COUNCIL ON REVENUES

Office on Aging Conference Room
No. 1 Capitol District, Hemmeter Center
Fourth Floor, Room 410

Thursday, November 2, 2006
3:00 P.M.

PRESENT:

Council Members:
Paul Brewbaker (Chair), Jack Suyderhoud (Vice-Chair), Carl Bonham, Vito Galati, Michael Hirai (arrived late), Pearl Imada Iboshi (arrived late), and Eric Yeaman

Staff Members:
Department of Taxation: Tu Duc Pham, Cathleen Tokishi, and Donald Rousslang
Department of Budget and Finance: Keith Shimada

Others:
Jeffrey Au, PacifiCap
Randy Hiyoto, Senate Committee on Ways and Means
Lowell Kalapa, Tax Foundation of Hawaii
Casey Shoji, Senate Committee on Ways and Means

CALL TO ORDER:

Dr. Brewbaker called the meeting to order at 3:00 P.M.

COMMUNICATION TO THE COUNCIL:

None.

The Chair distributed copies of *Hawaii Economic Trends*, October 30, 2006, which he prepared for the Bank of Hawaii and which is included with these minutes.

Dr. Bonham distributed copies of an article written by Mike Leidemann entitled, "Council questions rail affordability," which had appeared in that morning's issue of the *Honolulu Advertiser* and which is also included with these minutes. According to the article, Mr. Toru Hamayasu, the City and County of Honolulu's chief transportation engineer:

> "…said the city relied on economic projections from the state's Council on Revenues to come up with estimates showing how the costs could be covered. Using the more conservative of the council's figures, city officials concluded that a new half-percent increase in the general excise tax dedicated to transit projects would likely raise just over $3 billion in today's dollars."

Also reproduced in the article was the table, "Paying for Transit," taken from the Honolulu High Capacity Transit Corridor Project report, showing general excise tax county surcharge revenues for 2006 and 2022. The table improperly states that "(t)he revenue projections are from the state Council on Revenues."

The Chair asked if they should communicate with Mr. Hamayasu. Dr. Pham offered to communicate with the City, but the Chair thought the Council should directly communicate with the City to say that the Council on Revenues does not have a forecast for them and that they should not refer to the Council on Revenues as if they had.

Dr. Bonham noted that the Council doesn't forecast county surcharge collections.
Dr. Suyderhoud added that the Council also did not issue projections through 2022. Dr. Pham noted that there are no data for tax collections by county, pointing out that amounts reported as being for the First Taxation District (i.e., Oahu) represent the entire income and taxes of some taxpayers that do business in other taxation districts in addition to the Oahu district.

Dr. Bonham stated that it was not uncommon for people to use the Council forecasts to infer forecasts for items that the members don’t look at, but in this case there is no forecast and they were just making it up.

Dr. Pham noted that he had suggested that the City use 70% of the Oahu tax base to compute the estimated county surcharge tax collections, and apply it to the 2005 year. However, the Chair thought that was external to the Council's objections.

<u>It was moved by Dr. Suyderhoud and seconded by Mr. Yeaman, that the Council write to the appropriate person, to be determined by the Chair, to clarify that the Council on Revenues does not prepare a forecast for county general excise tax collections and that their forecasts don't extend beyond six fiscal years.</u>

During discussion, Dr. Bonham stated that the issue was that the City implied that the Council had a forecast of tax revenues for Honolulu County and that the Council had a forecast associated with the tax increase when they in fact have neither. Dr. Suyderhoud added that they also did not forecast beyond 2012.

Dr. Pham suggested that the Chair write to the Mayor and to the City Council. Dr. Suyderhoud suggested sending a copy of the letter to the author of the article as well. The Chair stated that he'd speak with Mr. Leidemann, but that the letter should go to the Mayor and to the Council Chair.

Dr. Bonham did not want the County Council making decisions based on the idea that the Council on Revenues had somehow predicted those collection figures. The Chair agreed and stated that he would draft a letter for Dr. Pham's office to finalize for his signature.

The Chair called for the vote, and the motion passed with the following votes:

Paul Brewbaker	Yes
Jack Suyderhoud	Yes
Carl Bonham	Yes
Vito Galati	Yes
Michael Hirai	Absent
Pearl Imada Iboshi	Yes
Eric Yeaman	Yes

MINUTES OF THE MEETING OF SEPTEMBER 6, 2006:

The Chair asked if there were any corrections to or comments about the minutes of the September 6, 2006, meeting. There were none, so Dr. Brewbaker called for a motion to approve the minutes.

It was moved by Dr. Suyderhoud and seconded by Dr. Imada Iboshi, that the minutes of the September 6, 2006, meeting be accepted. The Chair called for the vote, and the motion passed with the following votes:

Paul Brewbaker	Yes
Jack Suyderhoud	Yes
Carl Bonham	Yes
Vito Galati	Yes
Michael Hirai	Absent
Pearl Imada Iboshi	Yes
Eric Yeaman	Yes

TOTAL PERSONAL INCOME FORECAST:

The Chair distributed copies of the workbook prepared for the Council, and asked Dr. Pham to discuss Table 5, Summary of Total Personal Income Forecasts, Summary of Annual Growth Rate, on page 27.

Dr. Pham stated that this table was updated since the last time, and based on the September meeting, the projections are 6.3% and 5.9% for calendar years 2006 and 2007, respectively. These projections are very close to the Council's August forecasts for total personal income, which were 6.5% and 6.0%, respectively. The model was updated because the construction expenditure was higher than previously estimated.

The Chair then asked if anyone was inclined to change the August forecast based on current information.

Dr. Bonham noted that they had talked about nominal growth slowing at the last meeting, but that was reversed based on the income data released in September. Growth rates, at a compound annual rate, were at 5.8% last year in the first quarter, 4.5% in the second quarter, 5.5% in the third quarter, and 6.4% in the fourth quarter. It then went up to roughly 7.75% for both of the first two quarters of 2006 on a quarter-to-quarter annualized rate. On a year-over-year rate, it went up about 0.5% for first half of this year, which was stronger than the last half of last year.

Dr. Pham expressed concern about the 5.8% Consumer Price Index (CPI) leaving only a 0.6% real growth rate. Dr. Bonham stated that he was surprised to find that the real growth rate was also accelerating, which on a quarter-to-quarter basis is faster in the first half of 2006 than every quarter of 2005 except the first quarter.

Dr. Suyderhoud asked if Dr. Bonham felt that the underlying economy in the last half of 2006 was stronger than they thought at their previous meeting.

Dr. Bonham stated that the data would suggest that it is not slowing as much as they thought with respect to income. He added that he was comfortable with the current numbers and certainly wouldn’t lower it. The Chair stated that he would not raise it since he was not as comfortable with the current numbers.

<u>It was moved by Dr. Suyderhoud and seconded by Mr. Galati, that the Council retain the 6.5% forecast for calendar year 2006 personal income growth. The Chair called for the vote, and the motion passed with the following votes</u>:

Paul Brewbaker	Yes
Jack Suyderhoud	Yes
Carl Bonham	Yes
Vito Galati	Yes
Michael Hirai	Absent
Pearl Imada Iboshi	Yes
Eric Yeaman	Yes

The Chair expressed more concern about 2006 than 2007, because of instability in things like housing and construction, and he wasn't impressed with the tourism numbers. Dr. Bonham stated that it would take time for those things to affect the income data, and that they would need to have a truly awful fourth quarter before there would be a big change in nominal income growth. The Chair added that a downward revision in the job growth numbers in February could also affect nominal income growth, and is something that he'd be looking for. Dr. Bonham, however, stated that he felt that those numbers would be revised upwards. Dr. Imada Iboshi stated that she'd never seen them revised downward. Dr. Bonham contradicted her, adding that downward revisions tended to happen when Hawaii was growing much slower than the U.S. mainland and vice versa since they are using national data to estimate Hawaii components. Dr. Imada Iboshi said that what he said might be true for labor data but not for jobs data.

The Chair stated that he was not concerned enough to change the forecast. However, he believes that the slowdown would begin to show up in data.

Dr. Suyderhoud asked for thoughts on whether they expected the national economy to have a harder rather than a softer landing.

