construction industry and the mortgage industry that have been adding so many new jobs to the state will feel the pinch and as a result job growth will be hurt.

And sadly the worst part is that many of the buyers who are now rushing into the market to be a part of the 'next big thing' are those who can least afford to be exposed to the risks of the current market. For those of us who bought in early, this housing wave can come and go without much impact on our overall personal well-being. But those at the bottom of this housing pyramid may find their life savings lost before they know it.

From this perspective, perhaps we should be surprised that in a recent speech, Greenspan stated that he felt there was only 'froth' in some local markets. But maybe he is cagier than we think. For those of you who are wondering what 'froth' might mean, the following definitions are taken directly from the online version of the Merriam-Webster dictionary:

*a : bubbles formed in or on a liquid*

*b : a foamy slaver sometimes accompanying disease or exhaustion*

It still remains unclear to this author which definition of 'froth' was intended to be used in Greenspan's speech but my favored definition would be the 'foamy slaver accompanying exhaustion'. This is because when one scratches the surface of this so-called expansion we find a number of troubling signs that the economy is not at the start of a new expansion but very near the end of an old one.

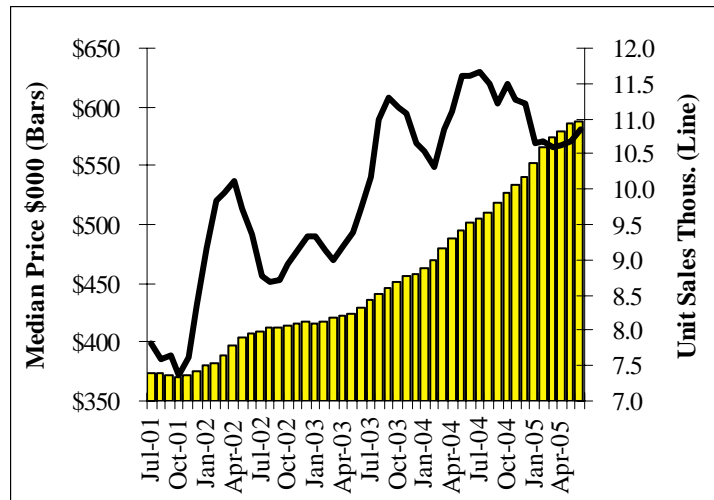
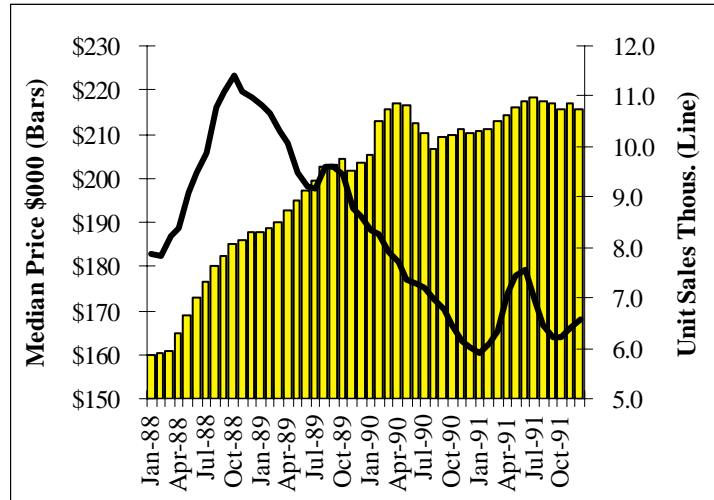
## Looking Ahead

Will a cooling market be enough to cause a recession? Very possibly, as pointed out by Ed Leamer in the national report. When will it start? That is a harder question to answer, since by definition a bubble market acts irrationally. The first place to look, however, is overall market activity. The following chart shows unit sales and median prices at the end of the late eighties run-up in prices. Market activity peaked in the end of 1988, and price appreciation began to slow within 6 months, and stopped within 18. So keep an eye on market activity, since this will be the first sign of impending problems. More recently unit sales have begun to fall, and you can see some slowdown in price appreciation. This may not be completely convincing evidence since you can see a similar slowdown in 2002 that quickly reversed itself. Of course this time prices are higher and more out of whack relative to income, and interest rates are rising rather than falling. This makes it considerably more likely to be the beginning of the end.

### Bay Area Market Activity and Median Prices

*Data seasonally adjusted and smoothed*

*Source: Dataquick and the UCLA Forecast*



Either way, as of now the bubble continues to expand. And while there are certainly signs that we are past the peak in this State, activity remains at a historically high pace. There is almost no chance of a major economic slowdown in the next 12 months for the nation, and as such we can

expect the State and Bay Area economy to move forward at a decent clip for the next year. And there is other good news for the Bay Area. A falling dollar and strong world economy have fueled a new export boom from the state. While last year this failed to create much in the way of new jobs, we feel that this year it will start to take hold and encourage job formation and decent income growth. But add it up and at best we have mediocre growth in our future. Look for a .5% growth in San Jose, while San Francisco and the East Bay will see payroll growth between 1% and 2%.

