

COMMITTEE ON WAYS AND MEANS
Senator Rosalyn H. Baker, Chair
Senator Shan S. Tsutsui, Vice Chair

Testimony Index

Date: Friday, January 11, 2008

Time: 9:00 a.m.

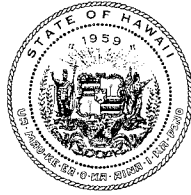
Place: Capitol Auditorium

Council on Revenues

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COUNCIL ON REVENUES

STATE OF HAWAII
P.O. BOX 259
HONOLULU, HAWAII 96809

January 11, 2008

The Honorable Rosalyn H. Baker
Chair, Senate Committee on Ways and Means
State Capitol, Room 210
Honolulu, HI 96813

The Honorable Marcus R. Oshiro
Chair, House Committee on Finance
State Capitol, Room 306
Honolulu, HI 96813

Chairpersons and Members of the Committees:

Thank you for inviting the Council on Revenues to appear before you today to present the current tax revenue forecasts for the State of Hawaii. My name is Paul Brewbaker, and I am the Chair of the Council on Revenues. I would like to present to you a review of recent trends as well as the Council's latest forecast.

Current Revenue Trends

Fiscal year (FY) 2007 had a 3.4% increase in the State's general fund tax revenues, which followed an even more impressive gain of 10.9% in FY 2006. Transient accommodations tax collections increased by 3.7% in FY 2007, after increasing by 9.2% in FY 2006.

General excise and use tax (GET) collections, which typically make up about half of the total general fund tax revenues, were nearly \$2.6 billion in FY 2007, which was 8.5% higher than the previous fiscal year.

Collections of the individual income tax increased much slower than the growth of the State's overall economy. Individual income taxes grew by 0.6%. The increase in individual income taxes was composed of an increase in the withholding tax on wages of 4.0%, an increase in payments with returns of 9.2%, an increase in declarations of estimated taxes of 0.4%, offset by an increase in refunds of 19.3%. Corporation income taxes fell by 37.1% from FY 2006 to

FY 2007. The decline in corporation income taxes in FY 2007 was due primarily to a large one-time payment of \$40 million received in FY 2006. Without this payment, corporation income tax revenues would have declined by 9.1% from the previous fiscal year. The actual overall decrease was composed of a decrease in declarations of estimated taxes of -14.2%, an increase in payments with returns of 49.8%, and an increase in refunds of 69.7%.

Fiscal Year 2007 General Fund tax collections were affected by changes in laws passed by recent legislative sessions. For example, Act 100, Session Laws of Hawaii (SLH) 2006, decreased the allocation of the conveyance tax to the General Fund from 35% to 15% beginning July 1, 2006. Gross collections before allocation to special funds for the conveyance tax amounted to \$46.9 million in FY 2007, meaning that the General Fund lost nearly \$10 million because of the decrease in allocation. The GET exemption of gasoline with alcohol expired on January 1, 2007, increasing revenues by about \$25 million for the last half of FY 2007.

General Fund tax collections were also affected because the Department of Taxation has effectively pursued delinquent taxpayers. In FY 2007, the Department realized \$202.9 million in total cash collections of delinquent taxes.

In summary, changes in the tax laws, technical accounting factors, economic growth, and effective collections all contributed to a 3.4% gain in the State's General Fund tax revenues for FY 2007.

Turning to the current FY 2008, total tax revenue deposited into the State's General Fund in the first five months amounted to \$1.90 billion, an increase of \$59.6 million, or 3.2%, compared to the same period of last year. If we remove the weekend effect of approximately \$30 million that was received in July 2007 when the last day of June fell on a weekend and taxes paid were received in the next month, the adjusted growth rate would be 1.6%. Key components of General Fund tax revenues performed as follows:

1. GET collections deposited into the General Fund increased by \$37.2 million or 3.5% during the first five months of the current fiscal year. If we assume that all \$30 million of the weekend effect was in the GET, the adjusted growth would be 0.7%, indicating flat growth of the overall economy.
2. Individual income tax collections were \$604.3 million for the first five months of the current fiscal year, an increase of 1.3% over the same period last year. Cumulative corporate income taxes were \$23.5 million for the first five months of the current fiscal year, a decline of \$0.2 million compared with the same period last year.