The Chair stated that he does not expect a harder landing, and that he sees the economy continuing to slow to 3% growth. He thinks that energy is problematic for domestic travel and reflected in the softer growth rates for that rather than income.

Both Dr. Bonham and Dr. Imada Iboshi agreed that it was the 10% to 15% decline in travel from Japan rather than domestic travel that is negatively impacting Hawaii's economy. Dr. Bonham believes that domestic travel would set another record, and that his forecast was for growth of 2.17%. He recently ran the UHERO model that showed 6.6% income growth in 2006 and 6.3% for 2007. He also had a 5.2% inflation forecast for this year and 4.4% for next year. Therefore, their real personal income growth numbers were coming down quickly; 1.3% real personal income growth for this year and 1.8% for next year, which is pretty significant.

The Chair agreed, adding that he had 1.5 % real personal income growth for next year.

Dr. Bonham added that his number was based on a 1.3% growth in the jobs count for next year, well over 2% to 2.5% this year. The Chair had 1.8% in jobs growth for next year and inflation of 4.6%.

Dr. Pham stated that those numbers would result in total personal income growth of 6.1% or 6.2%. Dr. Bonham said that something like 6.25% would be okay. The Chair noted that their current forecast was 6.0%, and Dr. Bonham wondered if they should bother changing it.

Dr. Suyderhoud asked what tax collections could say about personal income. Nothing for 2007, but Dr. Bonham said that monthly income tax collections could say something about the second half of 2006. Dr. Suyderhoud noted that the cumulative total through October implied growth of about 5%. However, Dr. Pham noted that there was a single, large corporate income tax payment last year and that without that payment the growth would actually be something like 7%.

Dr. Suyderhoud asked if the others thought that the forecast should be more than the current 6%. Dr. Bonham's projection is 6.3% and the Chair's projection is 6.2%. The models range from 5.6% to 6.9%.

The consensus was to leave the forecast at 6.0% for 2007.

The Chair said that he believed growth would be 6.0% in 2008, and though they don't do forecasts for 2008, asked if anyone had any thoughts about 2008. Dr. Bonham stated that his nominal growth rates were down to 5.3% in 2008 with inflation coming down, but he added that his real growth rates were not changing and remained at 1.8%. The Chair noted that he wasn't getting down to 5% growth until 2009 and that his real growth rates were 2.2%.

The Chair noted that everyone seemed to have the same slow fade in inflation. Both he and Dr. Bonham noted that the construction numbers were going down quite hard.

It was moved by Dr. Suyderhoud and seconded by Dr. Imada Iboshi, that the Council retain the 6.0% forecast for calendar year 2007 personal income growth. The Chair called for the vote, and the motion passed with the following votes:

Paul Brewbaker	Yes
Jack Suyderhoud	Yes
Carl Bonham	Yes
Vito Galati	Yes
Michael Hirai	Absent
Pearl Imada Iboshi	Yes
Eric Yeaman	Yes

NEXT MEETING:

The next meeting to forecast General Fund Revenue was scheduled for Tuesday, December 12, 2006, at 4:00 P.M. in the Office on Aging Conference Room, at the Hemmeter Center, No. 1 Capitol District.

ADJOURNMENT:

The Chair called for a motion to adjourn. Mr. Hirai moved to adjourn the meeting and Mr. Yeaman seconded the motion. The motion carried unanimously and the meeting adjourned at 3:30 P.M.

HAWAII ECONOMIC TRENDS

October 30, 2006

prepared by
Paul H. Brewbaker, Chief Economist
Bank of Hawaii

Economic information is available electronically at
https://www.boh.com/econ/

Executive Summary
October 30, 2006

- Third quarter 2006 Hawaii data continued to exhibit signs of slowing economic growth, as hard-braking from residential investment and capacity-constrained tourism, and the friction burn from above-national average inflation, reduced real personal income growth to a measured standstill through mid-year. Hawaii employment measures displayed a more moderate slowing, from unsustainable growth just under 3 percent in recent years, to a pace—currently around 2 percent—consistent with our multi-year forecast deceleration to a range of 1-2 percent. Real income growth may be nil in 2006, after several years of strong increases, because of higher inflation, but convergence to real growth rates of 2-3 percent is forecast for the next few years.

- Hawaii tourism is now forecast to decline slightly for 2006 as a whole, perhaps a half percentage point, from its 2005 all-time high. During the nine months through September 2006, visitor arrivals and comparable volume measures increased only 0.1 percent, down from 7 and 8 percent annual growth in 2004 and 2005, respectively. Tourism volumes should remain near the 2005 record before renewing slow rates of increase in the out-years of the decade. Higher-than-expected crude petroleum prices undermined earlier forecasts of tourism growth in 2006 and, despite recent pull-backs, have weighed on consumer expenditure. Japan's improved economic fundamentals are being thwarted by hotel capacity constraints in Hawaii, exacerbated by a wave of hotel renovation and condominium and timeshare conversion. Domestic arrivals growth with its associated longer stay lengths is crowding out international arrivals. Airline capacity continues its accommodative expansion. A new, third, inter-island commercial jet aviation service provider in Hawaii is expanding access and affordability in a formerly duopoly market.

- Published forecasts of decreases in real, inflation-adjusted construction expenditure in the islands over the next several years in collaboration with the University of Hawaii Economic Research Organization are consistent with the continuing, now two year-long decline in residential sales transactions volumes and stabilizing average home prices that took on a more definitive tone in 2006. Home prices in 2006 were flat through the third quarter; volumes continued declining. Stabilized home prices have undercut residential development; construction's overall forecast decline is expected to be dominated by falling residential construction. Nonresidential construction's smaller and resilient share of the total cannot offset the downward track of the residential cycle. Public infrastructure investment will remain absent.

- Damage estimates of recent earthquakes on the Big Island are quickly running into the several hundreds of millions of dollars, and the temblors were a reminder of both the persistent presence of unpredictable event risk and the challenges of managing external perceptions from the remotely-located Hawaii economy.

- US Treasury yields backed up 25-30 basis points in early-October on data reports pointing to US economic strength, persistent core inflation, and indication in the FOMC minutes that mixed opinion about prospects for anti-inflation success remained among members. After their recent rise, however, yields on the 2-year and 10-year Treasury notes returned to levels between 4.50 and 4.75 percent that we think could be a good guess at the neutral Fed Funds rate. This range is roughly consistent with our forecast for a relatively stable and flat yield curve through 2007, combined with a small—50-basis point—reduction in the Fed Funds target beginning in first quarter 2007, restoring modest upward slope to the term structure of interest rates. We interpret the decline in the spread from nominal to real US Treasury yields as primarily a reduction in unobservable inflation risk, since long-term core inflation expectations remain fairly stable in published forecasts.

Hawaii economic indicators

aggregated from monthly, seasonally-adjusted raw data

		2004:3	2004:4	2005:1	2005:2	2005:3
Real personal income	*billion 2005 $*	43.528	44.322	44.470	44.725	44.472
Growth rate	*% y-o-y*	6.1	6.6	4.7	4.0	2.2
Honolulu CPI inflation*	*% y-o-y*	3.3	3.3	3.2	3.1	4.1
Labor force	*thousands*	619.8	622.1	625.2	631.4	638.6
Persons employed	*thousands*	600.6	603.4	606.5	613.6	621.1
Unemployment rate	%	3.1	3.0	2.9	2.7	2.8
Occupied jobs	*thousands*	592.7	599.4	601.0	606.9	611.1
Private building permits	*million $*	581.0	653.7	697.9	744.2	1,059.9
Nonresidential	*million $*	75.1	79.5	59.2	106.1	259.8
Residential	*million $*	348.4	426.4	393.2	478.0	630.3
Additions and alterations	*million $*	157.5	147.9	245.5	160.1	169.8
Oahu home sales	*units*	3,152	3,292	3,163	3,239	3,248
Single-family	*units*	1,156	1,215	1,161	1,191	1,184
Condominium	*units*	1,996	2,077	2,002	2,048	2,064
SF median price	*thousand $*	459.4	499.2	536.4	571.8	603.1
Condo median price	*thousand $*	212.3	221.7	232.6	257.3	276.1
Visitor arrivals	*thousand*	1,750.8	1,773.9	1,850.4	1,804.8	1,881.3
Domestic arrivals	*thousand*	1,235.3	1,266.6	1,328.3	1,261.2	1,357.4
International arrivals	*thousand*	515.5	507.3	522.1	543.6	523.9
Hotel occupancy	*%*	78.54	78.10	79.77	80.74	81.35
Average daily room rate	*$*	152.43	154.39	159.75	160.29	169.64

