

East Bay Economic Outlook

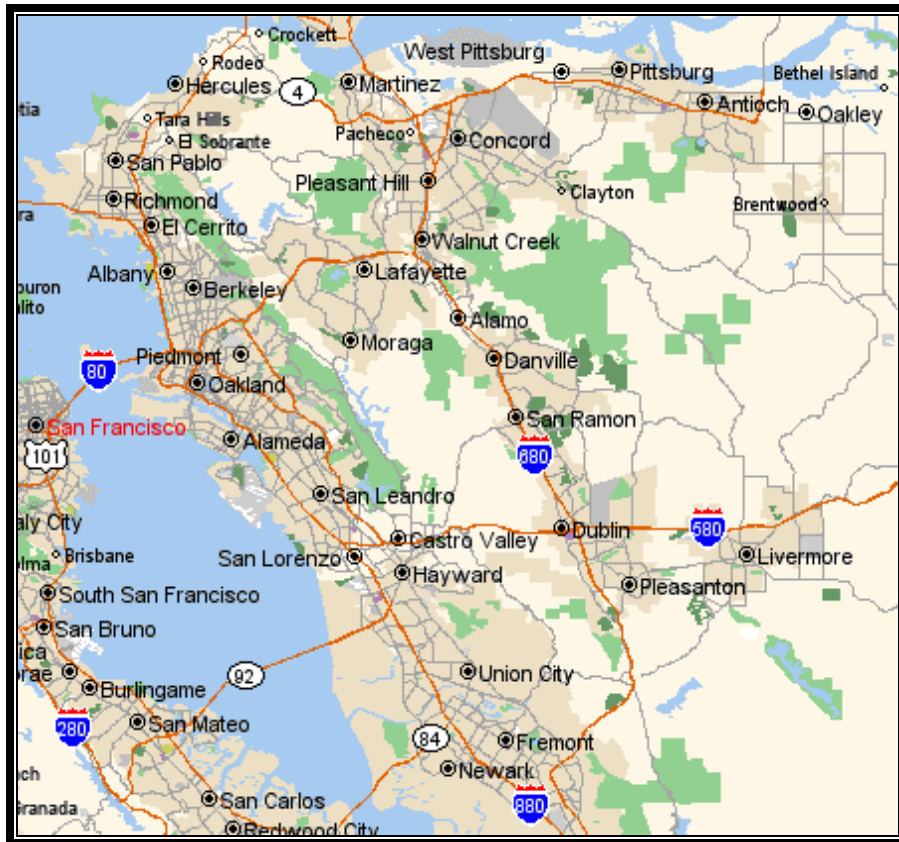
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Created for the East Bay Economic Development Alliance for Business

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Overview and Outlook:

It has been over three years now since the 2001 downturn began, and the economy is finally starting to pick up some momentum. Business spending and exports are on the rise, industrial production is up, and GDP growth in the second half of 2003 was solid. But some fundamental issues remain, including an under performing labor market (one of the major topics of discussion in this report), consumers with too much debt and a national housing market that is rapidly turning into another bubble. These issues imply the US economy will not be moving into a recovery period. We look to growth being driven by exports and business spending and overall growth for 2004 to be 3%, not Wall Street's 4.5%.

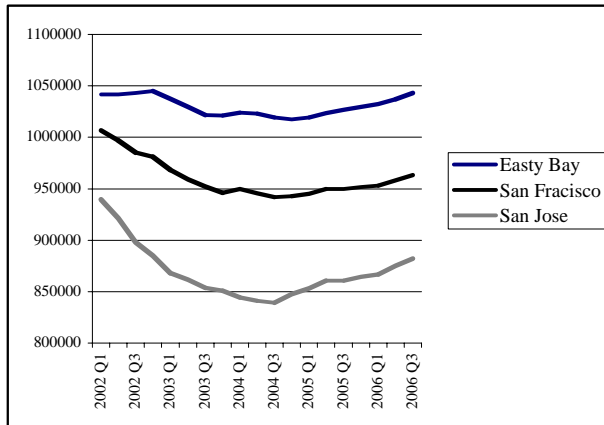
At the national level the greatest risk, by far, is inflation. And if the trend of the last few months continues, inflation may be exactly what is coming. While the Federal Reserve did an admirable job minimizing the impact of the recession, it is starting to look as if the consumer side of the economy was over-stimulated. One result of the March CPI number has been the increased rates on 10-year bonds, and mortgage rates will not be far behind. While we are a couple months from calling for a dramatic shift in our forecast, keep an eye out.

Closer to home, the recent payroll revisions were not kind to the Bay Area overall or to the East Bay specifically. After initially looking as if the region had bottomed out, it turns out that 2003 was worse than anyone had expected. Total payroll job losses are now at 400,000 for the entire 6-county region on par with the downturn that hit Southern California in the early nineties. The East Bay lost an additional 13,000 jobs on top of the 30,000 jobs lost in the first two years of the downturn. While still significantly better off than its two neighbors, it is clear that the economic turmoil in San Francisco and San Jose are taking its toll on the East Bay.

Business activity has been mixed in recent months. Non-residential investment has bottomed out in the area, and there is not much expectation that building will begin again in any substantial way in the near future. Hotel vacancy rates are down, but so are nightly rates. On the other hand, revenues are up for a number of tech firms in response to increased business spending, and taxable sales in some areas continue to be maintained. There was even a surge in non-residential investment in the bedroom communities around the region, with retail construction being the largest single source of new money.

The biggest issue in the East Bay is the residential building boom and rising housing prices. Despite the severe nature of the downturn, housing in the region has been maintained by the aggressive

Graph 20: Employment Forecast: Bay Area
Seasonally adjusted



Bay Area has been downgraded substantially. I look for flat job growth for the entire region in 2004, with payroll jobs in the region basically staying even. Specifically the East Bay will likely lose another 5000 jobs over the course of this year. 2005 will be a much better year, and if the national economy stays on track the East Bay should add something around 1.5% to its workforce in that year, 15,000 jobs. By mid 2006 the East Bay should start approaching its peak level in 2002. Trade jobs will be weak in 2004 but pick up after that, as will government jobs in the East Bay. Professional Services will be the single largest source of new jobs of the next two years, and we also expect that manufacturing will add a few jobs as well.

Fed policies. However if inflation forces their hand and rates go back up, the true shock to the economy of the rapid loss of jobs may begin to reveal itself, as the housing equity that has kept consumer spending moving along may suddenly disappear.

As a result of the unstable national situation, the ongoing budget crisis and the employment revisions, the Forecast for the

Forecasted Job Gains by Sector: East Bay
Q4 to Q4 Changes

	03-04	04-05	05-06
Construction	3100	1100	1920
Education and Health	1700	800	2900
Financial Activities	-100	200	1000
Government	-6700	-1300	500
Information	-900	100	600
Leisure	200	700	1800
Manufacturing	700	2200	2500
Professional	2300	1700	6000
Trade	-2700	3400	4200

The National and State Economy

It has been three years since the 2001 economic downturn dramatically ended the late 90's Internet Rush, high growth economy. Remember that this period of excessive optimism created three fundamental imbalances inside the US economy. We had surging business investment, but no growth in corporate profits. Private savings began to fall as expectations of future growth made saving for tomorrow less of a perceived need by consumers. When a nation invests more and saves less, it must find a source to borrow from in order to make up the difference. In this case the rest of the world was more than happy to lend to us in exchange for a piece of that rapidly growing tech pie. This inflow of capital has created a record trade deficit.

Shocks to an economy that cause recessions must have three features: they must be rapid, substantial and sustained. Any of these three imbalances, had they snapped suddenly, would have had these characteristics and hence could have driven the US economy into a downturn. The actual driver in 2001 was the collapse of the investment bubble. After failing to see the promised returns of IT investments over the course of three years and with the collapse of the stock market substantially reducing the capital available for firms, businesses began to cut their capital spending back sharply in mid-2000. Weak business spending continued to dog the economy right through 2002 -- even after the recession

'officially' ended -- playing a role in the economic doldrums the economy experienced.