But beyond this period of time things are looking far more dubious. The potential impact of a slowdown in the housing market is severe, even with a falling dollar helping to prop up the external economy. While prices may not fall or at most fall slowly, the hit to the construction industry and finance industry combined with a slowdown in consumer spending will be felt by the entire economy. And a sharp decline in the housing market will impact those areas that have experienced the greatest housing boom over the last few years—in short the East Bay, Sacramento, the Inland Empire and the Central Valley. Watch out, this could be a rough ride. And those government revenues flowing in from taxable sales and transfer taxes will quickly fade away, bringing back the budget problems even as we work to clean up the problems created during the 2001 downturn.

Still, we must always remember that these types of economic disturbances are the exception, not the rule. From a longer run perspective the East Bay remains the major growth area in the Bay region. This is due largely to a younger population, a location that allows for greater amounts of building and the general movement of the state's population to the east. Combine this with the rapidly growing Sacramento area, and the eastern most portions of Alameda and Contra Costa counties are going to see increased development pressures over the next few decades.

The following tables are the UCLA Anderson Forecast long run demographic outlooks for the Bay Area, including a breakdown by age range and the labor force that will be in place for the region. The numbers differ from the official state estimates for a number of reasons, most significant is an altered mortality forecast that allows for declining mortality rates and a different set of assumptions regarding the net migration of people in and out of the region.

We expect that the East Bay will add close to 1,000,000 people over the next 25 years and have a total population count of 4.16 million by 2050. This tallies out to a growth rate of 1.1% per year. San Jose will grow somewhat slower, growing to 2.6 million in 2050, a rate of .9% per year. San Francisco, due to an environment less able to handle significant increases in housing, will grow the slowest of the three areas, adding only 600,000 over the next 45 years reaching a population count of 2.36 million, a growth rate of .6% per year. This will put the seven county region (don't forget that San Benito County has been added to the San Jose Metropolitan Statistical Area) at a total of just about 9 million by 2050.

**Long Run Demographic Outlook: East Bay**

	Population	0-18	19-40	41-65	66+	Labor Force
2005 Pop	2,545,200	26.2%	28.7%	34.9%	10.2%	1,270,500
2010 Pop	2,676,500	25.3%	28.1%	35.6%	11.0%	1,348,300
2020 Pop	3,069,300	23.9%	30.0%	31.8%	14.3%	1,527,400
2030 Pop	3,492,600	23.4%	29.5%	30.1%	17.0%	1,707,900
2040 Pop	3,872,200	23.3%	27.6%	31.5%	17.6%	1,911,000
2050 Pop	4,163,700	22.5%	26.7%	33.1%	17.6%	2,118,600

**Long Run Demographic Outlook: San Jose MSA**

	Population	0-18	19-40	41-65	66+	Labor Force
2005 Pop	1,757,200	26.1%	29.6%	34.6%	9.8%	858,700
2010 Pop	1,863,300	25.4%	27.1%	36.6%	10.9%	954,000
2020 Pop	2,089,400	22.7%	28.5%	34.0%	14.7%	1,075,500
2030 Pop	2,304,500	21.7%	28.4%	30.4%	19.5%	1,140,600
2040 Pop	2,484,400	22.2%	25.7%	29.9%	22.2%	1,189,400
2050 Pop	2,591,500	22.1%	24.4%	32.7%	20.7%	1,302,600

**Long Run Demographic Outlook: San Francisco MSA**

	Population	0-18	19-40	41-65	66+	Labor Force
2005 Pop	1,766,800	20.1%	29.4%	37.2%	13.2%	930,300
2010 Pop	1,846,900	19.7%	25.8%	40.0%	14.5%	1,000,000
2020 Pop	2,037,500	17.7%	25.8%	37.1%	19.4%	1,073,100
2030 Pop	2,214,200	16.6%	26.4%	32.8%	24.3%	1,114,800
2040 Pop	2,348,400	16.9%	23.4%	30.6%	29.1%	1,098,300
2050 Pop	2,361,100	16.6%	21.0%	34.1%	28.3%	1,145,100

For all three communities the largest shift in the population base will be the increase in the number of seniors. Those 66 and above will grow from 10% to over 17% in the East Bay in that period of time. The shift will be even more dramatic in the neighboring two communities. San Francisco will have over a quarter of its population in this age range by 2050. The participation rates will also increase, however, as more and more of the 65+ crowd remain in the workforce.

Population growth in California is as controversial as it is inevitable. These sterile numbers do not do justice to the issues that will arise in the context of the ongoing development of the state. There will be those who will fight against growth through the prevention of various infrastructure projects. Unfortunately history has shown that where there is economic opportunity, people will go. This happens regardless of the quality of the roads and lack of available housing. In a very real way the Bay Area's outstanding fundamentals for business—a good location, a highly educated workforce, a high tech base, and an appealing climate—are exactly the forces that will encourage growth. The best long run plan is to work with these forces and move towards maintaining sustainable growth, rather than create problems where they need not exist by opposing what is largely un-opposable.