		2005:4	2006:1	2006:2	2006:3	2006:4
Real personal income	*billion 2005 $*	44.746	44.719	45.132		
Growth rate	*% y-o-y*	1.0	0.6	0.9		
Honolulu CPI inflation*	*% y-o-y*	4.5	5.4	5.8		
Labor force	*thousands*	643.1	645.5	648.0	653.3	
Persons employed	*thousands*	626.2	628.9	628.2	634.4	
Unemployment rate	%	2.7	2.5	3.0	2.9	
Occupied jobs	*thousands*	616.5	620.8	622.5	623.6	
Private building permits	*million $*	1,041.3	767.4	898.5	1,584.3	
Nonresidential	*million $*	63.8	78.3	152.8	529.1	
Residential	*million $*	738.6	456.8	485.7	605.3	
Additions and alterations	*million $*	238.9	232.2	260.1	450.0	
Oahu home sales	*units*	2,927	3,022	2,785	2,381	
Single-family	*units*	1,077	1,119	1,044	972	
Condominium	*units*	1,851	1,903	1,741	1,409	
SF median price	*thousand $*	635.2	636.6	628.6	628.9	
Condo median price	*thousand $*	300.1	311.1	304.9	313.3	
Visitor arrivals	*thousand*	1,880.2	1,839.7	1,849.0	1,853.6	
Domestic arrivals	*thousand*	1,365.8	1,329.3	1,337.6	1,376.6	
International arrivals	*thousand*	514.3	510.4	511.3	476.9	
Hotel occupancy	*%*	82.18	79.79	80.47	79.20	
Average daily room rate	*$*	176.33	178.82	183.90	188.53	

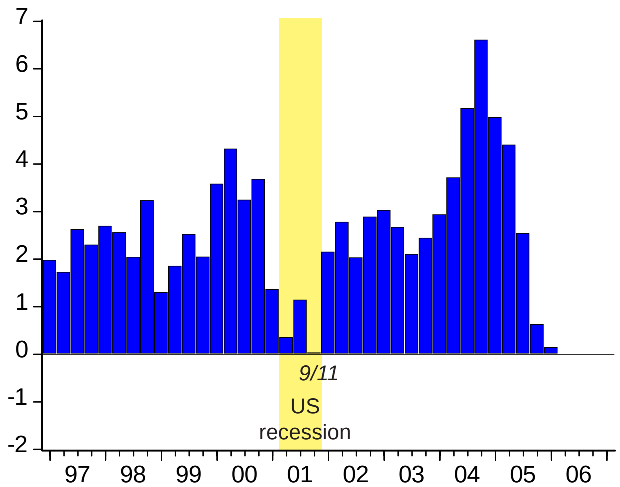
**nonlinear interpolation*

Hard braking transition to slower, sustainable growth

Hawaii's ability to sustain economic growth above its non-accelerating inflation potential of perhaps 3 percent has been constrained by tight labor markets, capacity limits in tourism, and the inability of housing supply to fulfill demand in a tight regulatory environment. After peaking above 4 percent in 2004, real income growth decelerated in 2005, slowing sharply though mid-2006 when Honolulu inflation reached 5.8 percent, two percentage points higher than the national average. Ultra-tight labor market conditions persisted through the summer in Hawaii, although the economic deceleration did ease labor market pressures somewhat through August. Hawaii's unemployment rate backed up about one-half percentage point higher than at the beginning of the year, before returning to about two percentage points below the national average. The US unemployment rate is thought to be close to full employment, the clumsily-named "non-accelerating inflation unemployment rate (NAIRU)" often cited in monetary policy theory. Through 2007 we forecast continued slowing of Hawaii employment growth measures from unsustainable rates of increase above 2 percent to growth rates between 1 and 2 percent. Hawaii's unemployment rate should drift upward slightly, even as Hawaii real income growth drifts back upward to around 2 percent as well. Local inflation will subside, but only gradually over several years towards a national norm around 2 percent.

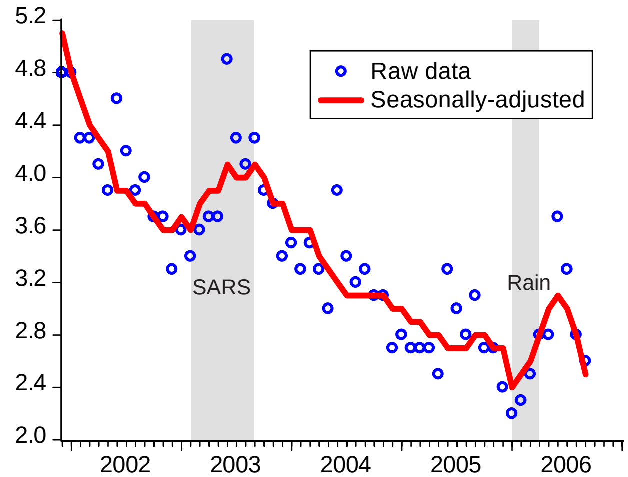
Hawaii real personal income growth through second quarter 2006

(*quarterly percent change, year-over-year*)



Hawaii unemployment rate

(*monthly in percent, seasonally-adjusted, through September 2006*)

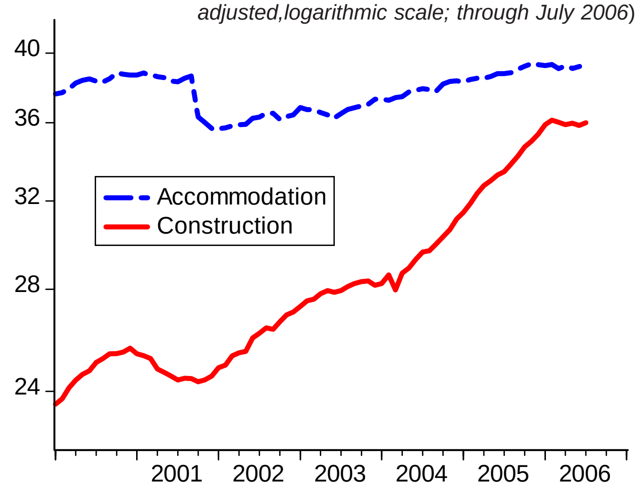


Bad weather or double whammy?

A rise in Hawaii unemployment from around 2.5 percent to around 3.0 percent during first half 2006 coincided with a period of unusually wet weather and a series of natural disasters that also may have temporarily slowed construction activity. Public school calendar changes during summer 2006, conforming all public schools statewide to an earlier than historical start to the new school year in late-July, complicate interpretation of most recent data because of the change in seasonality implied by an earlier statewide school year start. Was rising Hawaii unemployment transitory? Or had a turning point been reached? Thankfully, unemployment rates in Hawaii during third quarter 2006 reversed the increase from earlier in the year. At least a portion of the temporary rise appears to have been a consequence of abnormally bad, rainy weather last winter that hampered construction activity. Construction jobs stopped rising in first half 2006 at around 36,000 while jobs in accommodation flattened out at 39,000 through mid-year. At current levels construction jobs are 800 short of their 1991 prior peak; accommodation employment peaked at 42,000 in 1991.

Payroll employment in hotels and construction

(*monthly in thousand occupied jobs, seasonally-adjusted,logarithmic scale; through July 2006*)

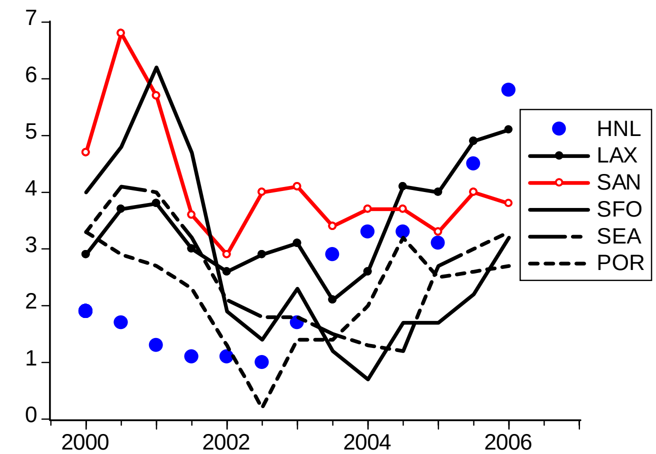


US core inflation slowing while rising in Hawaii?