2003 GDP growth by Contribution

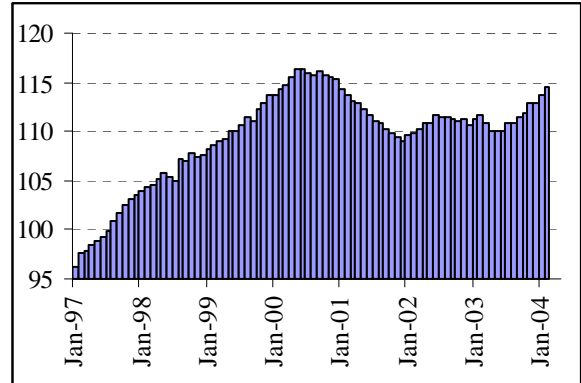
Data Seasonally Adjusted at Annualized Rates

<i>Quarter</i>	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>
Real GDP Growth	2.0	3.1	8.2	4.1
<i>Contributions by Source</i>				
Personal consumption	1.80	2.34	4.89	2.29
Durable goods	0.04	1.38	2.23	0.06
Nondurable goods	1.13	0.25	1.48	1.07
Services	0.63	0.71	1.19	1.16
Gross private investment	-0.57	0.73	2.17	2.19
Fixed investment	0.16	0.90	2.30	1.48
NR Structures	-0.10	0.09	-0.04	-0.03
NR Equipment	0.04	0.59	1.30	1.11
Residential	0.22	0.22	1.05	0.40
Change in inventories	-0.74	-0.17	-0.13	0.71
Net Trade	0.81	-1.34	0.80	-0.32
Exports	-0.19	-0.11	0.92	1.81
Imports	1.00	-1.24	-0.12	-2.14
Government	-0.07	1.36	0.34	-0.01
Federal	-0.01	1.46	0.09	0.05
State and local	-0.06	-0.10	0.25	-0.06

The attached table shows economic growth for each quarter of 2003, with the contributions to overall growth by source of demand listed below. The last two quarters of 2003 saw the fastest growth in the economy since the tech collapse began. The economy has moved out of the doldrums that it was stuck in for 2002 and the first half of 2003. Overall economic output rose by 8.2% (annualized) in the third quarter and 4.1% in the fourth. The last quarter had some very positive signs in the breakdown of the

numbers as well. Fixed investment continued to contribute significantly to overall economic growth, and exports continued to rebound strongly as a result of a growing world economy and the falling dollar. Consumer purchases lessened somewhat from the blistering pace of the third quarter which is a positive thing, since consumer balance sheets remain out of line with debt levels at all time highs. Growth in government spending also moderated somewhat as well, again positive news since this sector of the economy needs to start to get its balance sheets in order.

Graph 16: US Industrial Production
Seasonally Adjusted



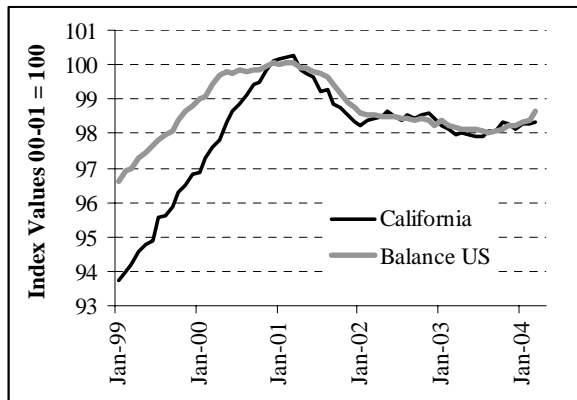
Another positive sign for the economy is that, unlike the twilight zone 3rd quarter numbers, the 4th quarter numbers seem to be built on true expansion inside the economy. Industrial production has started to increase in recent months and shipments and new orders for goods are also rising. Also welcome news was that corporate profits remained strong. The profit-investment imbalance that drove the 2001 recession has finally worked its way out of the system and business spending will stay on the rise in 2004.

On the less positive side imports actually grew faster than exports despite (or possibly because of¹) the falling dollar and rising commodity prices in the world markets. The US trade imbalance, already at record levels, continues to grow. Also worrisome was the run up in inventories in the final quarter. After being negative for three quarters, companies suddenly saw inventories grow rapidly. Remember that this implies a slowdown in national production in the near future to clear out current stocks.

As for California's economy, it is also slowly turning up. The recent job numbers revisions—the annual re-benchmarking done by the EDD each year—showed that the recession was a bit deeper in terms of the number of payroll jobs lost in the state last year, but also revealed a better upturn after mid-2003. The new data show that since the “trough” in jobs in July of 2003, the state has gained about seventy five thousand jobs through March of 2004. That is a tiny 0.5% gain over that 9-month period, but it is an up-trend in any case. Also on the upside, the state's unemployment rate has fallen from a 6.9% high in mid-2003 to 6.2% in 2004. These developments are due to the relative increase of household to payroll jobs seen in California as in the rest of the nation.

Graph 10: Payroll Employment for California and the Balance of the US Economy

Seasonally Adjusted, Indexed Values



The big issue immediately lying ahead for California continues to be the State budget situation. The legislature and the Governor must come up with a budget for fiscal 2004-2005 that saves approximately \$10 billion. That will involve spending cuts -- which are threatening to axe at least 25,000 state and local jobs -- other non-labor-related expense savings, and some small revenue increases. The latter will be increases in “user fees” or some tax changes. The reality is that even with these draconian cuts all indications are that the State will continue

running a small deficit into the foreseeable future. The only way this budget crisis will be resolved is through higher taxes. It looks as if the new administration is starting to realize this, and discussions of possible increases have already begun in the back corridors of Sacramento. In any case, fixing the deficit is one reason the rebound that has already started won't be rapid or strong this year. The job and spending cuts must start soon, reducing our outlook for 2004, and keeping labor markets cool.

Of course this threatens to exacerbate the already poor image California has for its business climate. However, it must be kept in mind that California is not a high tax state. Indeed on a per capita basis Californians pay a smaller proportion of their income in state and local taxes and fees than the average US state. The problems in California are due to how the State taxes. Proposition 13 has forced a large portion of the tax burden to be put on business and income taxes rather than on less distortion causing property taxes. Additionally the State has an extremely progressive income tax system—taxing high-income earners far more than low-income earners, but then cancels this out by having the most regressive property tax system, where those with the greatest equity in their house or commercial properties (those who have owned property for a long time and incumbent businesses) pay a far smaller property tax rate than those with the least amount of equity (new buyers and businesses).

State and Local Taxes			
<i>Per Capita</i>			
		US Avg.	California Difference
Total Receipts			
2000	\$ 4,439	\$ 5,016	13.0%
1997	\$ 3,939	\$ 4,102	4.1%
Total Taxes			
2000	\$ 3,100	\$ 3,545	14.4%
1997	\$ 2,747	\$ 2,850	3.7%
Federal Money			
2000	\$ 1,037	\$ 1,136	9.5%
1997	\$ 922	\$ 989	7.2%
Personal Income			
2000	\$ 26,521	\$ 32,363	22.0%
1997	\$ 25,412	\$ 29,760	17.1%

There were very good reasons for putting Prop 13 into place just as there are good reasons for workers' comp programs, utility deregulation and environmental protections in our state. Unfortunately the State has a long record of putting bad plans in place for the right reasons. The ongoing issues with workers' comp and the reality that California may again face power shortages this summer are testimony to this. A recent report puts California near the bottom in terms of its business climate in the US. It is clear that substantial reforms in both the tax and regulatory structure of the State are needed. The new administration has done an admirable job so far of tackling some of these tough issues, but it remains to be seen how much can be accomplished in the next few years.

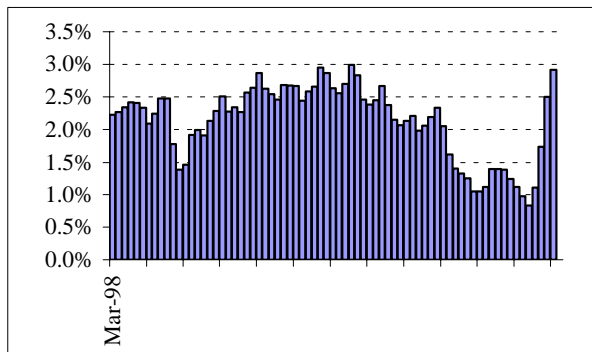
Looking ahead, while the economy is clearly on the mend, the UCLA Anderson Forecast's outlook for the national economy remains conservative. Wall Street continues to look for signs of a classic economic recovery—falling unemployment, 5% GDP growth, solid industrial production, big gains in payroll employment and of course (and most important to the folks on the Street) a rising stock market. The reality is that the economy is not in a classic recovery mode because this was not your standard recession.

While the investment-profit imbalance has worked its way out of the system, the consumer and external imbalances remain firmly in place. As a result of very aggressive Fed action that has pushed interest rates to all time lows, consumer debt levels are at all time highs. So are debt-servicing levels despite the record low interest rates borrowers are paying. As mentioned, the trade deficit is coming close to 5% of GDP, far outpacing the large deficit run during the Reagan administration. Add to this an overheated national housing market and it is clear that there is a lot of downside risk in the economy.

The reality is that these imbalances need to start correcting themselves, and to do so implies weak consumer and government spending in the near future. As such, our forecast for 2004 remains 3% even with the production economy showing some signs of life in recent months. If those imbalances do not start correcting themselves this year then they may start to rapidly correct themselves in the following two years. In short, the better 2004 is, the more likely we are to have another business cycle, a traditionally consumer-led downturn, in late 2005 or early 2006. Along with the conservative growth forecast, we also are predicting less than stellar growth in the job markets this year. Wall Street is looking for 250,000 or more new jobs per month. We see some positive growth, but only at about half the pace. The reasons for this are many, and will be discussed below.

The biggest single source of risk to the US economy at the moment is inflation. To keep interest rates low and spur the economy the Fed has pumped a tremendous amount of liquidity into the economy. Inflation has not hit the system despite this massive injection for a number of reasons. The downturn has caused the price of many products to fall, not too mention the hyper-competitive new marketplace of the Internet. Furthermore a lot of this new liquidity has been absorbed by China and Japan, eager to keep the value of the dollar up relative to their national currencies in order to keep exports flowing into the US economy. Even the US dollar falling has not had as much impact as it would for other nations. The US is such a large economy that foreign companies have to price to the local market, unlike smaller economies that have to purchase from world markets and thus face inflationary pressures under such circumstances.