Forecasts of General Fund Tax Revenues

Before presenting the current forecasts and the assumptions behind them, let me review the forecasts the Council made during the past fiscal year.

Table 1 presents actual general fund tax revenues in FY 2007, the forecasts of these revenues made by the Council on Revenues in December 2006, and the model forecasts based on actual economic data as of January 2008, by category.

As shown in Table 1, the December forecast of a 6.0% growth in General Fund collections overestimated actual General Fund tax collections by \$114.0 million, or 2.5%. Although the percentage forecast errors were greatest for the conveyance tax (an overestimate of 163.3%), corporate income tax (an overestimate of 64.2%) and miscellaneous taxes (an underestimate of -53.5%), the main sources of the overall forecast error were the overestimates of the individual income tax collections (\$74.8 million, or 4.8%) and the corporate income tax (\$52.5 million), and the underestimate of GET collections (-\$28.7 million, or -1.1%).

Some of the forecast error can be attributed to the Council's forecasts for growth rates for key economic variables. In December of 2006, the Council predicted that construction activity would grow by 8.9% for FY 2007, whereas actual growth was 16.5%. It predicted that total personal income would grow by 6.6%, whereas actual growth was 6.7%, and it predicted that visitor arrivals would increase by 1.2%, whereas there was an actual decrease of 1.1%.

As shown in Table 1, using actual economic indicator variables resulted in the model forecast of a 6.7% growth in General Fund tax collections for FY 2007. The model forecast is a multi-year forecast from FY 2007 through FY 2013. As in all multi-year forecasts some years are over-estimated and other years are under-estimated. In most years, the growth in General Fund tax collections is greater than the growth in personal income—in FY 2004, personal income grew by 6.1% and General Fund tax revenues grew by 8.3%, in FY 2005 it was 9.0% and 16.0%, respectively, in FY 2006 it was 7.0% and 10.9%, respectively. In FY 2007, however, personal income grew by 6.7%, but General Fund tax collections grew by only 3.4%. General Fund tax collections are also impacted by tax credits given to individuals and businesses. Unfortunately, when the FY 2007 through FY 2013 forecasts were made, tax credit data were only available for calendar year 2004. The lag in tax credit data increases the problem of getting accurate forecasts of the General Fund tax collections, which are net of tax credits.

At its meeting on January 9, 2008, the Council forecast that the General Fund tax revenues would grow at the rate of 4.9% for FY 2008 and 4.1% for FY 2009. Details of the updated forecasts of the State's General Fund tax revenues for FY 2008 through FY 2014 are presented in Table 2.

For FY 2008, the mean Council forecast of key economic indicators (Table 3) is that construction will grow by 1.7%, total personal income will grow by 5.9%, and visitor arrivals

will increase by 1.0%. Inflation (the Honolulu Consumer Price Index) is forecast to be 4.0%. For FY 2009, the mean Council forecast is that construction will decline by 0.7%, total personal income will grow by 5.3%, visitor arrivals will grow by 1.5%, and inflation will be 3.4%. For FY 2010 and thereafter, contracting is likely to decline after adjusting for inflation. Total personal income is forecast to grow at a modest rate of about 2% after adjusting for inflation.

Recent data supports the contention that the economy is softening. The latest data released by the Department of Business, Economic Development, and Tourism indicated that the pace of visitor arrivals for the first five months of FY 2008 is down 0.6% from the same period in FY 2007. Private building authorizations for the first four months of FY 2008, which indicate future private construction, were \$1.2 billion, 13.8% lower than the same period in FY 2007. The Council also noted that the consumer inflation rate, measured by the change in the Honolulu Consumer Price Index, was about 5.4% in FY 2007, which is the highest it has been since FY 1992. As a result, despite a forecast for modest real (inflation-adjusted) growth, the Council predicts that total nominal personal income will increase by 5.9% in FY 2008.