US core inflation measures (less food and energy) persisted in ranges that had financial and commodity markets on edge and that induced the Federal Open Market Committee to extend its target Fed Funds rate hikes past “withdrawing accommodation” into “further firming.” Fed Chairman Bernanke’s Congressional Testimony, reaffirming a 2007 projection of 2.25 to 2.50 percent core inflation, and Fedspeak since June 2006 seemed to calm the markets subsequently. Hawaii’s inflation rate, however, accelerated during first half 2006, rising to lead US western cities with a year-over-year increase of 5.8 percent. Honolulu’s core inflation rate in first half 2006 was 5.0 percent. Since housing and energy inflation were shared events, the Honolulu acceleration reflected local factors. The “friction burn” from economic growth beyond Hawaii’s capacity to sustain it has morphed into higher than national average inflation. Local inflation should subside in coming years.

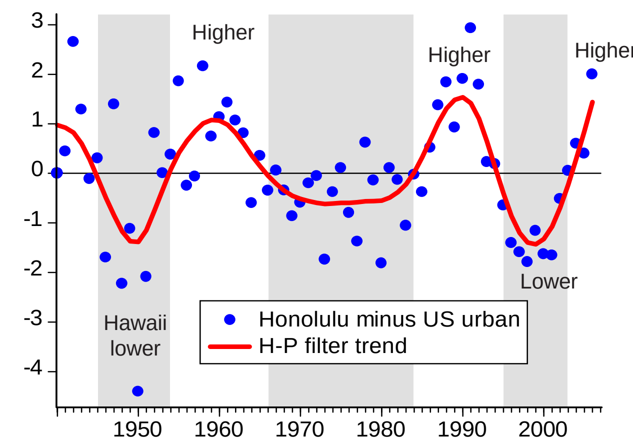
CPI inflation in US western cities

(*semi-annual year-over-year increase in percent, through first half 2006; primary airport abbreviations indicated*)



Honolulu minus US urban inflation

(*annual in percentage points, including first half 2006, with Hodrick-Prescott filter trend*)



Honolulu inflation cycling to an outer bound

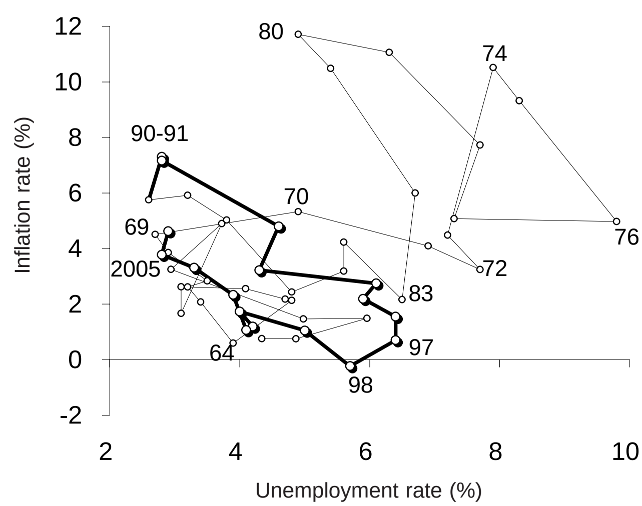
Over the course of the decades, Honolulu inflation has tended to vary pro-cyclically with strong local economic performance in a range bounded by two percentage points above and below the US average (above, right). First half 2006 Honolulu’s CPI-U inflation approached the upper bound. In terms of the “Phillips Curve” relationship between inflation and unemployment, the path set out by the two variables during 2006 for Hawaii reached a turning point historically associated with the end of prior expansions and the beginning of economic slowdowns. “Well contained” inflation expectations mean that the recent oil price shock did *not* displace the trajectory as in the 1970s. For Hawaii we forecast smooth convergence to 2 percent inflation and 4.5 percent unemployment in 2010.

Hawaii inflation-unemployment trade-off

(*annual in percent, highlighting recession-recovery cycle since the 1980s, through first half 2006*)

Hawaii inflation-unemployment trade-off

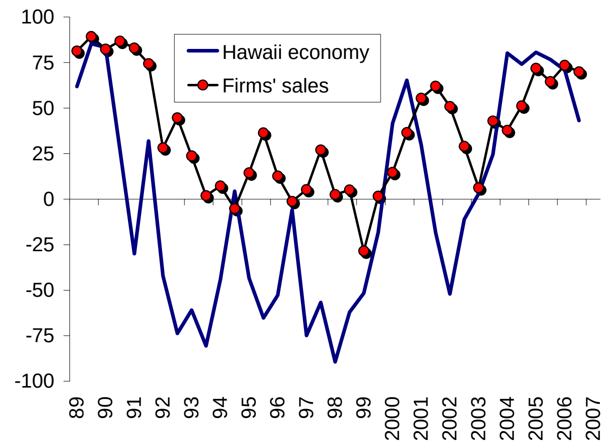
(*annual in percent, historical data from the early 1950s through 2005*)



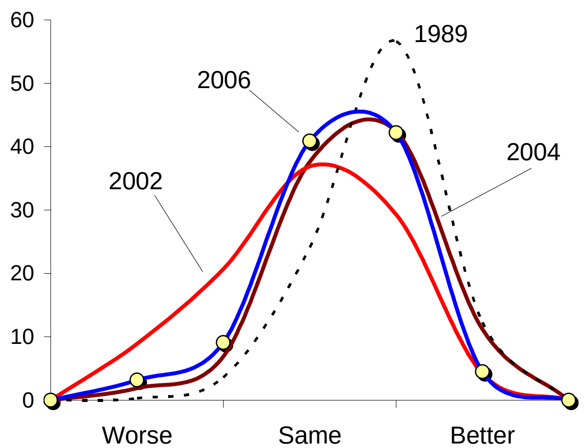
Hawaii business confidence reflects slowdown

While hovering with only a slight downward slide the last few years, indexes of business confidence in Hawaii from Bank of Hawaii's semiannual survey of business confidence had remained close to cyclical highs. During the August 2006 survey a marked decline in expectations for performance of the overall Hawaii economy was revealed, along with comparable declines in expectations for responding firms' own industries. Sales expectations remained comparatively strong, although historically these have tended to move upward and downward with the longest lag relative to overall economy expectations. Still, the distribution of sales expectations (below) only marginally moved to the left of recent highs recorded in 2004. Among changes in expectations for the next 12 months: one year ago 58 percent of respondents expected higher performance for the local economy, in August 2006 that had subsided to 37 percent of respondents. Complete historical detailed data are posted at www.boh.com/econ/.