Graph 11: Core Rate of Inflation
CPI All Items except food and energy
Seasonally Adjusted, Annual Rates, smoothed



Yet the risk of inflation is beginning to grow. The March inflation figure came out last week, and the news was not good. The core rate of inflation (inflation for all products *except* energy and food, two categories dropped because of their high variance from month to month) jumped by .4% the largest increase since 2001 and a sure sign that inflation is accelerating. The large amount of liquidity the Fed pumped into the economy over the last few years certainly set the stage, but a spark was needed to get things going.

Commodity prices, particularly oil, continue to rise and the effects are starting to carry over into the price of other goods. Furthermore, up to now the effects of a depreciating dollar were absorbed primarily in the profits of foreign firms. But there is only so much buffer that the large US marketplace can provide. Import prices, even without petroleum, have been on the rise for a number of months as well. And the largest threat may be economic growth. With markets tightening in a recovering economy and due to the rapidly rising costs of employment benefits, firms are beginning to raise prices. This is also sending more inflationary pressures through the economy.

If inflation starts creeping into the system the Fed has few choices available. Fighting inflation by reducing liquidity will raise interest rates. Not fighting inflation will also raise interest rates as banks, wary of the long run risks they are carrying when lending at fixed rates for 30-years to home buyers, will increase their rates. Ten-year treasury notes have already seen their rates creep up and mortgage rates are

sure to follow. Any kind of dramatic change will send a shock wave through the housing markets and through consumer spending as debt servicing levels rise up beyond their already high levels. The net result on the economy will not be pretty. Rising rates will increase the debt-servicing load carried by already over burdened consumers. Rising mortgage rates will cause housing prices to fall, removing the new wealth that many owners used to justify continued spending. The resultant slowdown in the housing market will hit home builders hard as well. If there is one stat to keep an eye on over the next two or three months, it is the CPI.

Jobs, Jobs, Jobs

Despite the long period of time since the 2001 downturn and the positive signs of a return to some sort of economic growth, as noted, we still are living in a period of substantial economic uncertainty. One of the primary problems is undoubtedly the labor markets. Like Bill Clinton's famous, or infamous, 1992 campaign slogan, "it's the economy, stupid" as he ran against George Senior, by November, the slogan for Kerry's bid against George Junior may very well end up being, "it's the labor markets, stupid". Of course in a political campaign, the truth more often than not takes a back seat to catchy slogans and strong stances on ideological issues. So is there truth here? Definitely. The labor markets have been underperforming by almost any measure, and there is little sign of any return to normalcy.

The March job numbers for the nation, on the surface, are quite solid, much to the relief of the current administration no doubt. Payroll numbers expanded by 300,000, the largest increase since this cycle began. But the reality is that these numbers aren't as good as they seem. The following table breaks down the average monthly job gains over the past three month by sector, total employment, and the percent that each sector contributed to the total number of jobs and job growth.

The reality is that almost half the job gains we have seen have come from two sectors, Retail Trade and Construction. These two sectors comprise only about 15% of the total workforce, and hence cannot support any kind of permanent recovery in job growth for the nation. Furthermore these two sectors tend to be highly variable on a month-to-month basis. Just as the core rate of inflation takes out the highly variable energy and food sectors, a 'core' rate of employment growth would likely exclude these two sectors. Retail jobs in particular were bolstered in March by a return to work for the grocery strikers, particularly in Southern California.

This is not to say that there aren't positive numbers here, because there are. There was positive

Employment Changes December 2003 to March 2004

Seasonally Adjusted Data, Thousands

	<i>Total</i>		<i>Monthly Change</i>	
Total nonfarm	130,548		171.0	
Construction	6,862	5.3%	29.3	17.1%
Durable goods	8,882	6.8%	4.7	2.7%
Nondurable goods	5,428	4.2%	-9.3	-5.4%
Wholesale trade	5,621	4.3%	7.5	4.4%
Retail trade	15,008	11.5%	44.0	25.7%
Transport / Utilities	4,769	3.7%	11.0	6.4%
Information	3,167	2.4%	-2.7	-1.6%
Financial Services	7,995	6.1%	4.8	2.8%
Professional and technical	8,360	6.4%	6.6	3.9%
Administrative Services	7,867	6.0%	16.0	9.4%
Educational services	2,736	2.1%	2.5	1.5%
Health care and social	14,070	10.8%	22.4	13.1%
Leisure and hospitality	12,249	9.4%	19.0	11.1%
Other services	5,383	4.1%	3.0	1.8%
Federal	2,713	2.1%	-2.3	-1.3%
State and Local	18,860	14.4%	12.0	7.0%

growth in sectors that do foretell economic recovery, including Professional Services, Leisure and Hospitality, and Transport and Administrative Services. This last sector is particularly positive news since it is the group that holds Employment Services. Growth here can be a leading indicator for employment increases in other sectors since firms use temporary workers to help out prior to hiring new permanent employees. Also good news was that manufacturing

employment losses have largely ended. But unfortunately the hope of adding 200,000 plus jobs per month for the rest of the year is certainly not supported by what has happened in the first three months.

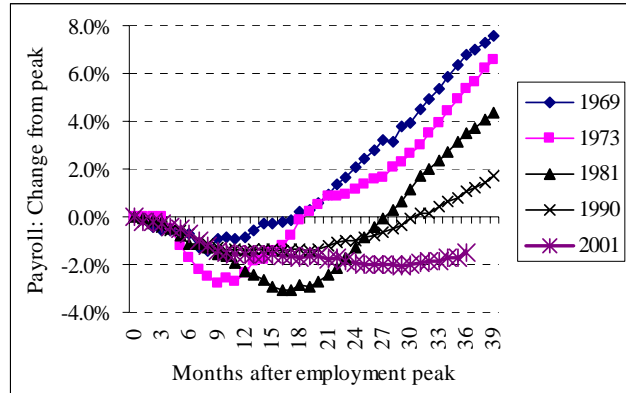
Even with the March numbers the US is still far behind in terms of job creation from a historical basis. The following graphs illustrate patterns of national employment around previous business cycles here in the US. The X-axis represents months past the employment peak in the economy—in other words the beginning of the recession. The Y-axis gives the percent difference in employment from that previous peak. So, for example, 20 months after the employment peak in 1969 total national payroll employment was 2% larger than the peak in 1969.

The first graph shows the patterns of payroll and household employment around the employment peaks. On the payroll front this last downturn certainly stands out. For one thing the initial loss of jobs in the contraction was relatively mild, particularly as compared to the very severe 1973 and 1981 recessions. Yet despite the relatively mild nature of this last downturn, the smallest by far of the five downturns exhibited in terms of GDP contraction, payroll employment is still significantly below where it was three years ago. This is unique compared to every other downturn in the US. Even the so-called jobless recovery of the early nineties saw payroll jobs rise above the previous peak three years out. For the previous three downturns employment rose three to five percent above the previous peak.

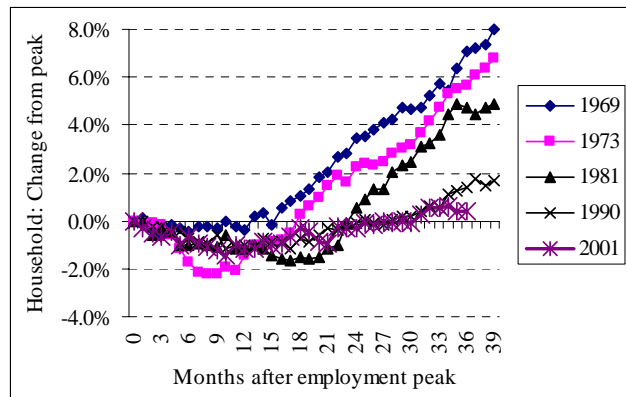
One of the debates in recent months has been on the payroll vs. household numbers.² The household numbers do present a slightly different picture. Unlike the payroll numbers the household numbers are above their previous peak. This has caused some debate on which number better reflects the current reality. Some economists lean towards the payroll numbers because they tend to be more stable on a month-to-month basis and thus are better predictors for overall growth. But this is due to the larger sample size, not because it is a necessarily better measure. The relatively small number of respondents to the CPS survey makes it noisier on a month-to-month basis, but this does not diminish its long run accuracy. However, the reality is that the US labor markets are still performing worse than in the previous four downturns on both bases, so the debate on household vs. payroll should be largely academic rather than political. Neither number looks terribly appealing.

Graph 1,2: Patterns of National Employment around Past Recessions

Payroll Jobs, SA, Percent from previous peak



Household Jobs, SA, Percent from previous peak

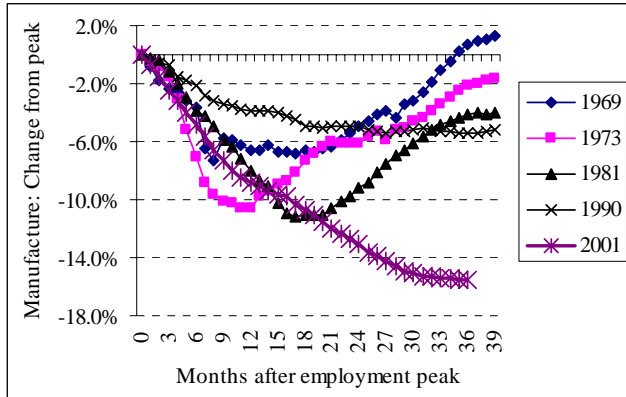


A lot of discussion has also centered on manufacturing employment. Typically manufacturing jobs tend to be very cyclical, and are the hardest hit through a downturn. However the pattern of jobs losses in this sector differs from other sectors because there has also been a strong long-run trend away from these jobs to service sector jobs because the manufacturing sector has seen more productivity gains. Hence manufacturing jobs are hit hard and then recover, but never quite to their previous level. Yet again, the 2001 downturn is remarkable for its labor market results. At this point in time manufacturing employment is 16% below its 2000 peak, three million jobs lost, and no recovery whatsoever. In every past cycle, manufacturing has seen some recovery by this point in time.