In producing its forecasts, the Council has considered the impact to the General Fund tax revenues of the changes in the tax laws passed by recent legislative sessions such as:

- Act 110, SLH 2006 – increase in standard income tax deduction and expansion of income tax brackets, effective January 2007, approximately \$25 million a year.
- Act 209, SLH 2007 – exemption from general excise tax of alcohol fuel for FY 2008 and FY 2009, approximately \$40 million a year.
- Act 210, SLH 2007 – one time, refundable constitutionally mandated income tax credit, approximately \$26 million for FY 2008.
- Act 211, SLH 2007 – refundable food/excise tax credit, approximately \$24 million per year starting in FY 2009.

The Council also reviewed the growing impact of Act 215, SLH 2004, which provides for the extension of the high technology and research credits. Although tax credits can have important effects on the growth rate of tax revenues, forecasts of them are subject to large errors because of large measurement errors and the lack of adequate historical data. The Council recognizes the challenge of forecasting revenues over the next several years as the impacts of significant changes in tax laws, especially recent business incentive tax credits, interact with external factors. In addition, geopolitical events and changes in capital markets, which may alter such things as the prices of real estate and of oil, will continue to pose challenges for economic forecasters.

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The Honorable Marcus R. Oshiro
January 11, 2008
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As always, the Council assumes that the State will not be subject to potential losses caused by decreases in federal allocations, any prolonged or crippling strikes, or any other unusual occurrences, and it has considered existing tax laws only.

This concludes my presentation. Again, thank you for this opportunity to appear before these Committees.

Respectfully submitted,

A handwritten signature in black ink that reads "Paul Brewbaker" with a horizontal line extending to the right.

Paul Brewbaker, Ph.D.
Chair, Council on Revenues

Attachments

Table 1. - FY 2007 General Fund Tax Revenues: Forecast vs. Actual

| Type of Tax | Actual | December 2006 | | | Actual Economic Indicators as of January 2008 | | |
|-------------------------|--------------------|-----------------------|-------------------------|-------------|--|-------------------------|-------------|
| | (\$1,000) | Forecast (\$1,000) | Difference (\$1,000) | (%) | Forecast (\$1,000) | Difference (\$1,000) | (%) |
| General Excise & Use | \$2,555,762 | \$2,527,087 | -\$28,675 | -1.1% | \$2,545,482 | -\$10,280 | -0.4% |
| Income - Individual | 1,559,690 | 1,634,464 | 74,774 | 4.8% | 1,636,904 | 77,214 | 5.0% |
| Income - Corporation | 81,834 | 134,363 | 52,529 | 64.2% | 148,187 | 66,353 | 81.1% |
| Public Service Company | 124,017 | 128,732 | 4,715 | 3.8% | 128,626 | 4,609 | 3.7% |
| Insurance Premiums | 92,196 | 84,595 | -7,601 | -8.2% | 83,020 | -9,176 | -10.0% |
| Tobacco & Licenses | 85,143 | 88,878 | 3,735 | 4.4% | 88,709 | 3,566 | 4.2% |
| Liquor & Permits | 46,034 | 47,323 | 1,289 | 2.8% | 46,953 | 919 | 2.0% |
| Banks & Other Fin Corps | 16,599 | 17,933 | 1,334 | 8.0% | 17,953 | 1,354 | 8.2% |
| Conveyance | 7,033 | 18,518 | 11,485 | 163.3% | 18,594 | 11,561 | 164.4% |
| Miscellaneous | 1,120 | 521 | -599 | -53.5% | 521 | -599 | -53.5% |
| Net TAT | 17,076 | 18,104 | 1,028 | 6.0% | 17,235 | 159 | 0.9% |
| TOTAL | \$4,586,504 | \$4,700,518 | 114,014 | 2.5% | \$4,732,184 | 145,680 | 3.2% |
| GROWTH RATE | 3.4% | 6.0% | | | 6.7% | | |