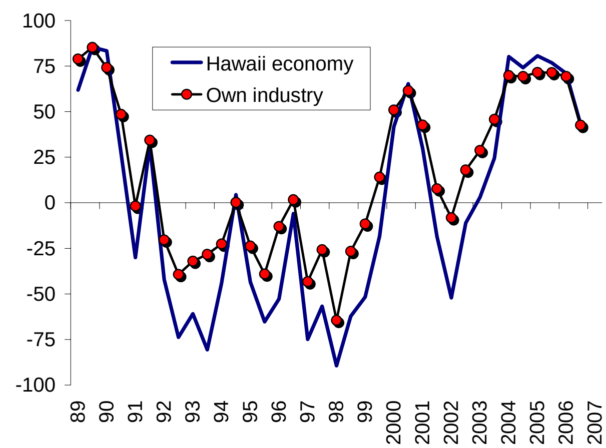
Bank of Hawaii Business Confidence Survey diffusion indexes of survey results for overall economy and respondent firms' own sales
(*zero is neutral response*)



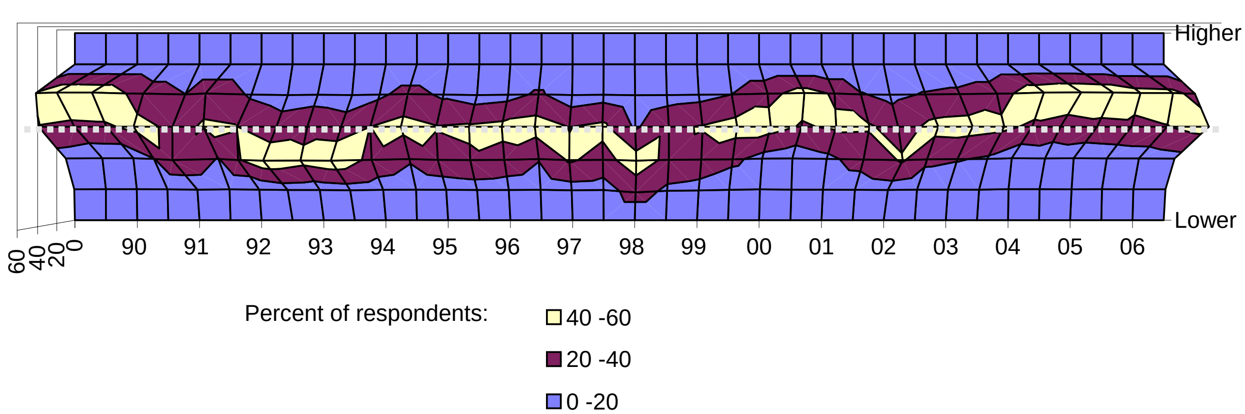
Bank of Hawaii Business Confidence Survey distributions of firms' own sales expectations
(*polynomial approximations*)



Bank of Hawaii Business Confidence Survey diffusion indexes of survey results for overall economy and respondents' own industries
(*zero is neutral response*)



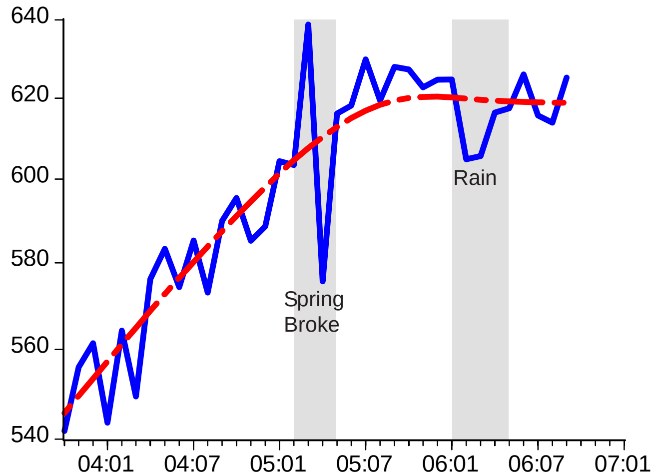
Bank of Hawaii business confidence survey: economy-wide expectations' distribution over time



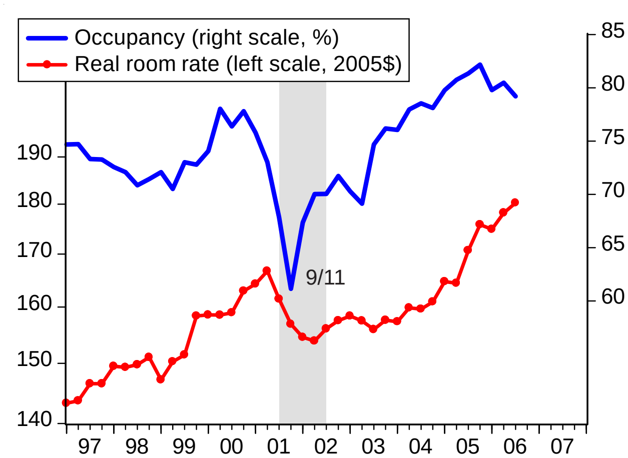
Tourism approaches its capacity constraint

Following two years in 2004 and 2005 of 7-8 percent growth in total visitor arrivals to an all-time high in 2005, the performance of tourism in 2006 is now expected to fall short of last year's record. Early forecasts of 4 percent arrivals growth in 2006 were based on lower oil prices than prevailed for much of the year, and on much stronger responses to general improvements in Japan's economic performance and outlook than has occurred. Anecdotal reports from summer 2006 performance suggest that during the seasonal peaks in July and August domestic visitors are "crowding out" international visitors in sold-out hotels. The longer stay length of domestic visitors is balanced against the higher average daily expenditure of international visitors, although hotels are the net gainers against the net losses of certain other tourism services and trade providers such as high-end retailers. Year-to-date through August 2006, total visitor arrivals, total visitor days (arrivals times length of stay), as well as the average daily census all increased only 0.1 percent, against an increase in lift around 1 percent. An active period of hotel renovation and condominium and timeshare conversion, however, have doubtless limited an otherwise unchanged visitor plant inventory. These latter capacity constraints are probably trumping the otherwise accommodative increase in scheduled air seats, and the introduction of new interisland air travel capacity brought by a third provider of jet commercial aviation service. Domestic arrivals growth this year has been particularly strong in the intermountain western US and central states, but weakest from the US East Coast. Japanese arrivals declined 9 percent through August; Japanese visitor days declined 10 percent. Year-over-year, the total visitor count unchanged in September, though domestic numbers eked out a gain. Visitor expenditure in the first nine months of 2006 increased 3.8 percent, but that was outstripped by local inflation of 5.8 percent during much of the same period.

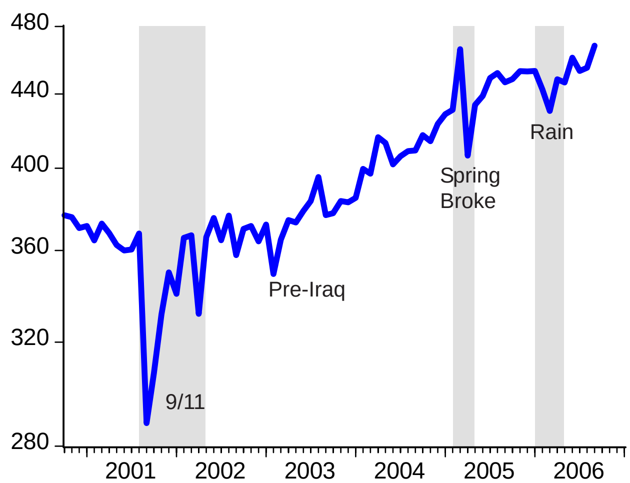
Hawaii visitor arrivals through Sept. 2006
(*thousands, seasonally-adjusted, logarithmic scale*)



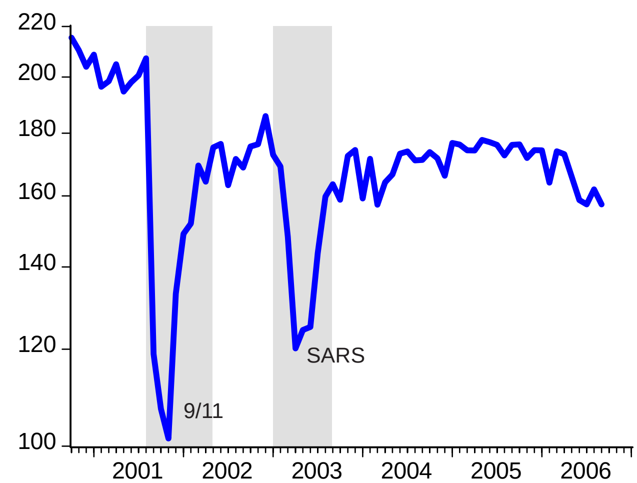
Hawaii hotel performance measures
(*as noted, seasonally-adjusted, through August 2006*)



Domestic visitor arrivals through Sept. 2006
(*monthly in thousands, seasonally-adjusted, logarithmic scale*)