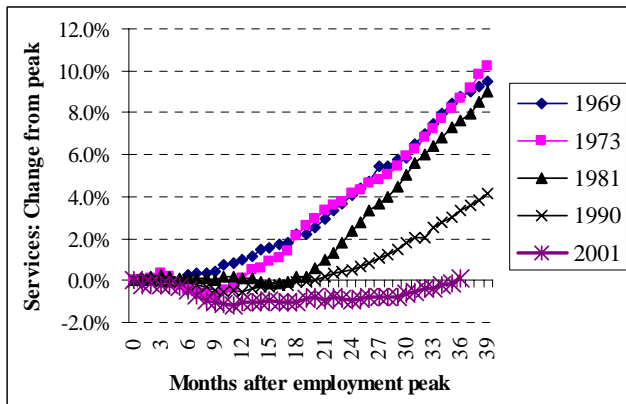
The weakness in Manufacturing is not enough to explain the overall job losses being experienced. The sector as a whole only represents 11% of total payroll employment. Looking just at services we see a

Graph 3,4: Patterns of National Employment around Past Recessions

Manufacturing, SA, Percent from previous peak



Services, SA, Percent from previous peak



similar pattern relative to past downturns. Service jobs today are about at where they were three years ago. Relatively speaking, at this point in time in the early nineties employment in services was 4% above the previous peak. In the previous three downturns service job employment was close to 10% above the previous peak. Whatever is afflicting the US labor markets is certainly having a dramatic impact on manufacturing employment, but it isn't the only labor market being hit. Services are performing almost as poorly.

So what is causing such problems in the US labor markets? It is the combined impact of a number of important trends including rising fixed costs, outsourcing, productivity gains and an aftereffect of the late nineties rush economy. Let's start with the last two issues; productivity and the late

nineties boom economy. This economic cycle that started in 2001 was unusual for a number of reasons. It was the first downturn that was led by businesses rather than being led by consumers. It also occurred at the end of a major bubble in stock prices as well as in business investment. Irrational expectations of the future of productivity and profits drove the economy up and the inevitable return to reality, as already discussed, created the downturn.

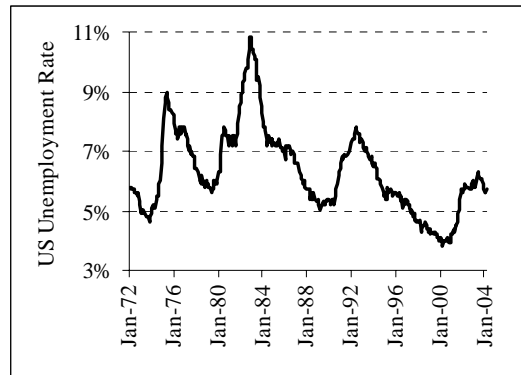
While the investment / asset bubble is well understood (at least in hindsight), less discussed was the parallel bubble that occurred in the labor markets. In the late nineties there was a mad scramble for employees, largely driven by rapid gains in employment in the tech sector. Start-ups do not make money as a standard rule, and the companies that were scrambling to get venture capital funding or go to an IPO had to signal their significance to potential investors through other means—primarily by signaling through office space and by simply having bodies in seats. In short, just as these companies forgot about profit when investing in physical capital they also forgot about it when investing in human capital. As

labor markets tightened up, other firms began to feel the pinch. Many began to add workers themselves buying into the hype surrounding the Internet or to defend themselves against the shrinking labor supply.

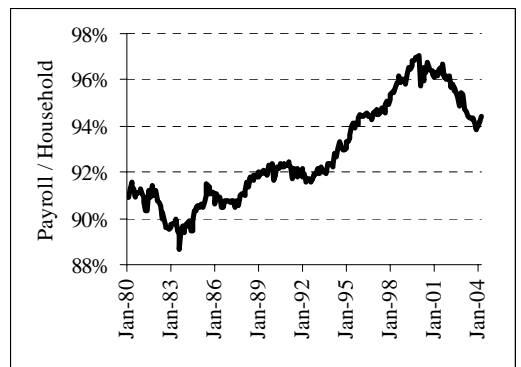
Some of the signs of this overheated labor market were obvious, at least in retrospect. College undergraduates were being offered signing bonuses often in the tens of thousands, an incentive typically only used for professional graduate students from elite institutions. National unemployment hit 3.9% in early 2000, a level not seen for many decades.³ In some of the hotter markets such as San Jose unemployment dropped below 2%. How unemployment grew during the downturn was another interesting sign of the bubble. Industrial production began to drop sharply in the middle of 2000, yet it wasn't until 9 months later that unemployment began to creep upwards in response. For the first few months of the downturn, even as GDP shrank, unemployment increased remarkably slowly. This is unusual for economic cycles in the US.

The reason for the slow response of the labor markets was that many firms, still feeling the sting of the irrationally tight labor markets, were loath to lay off workers. Indeed even as NASDAQ plunged and many dot.com firms simply disappeared, some tech companies began to hire these newly released workers just because they were available. It wasn't until after the September 11th tragedy that unemployment started to increase rapidly. This had nothing to do with the disaster itself, since it had little real impact on the economy. Rather it was a signal to all that the economy was truly in a downturn.⁴ However, do keep in mind today's unemployment rate of 5.7%, nearly 2 percentage points higher than three years ago, is in itself not high. Average unemployment between 1970 and 1995 was 6.7%. Keep in mind that European nations are pleased when their unemployment dips into single digits.⁵

Graph 5: US Unemployment
Seasonally Adjusted



Graph 6: Payroll / Household Ratio
Seasonally Adjusted, Annualized, Smoothed

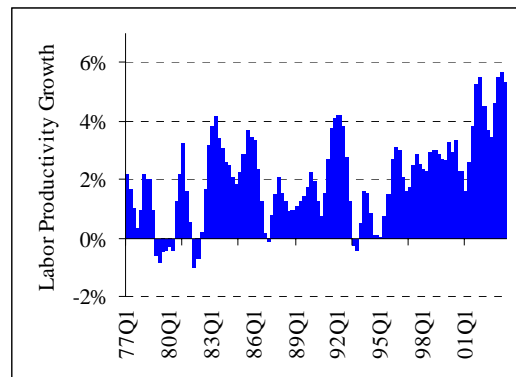


This strangeness also explains the differences between the household and payroll numbers in recent months. Household employment for the nation overall is typically about 10% higher than payroll employment. The balance is explained largely by the self-employed and agricultural employment. Payroll employment surged relative to household employment in the late nineties labor market, for reasons that still aren't fully understood even by the agencies that collect these statistics. The recent trends in the two series vary primarily because the ratio of payroll to household is slowly returning back to its historic norm as the labor markets work the excesses of the Internet rush out of the system.

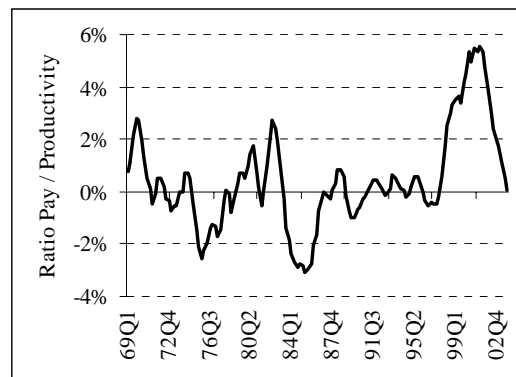
Another sign of the over-heated labor market comes from the productivity numbers. One of the paradoxes of the IT boom of the later nineties was that the promised labor productivity growth never showed up in the data. Average annual growth rates during this time were 3%, solid, but hardly unusual. Keep in mind this was a period when real investment inside our economy went up from \$6,000 per worker per year in 1995 to nearly \$9,000 per worker per year by 2000 in real terms. Since the 2001 downturn began, however, the US economy has seen truly spectacular productivity growth numbers, up in the 5% range, unusual for their magnitude as well as the fact productivity growth is typically pro-cyclical, not counter-cyclical and that it typically correlates with *increasing* investment in physical capital, not decreasing investment.

The results of the over heated labor markets can also be seen in the compensation / productivity numbers. Worker compensation, in the long run, is fundamentally tied to labor productivity. Yet in the late nineties wages began to increase sharply despite mild productivity growth numbers. This might be called the fourth imbalance suffered by the economy as a result of the technology rush. What has been experienced over the past two years might be best termed a productivity echo. Over-employment in the late nineties swamped the productivity growth that should have been seen during the investment rush. We are seeing the numbers now because firms have been

Graph 7: US Labor Productivity Growth
Seasonally Adjusted, Annualized, Smoothed



Graph 8: Pay / Productivity Ratio
Seasonally Adjusted, Detrended



concentrating on reorganizing their workforces in ways to make them more productive.