Fig. 1 - Sources of General Fund Tax: \$4.587 Bil FY 2007

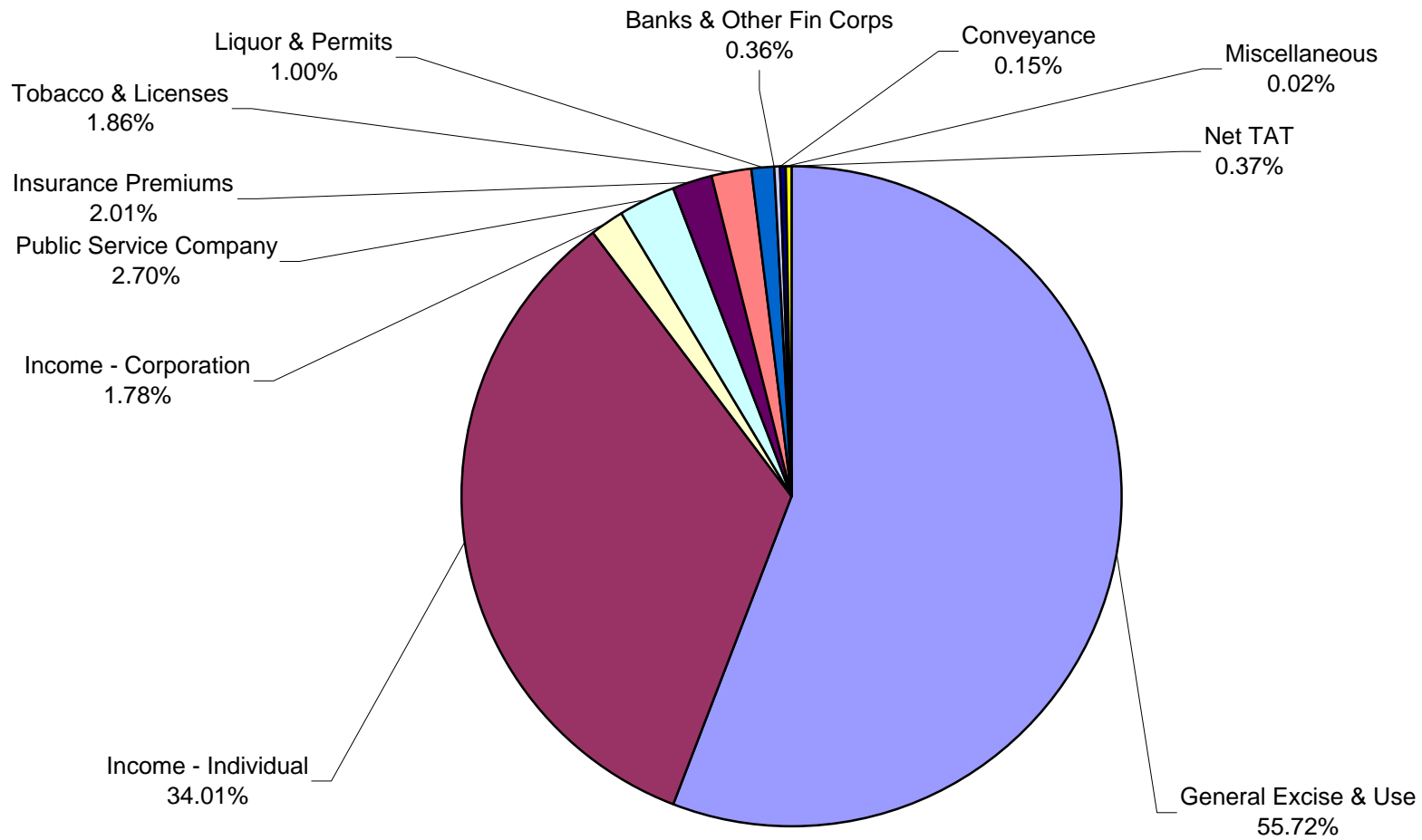


Fig. 2 - FY 2007 Forecast Errors (Percent)