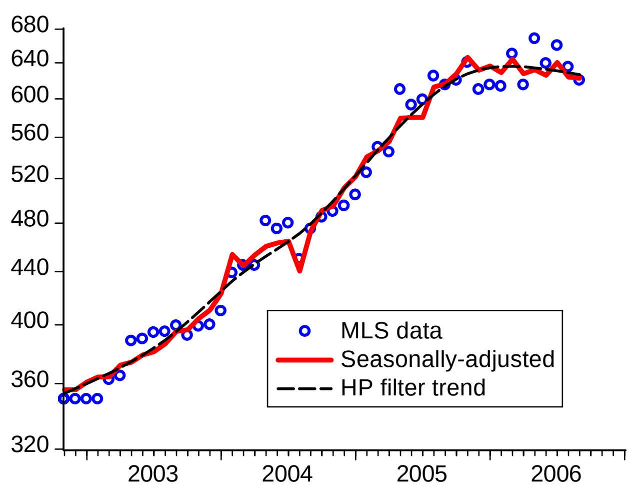
International visitor arrivals through Sept. 2006
(*monthly in thousands, seasonally-adjusted, logarithmic scale*)



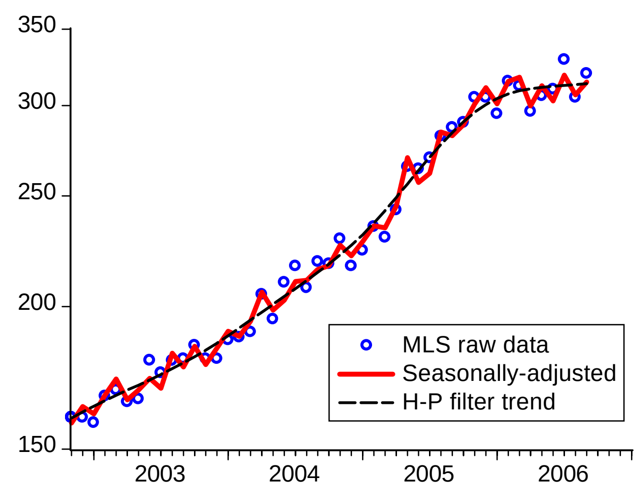
Residential investment continuing to soften

Seasonally-adjusted Oahu housing transactions data continued to exhibit the now two-year old decline also seen on the neighbor islands through third quarter 2006. A multi-year fade in transactions volumes is forecast through the remainder of the decade, during which interval home prices should be roughly stable. In the first nine months of 2006, Oahu single-family home prices decreased on trend at an annualized rate of about 1 percent, falling around 3 percent on an annualized basis in the last two quarters. But with median single-family price prices around $630,000 on Oahu, homes are relatively affordable compared to $700,000 benchmarks in California markets, on Maui and on Kauai. Honolulu condominium market prices continued to rise slightly on the tailwind of continued relative affordability. In the first nine months of 2006 existing condominium median sales prices rose at a 5.7 percent annualized rate, slowing to a 2.9 percent annualized rate during the most recent two quarters. A richer texture of price appreciation in more affordable markets, combined with downward pricing pressures at the high-end, now is masked by the relative stability of measures such as median and mean prices. On the neighbor islands, resort markets with higher offshore investor participation have reportedly gone dark very quickly. Construction forecasts for decline over the next several years are dominated by the expected retrenchment in residential construction commitments accompanying the loss of expected price appreciation.

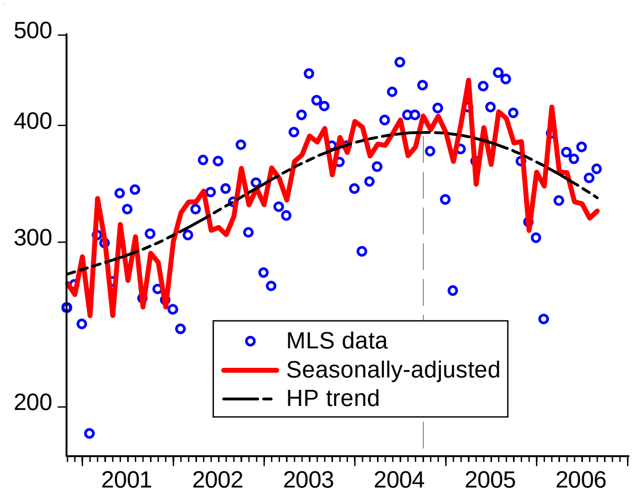
Oahu single-family home median sales prices
(*thousand dollars, log scale, through September 2006*)



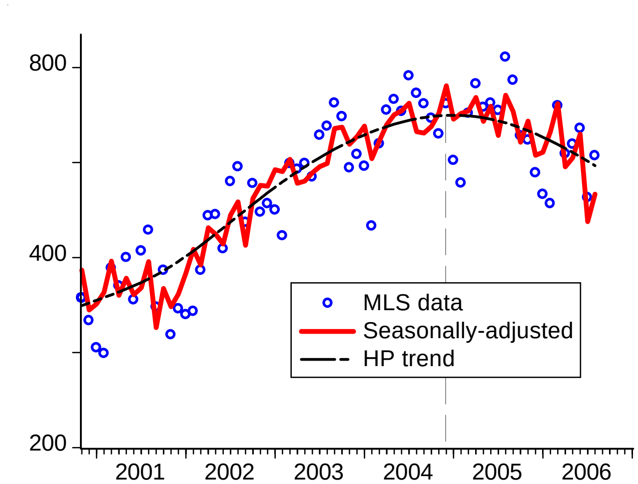
Oahu condominium median sales prices
(*thousand dollars, log scale, through September 2006*)



Oahu single-family home sales transactions
(*units, through September 2006, log scale*)

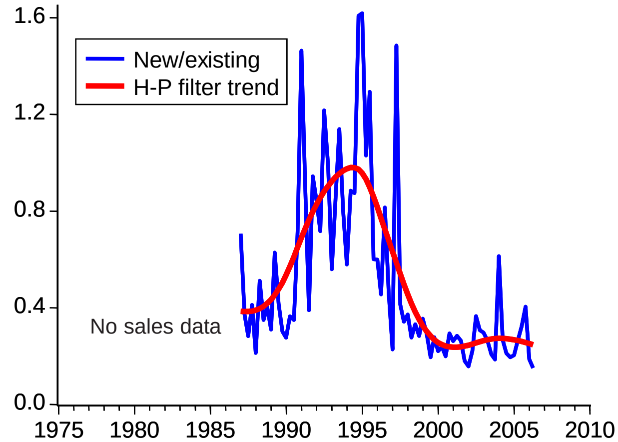


Oahu condominium sales transactions
(*units, through September 2006, log scale*)

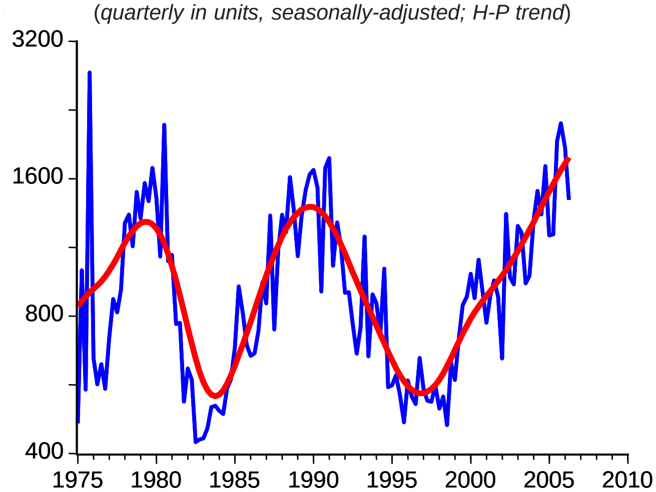


Home prices signal end to production cycle
Median single-family home prices in Hawaii began to flatten out in second half 2005 and remained largely constant during 2006, lagging California markets by a couple quarters. Without the incentive of prospective future home price increases, residential construction would be expected to wane. Neighbor island commitments to build remained strong through mid-2006, though the dominance of high-end resort second-home buyers made this market more vulnerable to an investor pullback that already may have begun. Oahu homebuilding commitments remained a relatively small fraction of existing home sales during the recent expansion (graph at right), unlike the experience during the 1990s cycle. If true, the housing glut exacerbated by State "affordable housing" supply-side interventions during the 1990s, and by military downsizing on the housing demand side, should not present as strong a challenge to homebuilding during the next few years. We forecast modest declines in residential construction.