This shift in thinking has had a number of impacts on the economy. Rising productivity has been able to keep up with the weakly rising aggregate demand, dampening the need for new workers in many sectors of the economy. Additionally, one of the reasons things look so bleak now is because we keep comparing them to the peak hit in early 2001. The 3.9% unemployment rate was clearly too low to be sustainable, hence we should not be comparing our current unemployment rate to that number. A better comparison is the long run performance of the labor market. By that measure things are not that bad. Similarly the peak employment level hit in 2001 was as unusual as unemployment is right now. Comparing employment today to then may not be the appropriate metric.

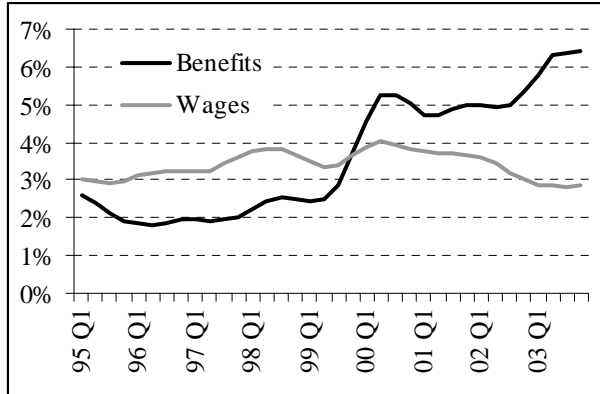
The good news of course is that the pay / productivity imbalance has finally worked its way out of the labor markets and demand for new workers may be on the rise again. But the bad news is that there are a number of other issues that have also had an impact on the creation of new jobs over the past three years and may very well continue to dog the system in 2004. The problem is the rising fixed costs of employment.

The statistics are undeniably clear on these rising fixed costs. Healthcare premiums have been increasing at double-digit rates now for the past three years, a crisis on par with what was happening in the late eighties. The current cost of insuring a family of four is now around \$9,000 per year. Here in California businesses are facing the additional burden of rapidly rising workers' comp insurance costs. Finally, many firms are finding the cost of providing retirement benefits for their employees have surged as a result of the weak stock market and record low interest rates. The result is that the cost of benefits is currently rising at twice the rate of take home wages.

On the surface the results of these rising fixed costs are clear. Some firms have begun to abandon their health coverage programs, or are passing the costs on to their employees. The labor strife that has started to occur in many sectors, including the grocery strike here in California, is a result of this. Policy makers have gotten into the mix as well. Here in California we have SB-2, the bill that forces firms to contribute to health care coverage of their employees through a pay-or-play system. What is not understood by many policy makers about the rising fixed costs of employment is that it is workers who ultimately suffer the consequences, not the companies that hire the workers regardless of who actually pays the cost of the benefits in question.

Graph 9: Increases in Worker Compensation

Annualize Rates, Seasonally Adjusted



It is critical to understand that the pay package received by workers is the sum total of the cost to provide the benefits to the worker, the labor taxes paid by the firm on behalf of the worker and of course the take home pay the worker receives. The size of this *total* pay package is determined by the supply and demand for labor. When the cost of one of these forms of pay goes up, one of the others must go down in order to offset it if

the market is to stay in equilibrium. If not, firms will simply hire fewer workers. There is no free lunch, or more specifically no free benefits. The price will be paid by the workers somewhere. Policies that try to shift costs rather than try to control the reasons why costs are going up in the first place are largely fruitless endeavors. Over time higher benefit costs must be offset by lower take home pay and workers end up no better off than if they had to pay the increased cost directly.

You may be saying, ‘okay, but what does this have to do with the bad payroll numbers?’ The reason is that rising fixed costs of employment have a different effect on employment in the short run than in the long run because take-home pay tends to be ‘sticky’. Wages rise easily in the face of high labor demand or inflation, but they tend not to fall much when labor demand declines for a variety of reasons. This is one reason why unemployment rises in economic downturns instead of wages simply falling in response to weak labor demand in a contracting economy. What this implies is that when the cost of benefits goes up, the real cost of labor rises in the short run. This implies that firms are unwilling to employ as many workers as before and job creation is weak. This effect is particularly severe when the overall economy is not doing well, since overall compensation levels are not rising enough to offset increased benefit costs.

How do firms handle rising costs and still increase output as we have seen over the past two quarters? There are a number of avenues. In the short run the simplest way that firms offset rising costs is simply by making existing workers work harder. This is particularly true for the many salaried positions in our economy that are not covered by overtime regulations. One of the many oddities of this downturn has been the hours of work have been rising, but this has not led to increasing employment as in past cycles. The short-term effect has been to reduce demand for new workers.

Another avenue by which rising fixed costs can reduce demand for labor has to do with the tradeoff that firms have between using capital and labor to produce goods. When a firm wants to expand output it has two choices—it can hire more workers or invest in new machines. When the price of one input rises relative to another, the firm has an incentive to substitute towards the cheaper input. Right now in the US we have rising worker costs and record low interest rates. Labor has become considerably more expensive relative to capital even though take home wages have been stagnant. As a result many firms today choose to expand output by investing in new machines rather than by hiring new labor. Eventually there will come a point at which the gains from the substitution of capital for labor is offset by diminishing returns to investment and then employment growth will begin again.

Analogous to the substitution between labor and capital is the substitution between domestic workers and foreign workers. As international communications become easier as a result of the Internet, and as domestic workers become more expensive, firms naturally choose to substitute away from local workers to foreign sources. The degree to which this substitution is viable and profitable is still limited by production technology, just as is the substitution of capital for labor. It also carries much of the same long run benefits as investment in technology: higher worker productivity here in the US. But again in the short run this is certainly one contributing factor to weak job growth in the US.

The important thing to remember is that a weak labor markets is a short-run phenomena. All the issues just described will eventually work their way out of the system and job growth will begin again. Unfortunately the productivity / wage imbalance of the late nineties and the lackluster economic growth since the downturn have slowed the pace at which this process can occur—to some extent we simply have to take our lumps, worry about the displaced, and wait. And of course there is a bit of a catch-22 problem as well. Weak labor markets imply weaker economic growth and vice versa. Things are looking up, but expect these issues to continue dogging the system for the near future. Employment growth in 2004 is not going to be very strong, and whatever promises are made by both sides of the aisle in Washington over this election year the harsh reality is that there is remarkably little they can do about it.

Employment in the East Bay

In March the EDD revised its employment numbers for the State. While these new numbers are good news for the Southern California region, they have carried considerably worse news for the ailing Bay region, yet again highlighting the stark differences between the two major economic regions of the

State. In the South, 2003 was not a bad year. The Inland Empire, Orange County and San Diego all had positive job growth. Ventura, which had looked bad in the original numbers, is now shown to have had flat job growth last year. Los Angeles County is the only weak spot in the South, and it looks much better in the first few months of 2004.

Looking at the trends over the past year in the Bay area it is clear that the tech bust has still not completely worked its way out of the system around the Bay. San Francisco was revised downwards from a 1.4% loss in payroll jobs to a 3.5% loss, a loss of 21,500 jobs. The East Bay saw a similar drop in the new numbers, to a loss of 2.3% of the payroll workforce, a loss of an additional 16,000 jobs. The six-county region around the San Francisco Bay is now estimated to have lost a total 400,000 payroll jobs since the start of the economic downturn three years ago. The only positive note was in Sacramento. The failure of the State government to cut as many jobs as originally predicted has buoyed the strong growth of the area.

Payroll Employment Growth Q4 02 to Q4 03
Original and Revised Benchmarked Numbers
Non-seasonally adjusted numbers

	Original	Revised	Difference	Employed Q4 04
Inland Empire MSA	1.6%	1.4%	-0.3%	1,118,600
Los Angeles MSA	-0.8%	-0.9%	-0.2%	4,021,800
San Diego MSA	0.1%	0.7%	0.7%	1,265,100
Orange County MSA	0.0%	1.2%	1.2%	1,446,800
Ventura MSA	-2.2%	0.0%	2.2%	302,900
San Francisco MSA	-1.4%	-3.5%	-2.2%	953,400
East Bay MSA	-0.8%	-2.3%	-1.5%	1,027,600
Fresno MSA	0.4%	-0.3%	-0.7%	362,300
San Jose MSA	-3.8%	-3.9%	-0.1%	852,800
Sacramento MSA	-0.7%	1.0%	1.7%	761,200

So where did these East Bay jobs go? Using the original and revised October numbers as a guide, the losses have really occurred pretty much across the board. Durable Goods manufacturing lost an additional 2,400 jobs, primarily in Computers and Electronics. Non-durable manufacturing was up slightly, however. Administration and Support Services were reduced by 5,500 jobs, almost one quarter of the total revision. Over half these jobs were removed from the Employment Services category. This category is typically viewed as a strong leading indicator, since firms often hire temporary help through employment agencies before adding new permanent positions. Transportation employment was also reduced by 2,300 jobs primarily in local transport industries such as trucking and courier services. Again, this is not a good sign for the health of the local economy.