Using December 2006 Forecast

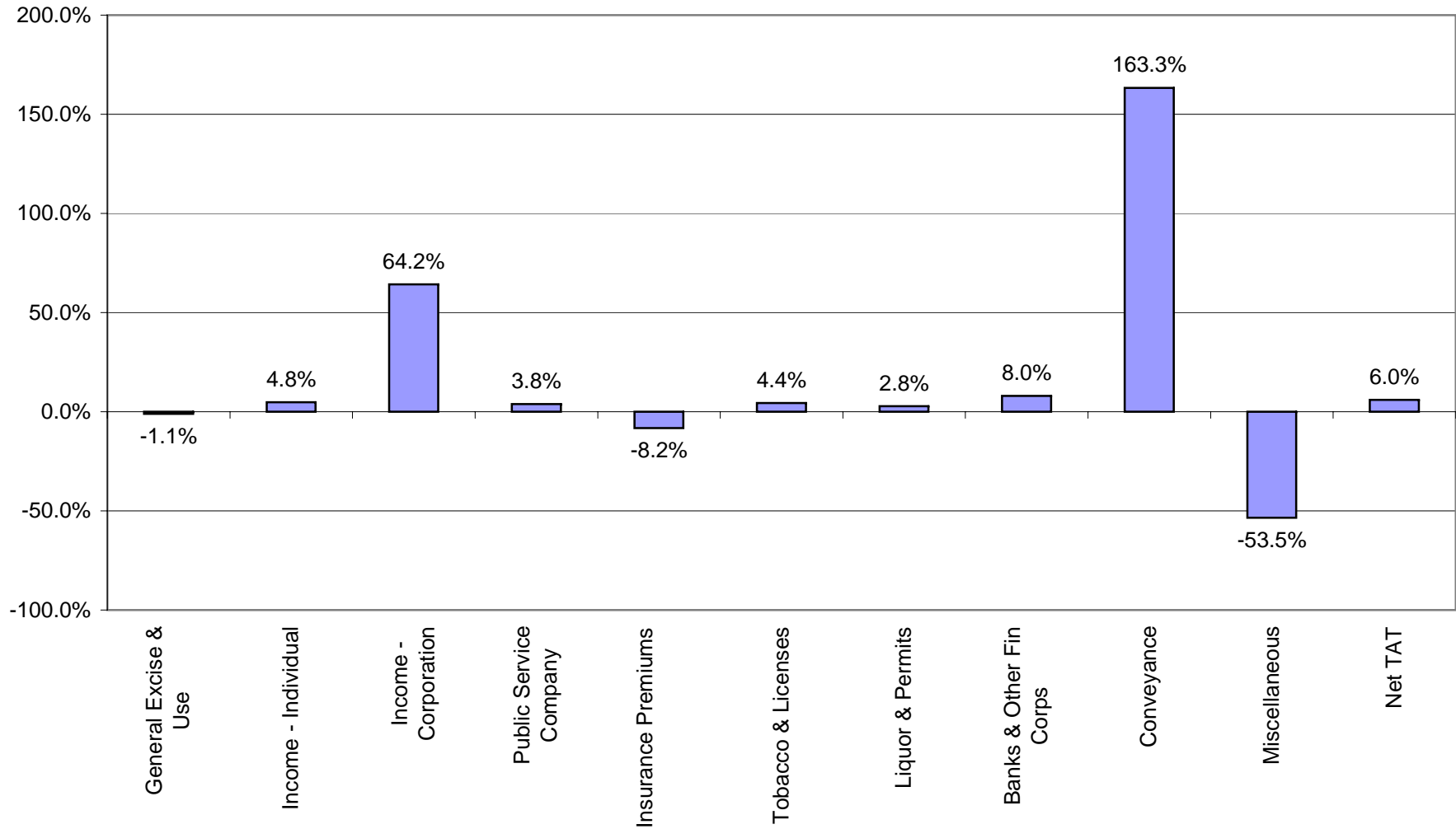


Fig. 3 - FY 2007 Forecast Errors (Dollars)