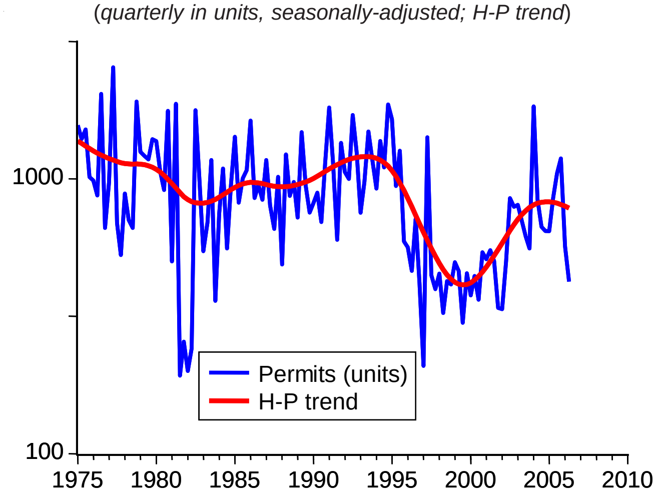
Oahu ratio of new housing units authorized for construction to sales of existing homes
(*ratio, Hodrick-Prescott filter trend*)



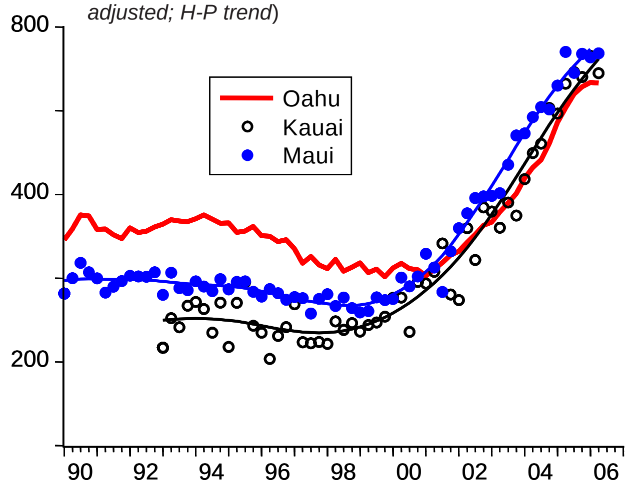
Neighbor island housing units authorized by building permits through mid-2006
(*quarterly in units, seasonally-adjusted; H-P trend*)



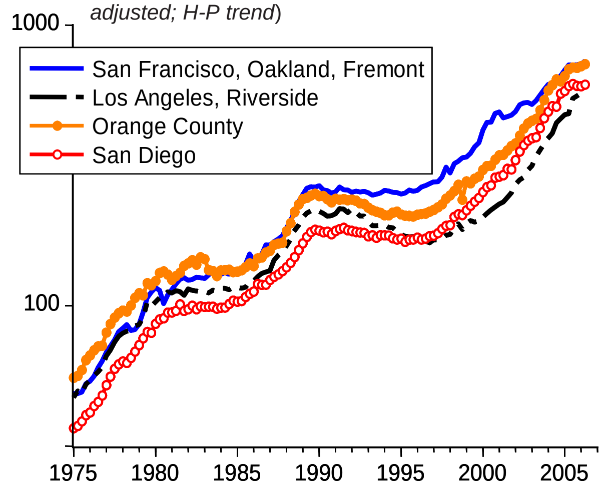
Oahu housing units authorized by building permits through mid-2006
(*quarterly in units, seasonally-adjusted; H-P trend*)



Hawaii median single-family existing home sales prices through third quarter 2006
(*quarterly in thousand dollars, log scale, seasonally-adjusted; H-P trend*)



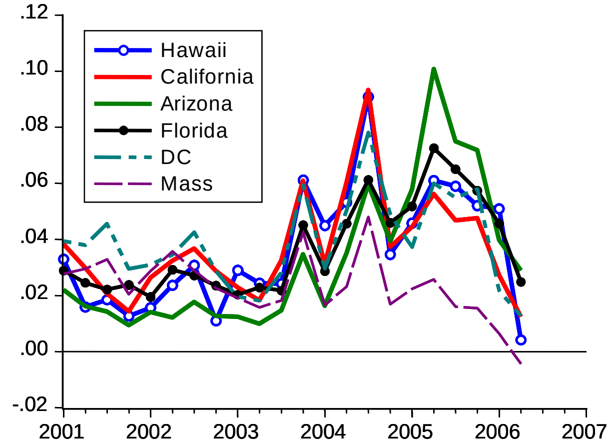
California median single-family existing home sales prices through second quarter 2006
(*quarterly in thousand dollars, log scale, seasonally-adjusted; H-P trend*)



Home price transmission still strong

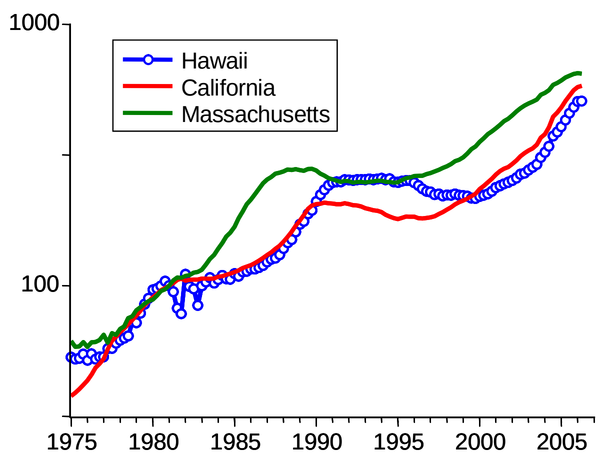
As covered in previous Bank of Hawaii reports, capital and labor mobility combined with monetary union, which equates interest rates across regional markets, means that Hawaii home prices should be expected to share mainland long-run rates of home price appreciation, unless an arbitrage persists. Such shared appreciation rates have been observed, although as in many coastal jurisdictions with restrictive regulatory environments, the variation in home prices around those trends in Hawaii has been wide. Updating earlier analysis, these graphics illustrate how Hawaii home price movements follow the national pattern with a lag of several quarters. Rapid deceleration of rates of single-family home price increase observed across the country in 2005 and early-2006 was also a Hawaii phenomenon (graph at right). Casual inspection of the data suggest that these trends appeared first in markets like the DC Area and Florida, before becoming more apparent in Hawaii and western states. A formal regression test of this transmission crudely validates the hypothesis.

Quarterly log changes in OFHEO same home "quality-adjusted" price indexes
(selected states, through second quarter 2006)