Employment Revisions for the East Bay

<i>Industry</i>	<i>Original</i>	<i>Revised</i>	<i>Diff.</i>	<i>%</i>
Total, All Industries	1049.7	1025.8	-23.9	-2.3%
Construction	69.9	69.2	-0.7	-1.0%
Durable Goods	61.4	59.1	-2.3	-3.7%
Computer, Electronics	22.7	20.3	-2.4	-9.9%
Nondurable Goods	36.5	37	0.5	1.4%
Wholesale Trade	51.5	50.6	-0.9	-1.7%
Retail Trade	111.1	109.9	-1.2	-1.1%
Transportation, Utilities	39.2	36.9	-2.3	-5.9%
Information	32.7	31.2	-1.5	-4.6%
Finance and Insurance	43.1	49.4	6.3	14.6%
Real Estate and Rental	18.7	18.4	-0.3	-1.6%
Professional Services	67.7	66.4	-1.3	-1.9%
Management Companies	25	23.6	-1.4	-5.6%
Administrative Support	58.1	52.6	-5.5	-9.5%
Educational Services	17.5	18.6	1.1	6.3%
Health Care and Social	110	99.5	-10.5	-9.5%
Leisure and Hospitality	82.7	80.9	-1.8	-2.2%
Other Services	38.3	37.5	-0.8	-2.1%
Government	181.2	181.5	0.3	0.2%

The single largest downward revision, however, came in (of all places) healthcare. The EDD shifted its estimates of employment in this industry by over 10,000 jobs. These almost all came from one sub-category, Ambulatory Health Services. This is the sector that holds all health services in which the patient does not stay overnight, including outpatient clinics, private medical practices and so on. Instead of adding 8,000 jobs as originally estimated, this sector has lost 1,000 jobs. There were some positive numbers as well. The

Financial Services sector in particular was revised strongly upwards, largely because of a strong upward revision in insurance employment. Should we speculate that the Healthcare jobs the EDD had estimated were actually added in the Health Insurance industry?

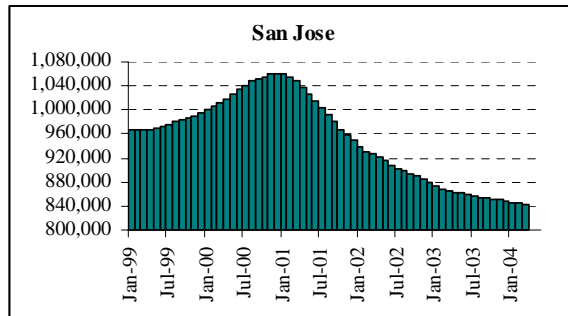
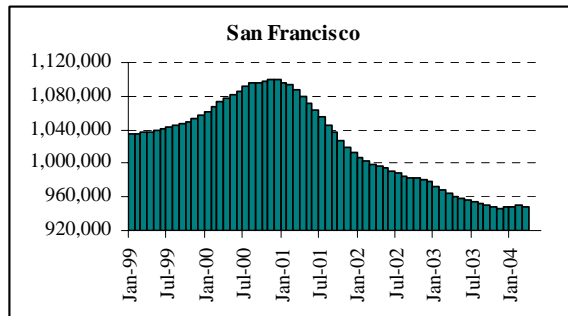
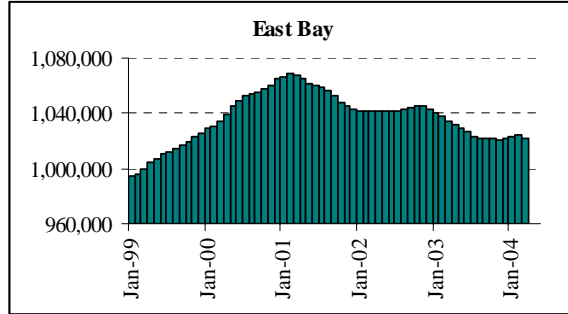
In previous reports I have expressed surprise at the apparent robustness of the East Bay economy compared to its neighbors. It is certainly true that the East Bay benefited from a diverse industry base and its relative affordability at the height of the bubble that brought it those few firms that were still worried about the bottom line into the area. Nevertheless, the East Bay’s economy is closely tied to its neighbors, and given the loss of jobs in San Francisco and the South Bay it seemed remarkable that the East Bay was not having more difficulties. With this revision it is becoming clear that the East Bay is definitely feeling the burden of the collapsing economies of its two neighbors.

Of course this is all past history now. The real issue is what has been happening more recently. Unfortunately the answer is not much. Employment numbers in the East Bay and San Francisco have remained flat over the past five months. In San Jose a further 10,000 jobs have been lost, slightly over 1% bringing the total job loss since 2001 up to 20%, over 200,000 jobs. For San Francisco the numbers are 13.5% and 150,000 and in the East Bay 4.5% and 50,000. While the worst of the downturn is clearly over, no rebound has yet to occur. Remember that economies have momentum. Even though the tech bust has

ended and business spending is on the rise, the economy is still feeling the vicious cycle of reduced aggregate demand and lower employment.

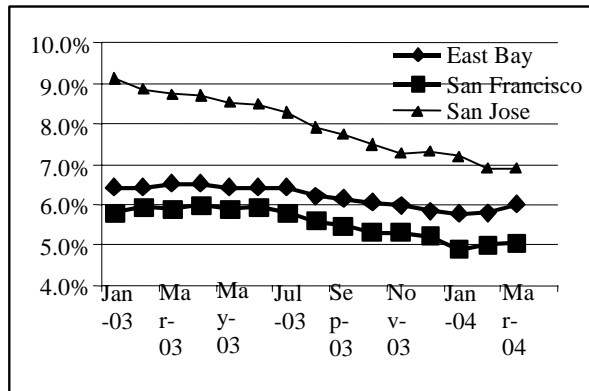
To put some perspective on this, it took the Los Angeles economy roughly four years in order to start adding jobs again after the aerospace crash of the early nineties. The analogy is closer than you might imagine. Total employment in Los Angeles County in 1990 was about the same as the combined six-county Bay economy. Los Angeles lost about 300,000 payroll and household jobs over the course of the downturn, proportional again to what has happened recently as a result of the tech bust. By this simple metric solid aggregate improvement will not occur until early next year, with small gains this year in the East Bay offsetting continued weakness in San Jose. And of course we have to add to this the general problems with employment noted in the section on the national economy.

Graphs 12-14 Bay Area Payroll Employment
Seasonally Adjusted, Smoothed



On the other side of the equation unemployment has been falling in the region. In San Jose unemployment fell to 7% over the last few months, while in the East Bay and San Francisco it remains at 6% and 5% respectively. The reason for these two directions is in part due to a decline in the labor force in the area. About 6.5% of the total labor force, 200,000 workers, have dropped out of the pool or have left the area. Some of this decline is expected after the incredibly low rates in the late nineties encouraged many people to join the labor supply who would not have in a normal economy. Some of it represents the difficult economic times as well, of course. In either case these types of declines have bad implications for growth in the future.

Graph 15: Bay Area Unemployment
Seasonally Adjusted



The other reason for the decline in unemployment despite the continued loss of payroll jobs is that like the rest of the nation the Bay Area has not lost as many Household Jobs as Payroll Jobs. In fact on this basis the six-county region has only lost 300,000 jobs, three quarters of the loss of payroll jobs. Household jobs actually expanded somewhat over the last five months in the East Bay and San Francisco, but continued losses even on this front in San

Jose.

By sector not much has changed in the East Bay in the past half-year or so. Most of the changes that have occurred between October of last year and the preliminary numbers for this March that were recently released are close enough to zero to be statistically insignificant. In general the Wholesale and Retail Trade and public sector continue to slowly lose jobs while a variety of service sectors continue to add them including Administrative Support, Healthcare and Management of Companies, a sector made up of holding firms. Construction is up strongly because of the surging housing market of course. Overall the East Bay has lost 50,000 jobs since the peak in 2001. Half these jobs were lost in manufacturing, mimicking the pattern in the US overall. Professional Services, Trade, Information and Transportation were also hard hit.

Business Activity: Mixed

One issue about forecasting local economies as opposed to the national economy is that the analysis

East Bay Employment
Seasonally Adjusted

Industry	Mar-04	5 Month	3 Year
Total	1,021,500	-2,900	-48,600
Construction	69,900	2,400	-2,000
Durable Goods	59,400	500	-20,200
Nondurable Goods	36,800	-100	-3,900
Wholesale Trade	49,700	-1,200	-6,700
Retail Trade	108,100	-1,700	-6,400
Transportation	36,700	100	-5,900
Information	30,300	-1,300	-8,700
Finance and Insurance	49,500	-400	10,500
Real Estate and Rental	18,700	400	400
Professional Services	66,500	-200	-4,900
Management of Companies	24,000	700	-3,200
Administrative and Support	53,600	1,800	-11,800
Educational Services	18,400	100	3,000
Health Care and Social Asst	100,100	600	4,500
Leisure and Hospitality	80,900	-500	3,500
Federal Government	17,400	-600	-2,100
State and Local Government	161,300	-600	3,500

often focuses on inputs (i.e. employment) as opposed to outputs (i.e. GDP) primarily because of the lack of reliable output data at the local level. However in our strange national economy there has been a marked divergence between outputs and inputs over the past few months for the reasons previously discussed. The same is true for the East Bay and the Bay area overall. While the employment situation is bleak at best, some of our best proxies for business activity are showing some positive signs of life, although overall the results are mixed.