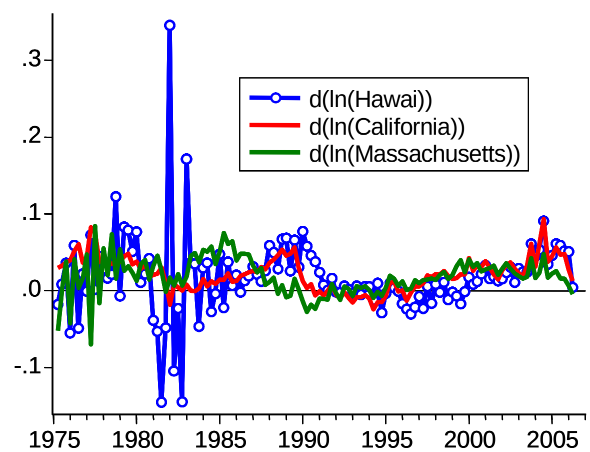


Source: Office of Federal Housing Enterprise Oversight

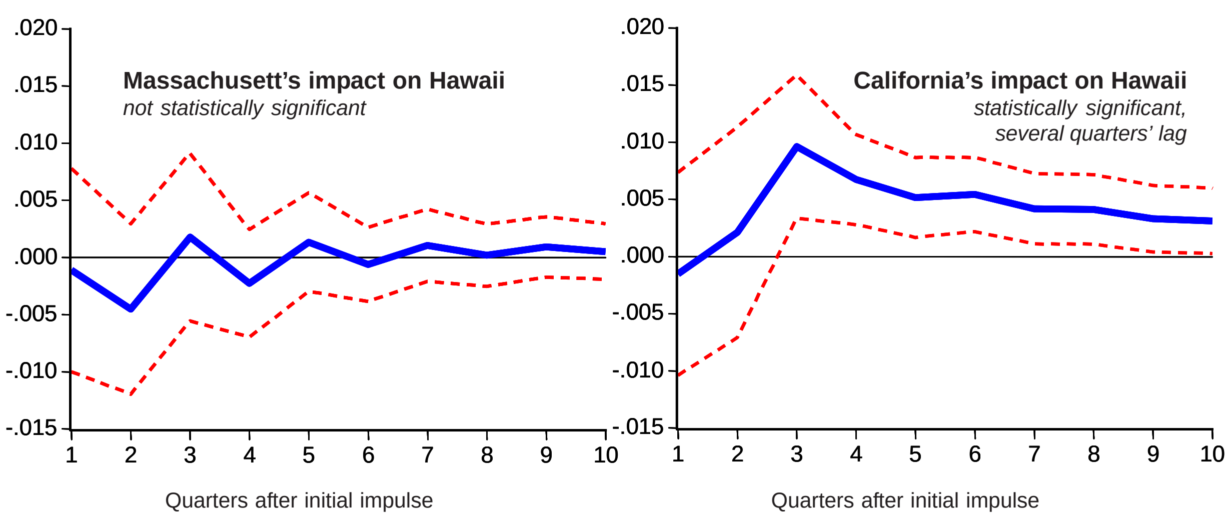
OFHEO single-family home price indexes
(*first quarter 1981 = 100*)



Quarterly log changes of home price indexes
(*quarterly changes in natural logarithms*)



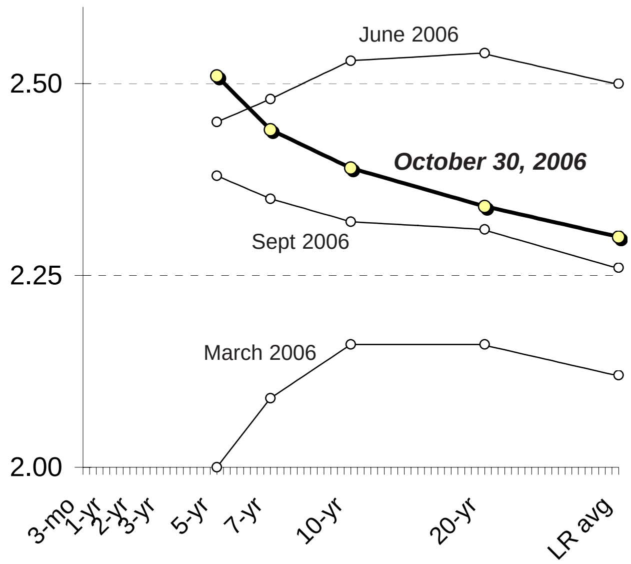
Impulse responses from small vector-autoregressions on OFHEO home price indexes
Impacts of a one standard error shock to the log change of mainland single-family home prices on Hawaii (including 99 percent confidence interval)



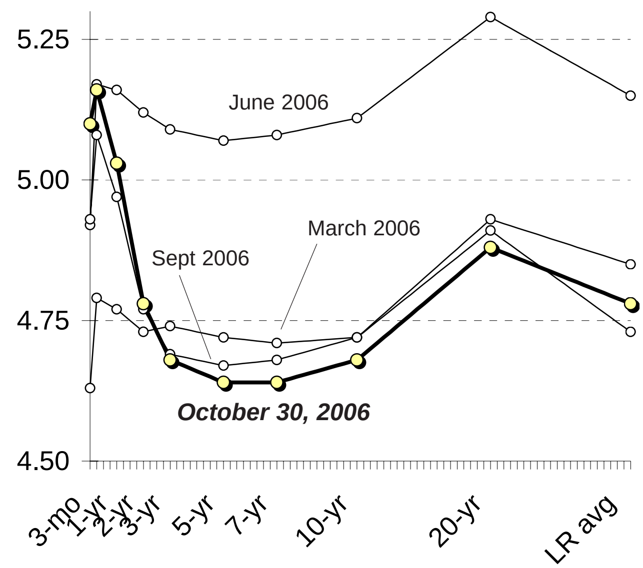
Inflation worries remain well-containd

We forecast long-termTreasury yields remaining range-bound within recent months' variation, with modest Fed target rate cuts in early-2007 as the data gradually confirm lower inflation risks. A rise in spreads between nominal and real yields between 2003 and 2006 can be interpreted as an increase in an unobserved "inflation risk" premium. Since June 2006, about half of the nominal yield decline at middle maturities appears to be attributable to an unwinding of that inflation risk premium. Published core inflation forecasts remain largely unchanged (notes below).

Real TIPS yields
(*percent, adjusted to constant maturities*)

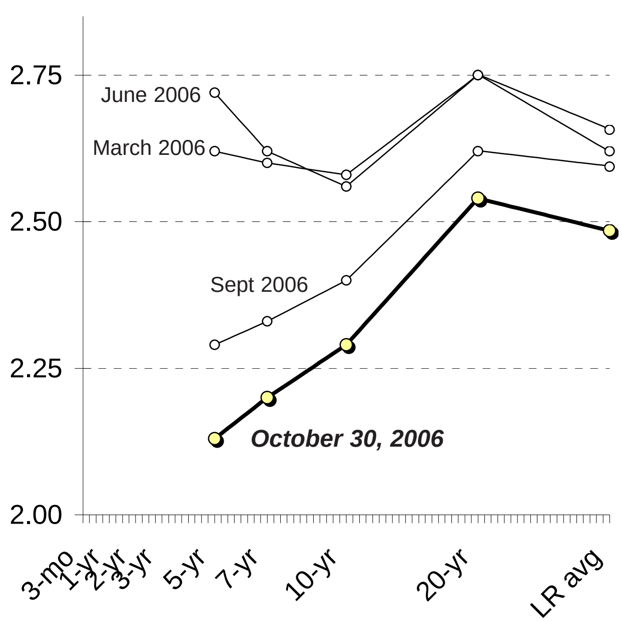


Nominal yields on US Treasury securities
(*percent, adjusted to constant maturities*)

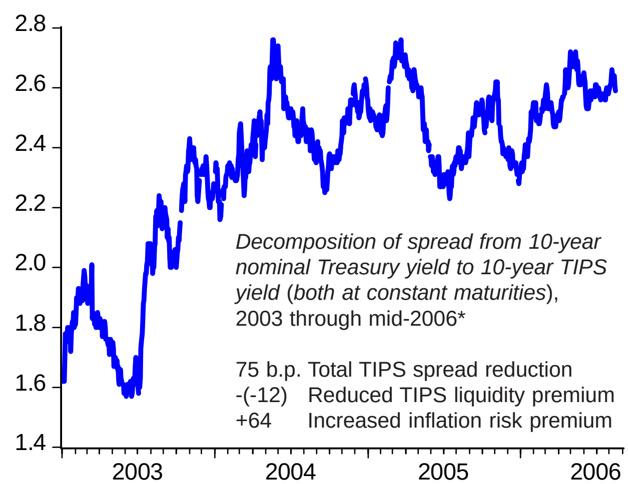


Term structure of expected inflation plus inflation risk (+) and TIPS liquidity (-) premia
Recent declines in the term structure of expected inflation may actually reflect declining "inflation risk" associated with increasing Fed credibility

(*percent, implied by the difference between nominal Treasury security and TIPS yields, adjusted to constant maturities*)



Spread from 10-year Treasuries to TIPS
(*daily in percentage points*)



Notes:

(1) ABA Economic Advisory forecast for core PCE inflation 2007: 2.3 percent (June 2006)
(2) Federal Reserve Board forecast central tendency, core PCE inflation 2007: 2.25-2.50 percent (July 2006)
(3) NABE survey forecast for core PCE inflation 2007: 2.4 percent (September 2006)

*Shen, Pu, "Liquidity Risk Premia and Breakeven Inflation Rates," *Federal Reserve Bank of Kansas City Economic Review* vol. **91**, no. 2 (Second Quarter 2006) pp. 29-54.