Recently released preliminary estimates of Taxable Sales from the Board of Equalization show a solid 4th quarter of 2003 when compared to 2002 for most regions in the State. Sacramento, Contra Costa, Solano and Fresno all saw increases upwards of 8 to 8.5%, in large part because of their very strong housing markets. Equity has kept consumers feeling financially sound despite the poor job markets. These four economies, like most bedroom communities in the nation, have retail activity that is up from where they were three years ago just prior to the start of the downturn. In contrast the employment centers in Alameda, Santa Clara, San Francisco and Sonoma are up slightly from last year, although considerably down from the peak hit in 2000.

Taxable Sales by Region
4th Quarter 2003 Preliminary Estimates

	<i>Q4 2003 Est.</i>	<i>1 Year</i>	<i>3 year</i>
CONTRA COSTA	\$3,518,303	9.6%	4.9%
SACRAMENTO	\$5,015,570	8.2%	12.3%
SOLANO	\$1,449,806	8.0%	17.7%
FRESNO	\$2,554,235	7.2%	15.6%
ALAMEDA	\$5,706,449	3.7%	-10.7%
SANTA CLARA	\$7,269,226	3.4%	-28.7%
SAN FRANCISCO	\$3,175,819	2.7%	-17.2%
SONOMA	\$1,789,593	2.0%	-4.1%
SAN MATEO	\$2,986,059	-0.5%	-20.7%

On the travel and tourism front things also remain steady. Hotel vacancy rates are down from this time last year, but nightly room rates are also down slightly. The net result is that revenues are about the same. Airport traffic through Oakland continues to rise, as Southwest continues to thrive in the new budget conscious business market. Better times are likely to be ahead because of the falling dollar. While the \$US has maintained its rate relative to most Asian currencies because of the aggressive actions taken by the Central Bank of China and Japan, the dollar is still 25% lower than it was in the not too distant past relative to the Euro. Tourists from Asia will find the US, and in particular California, a much cheaper option compared to European destinations.

Top 40 East Bay Public Companies, 2003 Performance

Data Source: *Contra Costa Times*

Region	03 sales \$mil	1 Yr Ch	Return
East Bay Total	\$188,160	14.9%	5.5%
Balance of Bay Area	\$416,060	7.8%	5.6%

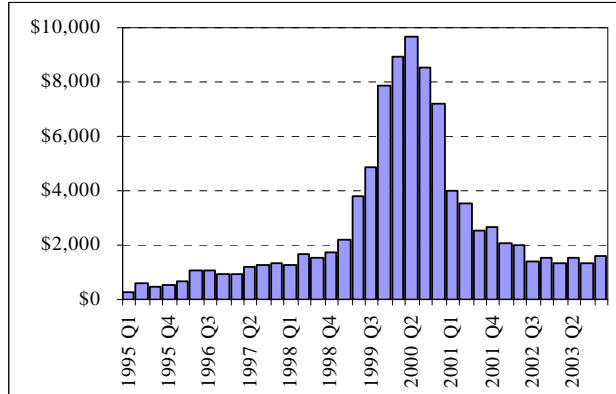
Company	03 sales	1Yr Ch	Return	Company	03 Sales	1Yr Ch	Return
ChevronTexaco	\$112,937	23.2%	6.4%	Westaff	\$535	1.7%	-0.9%
Safeway	\$34,050	-0.1%	-0.5%	ChipPAC	\$429	17.9%	-6.8%
Longs Drug Stores	\$4,527	2.3%	0.7%	Cooper Cos.	\$428	21.9%	17.1%
Clorox Co.	\$4,166	0.6%	11.9%	Polycom	\$420	-9.9%	5.5%
Synnex	\$4,126	9.5%	0.7%	InVision Technologies	\$417	-5.0%	13.7%
Ross Stores	\$3,921	11.0%	5.8%	Lexar Media	\$412	136.8%	9.7%
Golden West Financial	\$3,842	2.6%	28.8%	Copart	\$365	7.7%	16.7%
PeopleSoft	\$2,267	16.3%	3.7%	Ocular Sciences	\$298	11.6%	-1.3%
UTStarcom	\$1,820	85.3%	11.1%	Pixar Animation Studios	\$263	30.2%	47.5%
Pacer International	\$1,669	3.8%	1.9%	Asyst Technologies	\$231	-2.9%	-34.2%
Chiron	\$1,658	36.1%	13.7%	Wind River Systems	\$204	-18.1%	-12.7%
Dreyer's Grand Ice Cream	\$1,191	-11.5%	-6.4%	ESS Technology	\$195	-28.6%	12.8%
Central Garden & Pet	\$1,155	7.0%	3.0%	Mattson Technology	\$180	-11.8%	-33.9%
Bio-Rad Laboratories	\$1,003	12.3%	7.6%	LECG	\$166	23.9%	16.3%
PMI Group	\$887	-17.6%	33.5%	E-Loan	\$154	49.5%	14.9%
Cost Plus	\$802	15.9%	4.1%	Barra	\$150	5.6%	23.3%
Sybase	\$778	-6.3%	11.2%	Thoratec	\$150	14.5%	-1.3%
Lam Research	\$748	3.0%	2.1%	Network Equipment Tech	\$134	16.5%	2.2%
LeapFrog Enterprises	\$680	27.8%	10.7%	McGrath Rent	\$129	-11.0%	17.8%
Simpson Manufacturing	\$548	17.8%	11.1%	Centillum Communications	\$125	19.0%	-10.4%

Another good measure of current business activity is the performance of the various companies headquartered in the East Bay. Of course these firms only do a portion of their business and have a portion of their workforce in the East Bay, but it still represents a solid proxy for what is happening in the region. According to statistics compiled by the Contra Costa times, the revenues collected by the forty largest companies in the East Bay remained steady in 2003 relative to 2002. Total revenues increased by 15%, but this increase can be completely attributed to Chevron-Texaco and rising gasoline prices. Take this firm out and revenues were about the same in 2003 as they were in the previous year.

Still, the profit margin was a solid 5.5% for the region, good news since profits today lead to employment tomorrow. While traditional firms in retail and chemicals are the largest firms by revenues in the area, it was the technology firms that saw their bottom line improve the most. Lexar Media, UTStarcom, E-Loans and Pixar Animation all were in the mix of firms with the fastest growing revenues. While we want to avoid calling for a rapid tech rebound, this is a nice sign. Overall firms in the balance of the Bay had better results than the East Bay, but this is because they are recovering from a steeper fall. The largest 80 public companies in the balance of the Bay Area saw an increase in revenues of 8% and returns of 5.5% as well.

Graph 17: Venture Capital in the Bay Area

Source: PricewaterhouseCoopers



On the investment side, things are looking steady. Venture capital investment in the total region continued its slow advance with a total take of \$1.6 billion in the 4th quarter of last year, and \$6 billion for the entire year. About one third of this amount went into Biotech fields, and another half into traditional IT fields such as Software, Networking and Semiconductors. The largest biotech investment occurred in the East Bay.

Commercial Real Estate: A matter of perspective

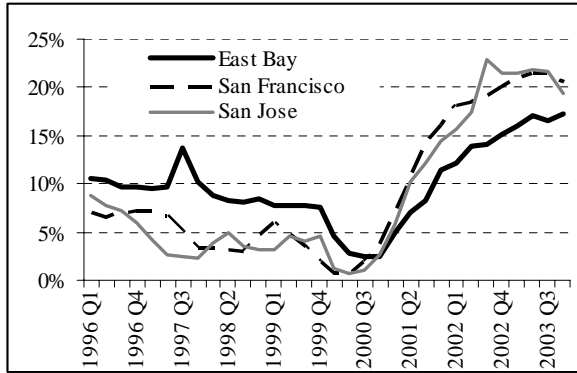
Investment in the non-residential markets remains cool as well. The only bright spot in the Bay Area has been Contra Costa. This has been a center of new residential development and the new retail centers supporting this area have been driving investment in the region. Another bedroom community, Marin, also saw some improvement in the non-residential side of the market in 2003 primarily due to retail spending, although building there is still a third below the peak seen in 2000.

Otherwise investment continues to collapse across the rest of the region. All non-residential spending in these areas is on finishing projects started just before the crash and in the property improvement sector. Spending is down by 70% from the peak in 2000. Given that investment increased

Changes in Non-Residential Building Permit Valuations (\$1000's)

	2002	2003	1 Year Ch	3 Year Ch
CONTRA COSTA	\$375,162	\$412,119	9.9%	-14.2%
MARIN	\$77,156	\$85,956	11.4%	-34.2%
ALAMEDA	\$770,270	\$608,280	-21.0%	-42.6%
SANTA CLARA	\$1,330,560	\$974,160	-26.8%	-66.0%
SAN MATEO	\$516,612	\$233,094	-54.9%	-68.5%
SAN FRANCISCO	\$737,510	\$378,644	-48.7%	-73.5%
VENTURA	\$288,565	\$379,999	31.7%	34.7%
RIVERSIDE	\$741,143	\$881,850	19.0%	14.5%
SAN BERNARDINO	\$731,849	\$804,275	9.9%	4.9%
LOS ANGELES	\$2,920,301	\$2,923,994	0.1%	-11.3%
SAN DIEGO	\$1,168,866	\$1,169,578	0.1%	-15.9%
ORANGE	\$1,208,626	\$1,001,787	-17.1%	-43.1%

Graph 18: Commercial Vacancy Rates
Bay Area Regions, Source: CB Commercial



five fold between 1994 and 2000 in Santa Clara County and its environs, it was bound to collapse hard when the tech bubble popped. With vacancy rates in the region still high, and rents still falling it is hard to see any substantial recovery in non-residential investment for the region anytime in the near future.

have actually been rising again in the East Bay over the past two quarters. Part of this is the continued loss of jobs, but it is also due to the fact that many firms are reducing the space they are using once their leases run out.

Relatively speaking , however, the East Bay is more stable than San Jose or San Francisco.

Vacancy rates across the region have continued to rise since the downturn began and

Bay Area Real Estate: Median Costs and Number of Units

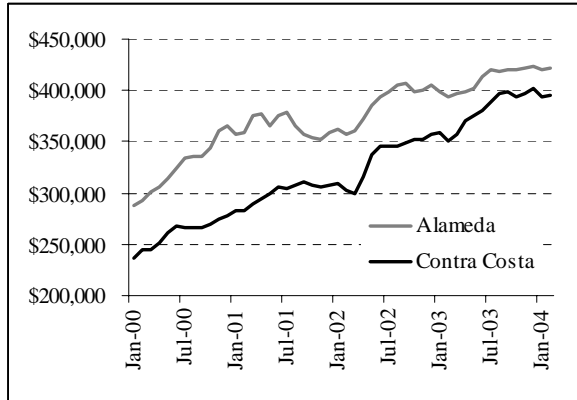
Source DataQuick

	Q4 2003	Q1 2004	Ch	Q4 03	Q1 04*	Ch
Alameda	\$422,667	\$421,500	-0.3%	2243	2210	-1.5%
Contra Costa	\$398,333	\$395,000	-0.8%	2121	2135	0.6%
Marin	\$617,667	\$631,500	2.2%	395	380	-4.0%
San Francisco	\$569,667	\$553,000	-2.9%	716	742	3.6%
San Mateo	\$556,667	\$567,500	1.9%	879	869	-1.2%
Santa Clara	\$487,667	\$481,500	-1.3%	2690	2660	-1.1%
Napa	\$455,333	\$460,000	1.0%	186	201	7.9%
Solano	\$323,000	\$324,000	0.3%	810	862	6.4%
Sonoma	\$401,000	\$394,500	-1.6%	853	829	-2.8%
Bay Area	\$453,000	\$450,000	-0.7%	10892	10886	-0.1%

Residential Real Estate: How high can it go?

Home price appreciation in the East Bay saw some cooling in the last few months of 2003 and early 2004. The median price of a home in Alameda has remained at around \$420,000 since September of last year while prices in Contra Costa have remained steady at \$400,000. Sales as well have remained calm, at least through February. This pattern has been seen throughout the Bay Area. However, if anecdotal evidence about the housing markets in March and April are correct this calmness may end rapidly. In Southern California initial numbers for March show the housing market back on a high growth trend. If the Bay Area follows along, the signs are ominous about a bubble being in place. With inflation starting to creep and the 10-year note starting to rise and mortgage rates along with them. This will likely spur on yet another round of panic buying as people rush to get into the market to lock in these low rates.

Graph 19: East Bay Median Housing Prices
Smoothed, Source DataQuick



As always, the questions are whether the growth path that real estate is on is sustainable, and if not, is the market already overvalued and if so, by how much? The answer to the first question is certainly not—expecting the housing market to appreciate by an average of 20% per year indefinitely would be as irrational as imagining that NASDAQ would or could do the same thing as many stock market investors found out to their chagrin. The answer to the second part of the

question depends critically on the outlook for rental growth rates here in the Northern California region. As has been discussed, real estate does have a fundamental value based on the potential growth in future revenues attached to a property (net rent) and the discount rate that one attaches to these future rents. This basic idea can be summed up in the following equation:

A rough real estate value estimation function

$$Value = \frac{Current\ Net\ Rents}{(Mortgage\ Rate + \phi) - Avg.\ Future\ Net\ Rent\ Growth\ Rate}$$

The discount rate is a mix that can be divided into one part risk premium, one part depreciation and one part mortgage rates. Real depreciation and risk premiums (ϕ in the above equation) can be considered to be roughly constant over time. Mortgage rates, on the other hand, do vary and can influence property prices today. When rates fall, as they have been over the last couple years, this drives property prices up today by making future rental streams relatively more valuable in today's terms. Another way of thinking about this is that cheaper capital increases the demand for housing, and drives prices up. There is little doubt about the important role that mortgage rates have played in driving up prices.

A rough estimate is that each percentage point of interest rates adds about 10% to the value of a house. Hence had mortgage rates stayed up around 7% or so, prices in the Bay Area and the surrounding

communities would be at least 15% to 20% lower than they currently are. In short mortgage rates cannot explain the 60% increase in prices seen in the Bay Area over the past four years. Some of the price increases seen are justified by falling mortgage rates, but not all. Of course even with this, the risk here is that what mortgage rates give, they can also take away. If we do hit a bout of inflation (as we may be now), look for mortgage rates to shoot up sharply and the housing market to quickly slow down.

Rents, of course, are driven by the current supply and demand for housing. Future rents will depend on future housing market conditions. The tighter future markets look, the greater property prices today look. Southern California markets are tight, with four new people entering the area for each new unit being constructed. In contrast the Bay Area has averaged out to about 3 people per unit, just about on par with population growth. With population growth in the Bay Area flat because of the sagging economy, it seems clear that space constraints are not enough to justify the rest of the price increases.

So what does this mean for the current level of prices? As mentioned in my last article I think it is clear that the price increases over the past six to twelve months are simply not justified by the fundamentals. With mortgage rates rising slightly and no sign of an imminent return to rapid increases in rental growth rates it is hard to justify a surge in prices now. What is going on is a clear bubble that was started by mortgage rates. As mortgage rates have fallen, home equity has been rising and along with that equity came the desire to roll over into a larger property. Of course this raises demand for high end properties even more, drives up prices, and in turn creates more demand for upgrading. This is a sort of Ponzi scheme, where as long as there are new buyers to pick up the slack in the entry level market, there will continue to be upward pressures on real estate prices.

This bubble is bound to crash, and the only question is when and by how much. The ‘when’ will be critically tied to inflation and interest rates. As mentioned earlier, if you have to choose one statistic to focus your attention on, it will be the

New Population and New Housing for California MSAs

Area	03 New Units*	Pop / Units**
LOS ANGELES	21,260	7.67
SAN BERNARDINO	12,620	4.52
ORANGE	9,268	4.28
ALAMEDA	4,530	4.05
VENTURA	3,562	3.52
SAN DIEGO	18,324	3.27
FRESNO	5,915	3.17
CONTRA COSTA	6,894	3.13
KERN	6,112	3.07
SACRAMENTO	13,833	2.98
RIVERSIDE	30,047	2.95
SANTA CLARA	7,479	2.79
SAN FRANCISCO	1,582	2.50
US Average		1.94

* Residential Permits

** This is the ratio of the change in population between 1994 and 2004 relative to new housing units.

inflation statistic. As for the 'how much', there is still a chance for a relatively soft landing if things cool off quickly. However expect that every increase in the next six months will be offset by falling prices when the inevitable pop does come.

End Notes

¹ Import demand is more inelastic in the short run than in the long run. In other words, the quantity demanded does not change much in response to shifts in the exchange rates in the short run. This is because finding new sources of materials or vendors for intermediate goods takes time. Hence a fall in the exchange rate often leads to an increase in the trade deficit in the short run as opposed to a decrease as might be expected due to the fact that foreign goods become more expensive. This is known as the J-curve effect.

² Remember that the Government collects information on employment from two sources. One source is employers themselves who self-report employment in the context of filing for unemployment insurance coverage. This is the payroll data, and it gives a nice view of the economy, especially from an industry by industry perspective. On the other hand, payroll numbers fail to pick up the self-employed and those who are unemployed (defined as those who want a job and don't currently have one). To gather these numbers the Government uses a second parallel study of households called the Current Population Survey (CPS). This survey covers 70,000 households per month.

³ The economy will always have a certain level of unemployment as a result of the natural movement of workers between jobs—this is what is known as frictional unemployment. When employment for life was common as in the 40's and 50's unemployment tended to be lower. In today's world of unemployment benefits and with people switching firms and even careers multiple times over the course of a working life frictional unemployment has risen to a higher level.

⁴ Remember that there was a debate as to whether the US economy was even in a recession as late as August of 2001. Many economists didn't think there was any downturn in the economy because of the strange mixed signals being received from different parts of the economy, yet again reflecting the uniqueness of this downturn. The UCLA Anderson Forecast called the downturn in December of 2000.

⁵ Japan typically has lower unemployment rates, but that is because they define the unemployed as anyone who is seeking work that hasn't been employed in the previous month, where in the US we count those who are currently without work. If Japan used the US system, their numbers would be significantly higher. This is the long-run benefit of having labor markets that are relatively free from the type of worker protection rules commonly seen in Europe and Japan. The downside, of course, is that those workers who do find themselves out of a job due to macroeconomic circumstances are often harder hit than their counterparts elsewhere.