Using December 2006 Forecast

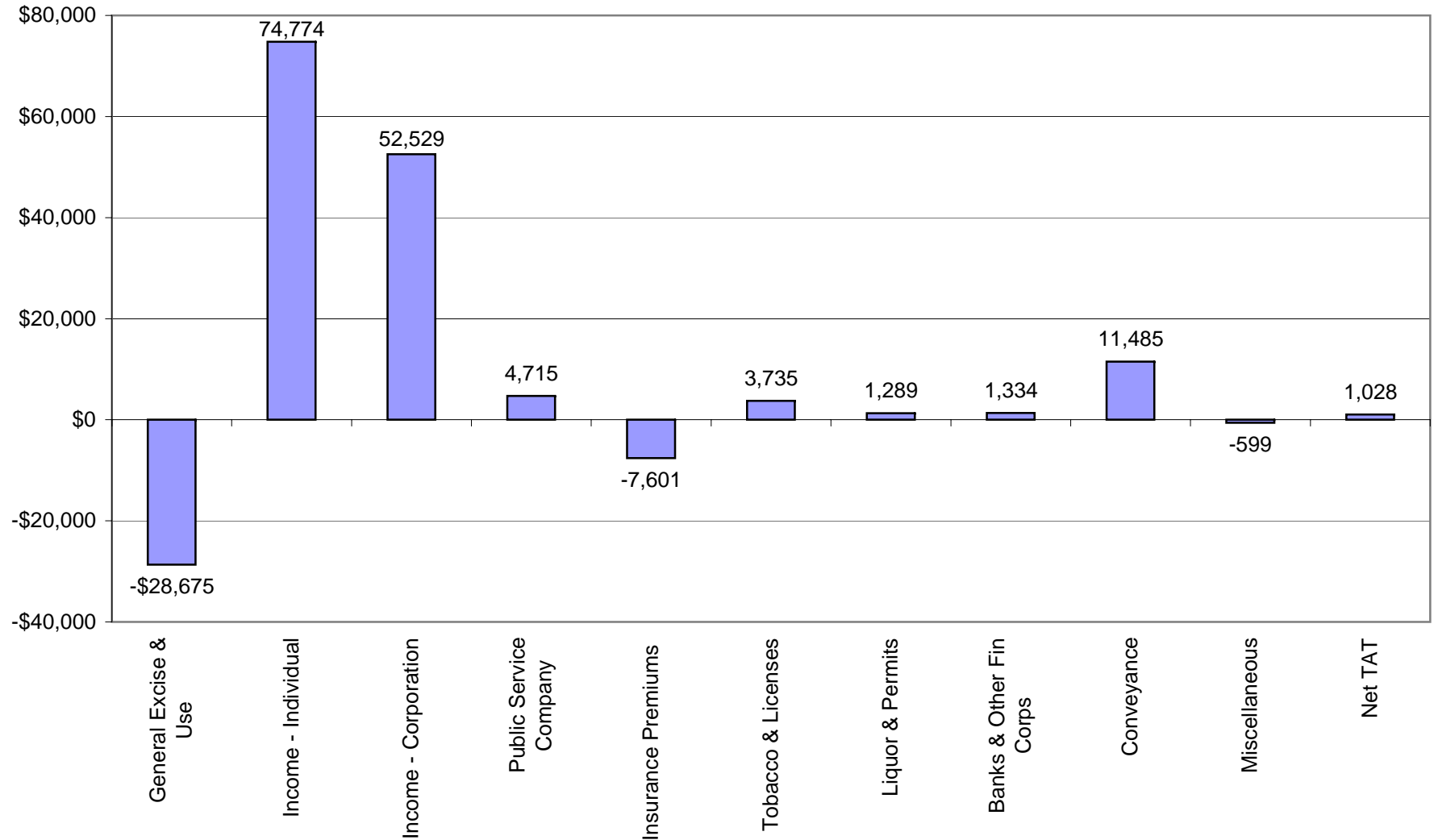


Table 2. - ESTIMATES OF GENERAL FUND TAX REVENUE: FY 2008 to FY 2014

(in thousands of dollars)

| TYPE OF TAX | ACTUAL | | ESTIMATED | | | | | | |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 | FY 2013 | FY 2014 |
| General Excise & Use 2/, 4/ | \$2,355,316 | \$2,555,762 | \$2,707,479 | \$2,802,877 | \$2,952,216 | \$3,094,190 | \$3,210,255 | \$3,411,894 | \$3,623,953 |
| Income - Individual 3/, 5/ | 1,550,164 | 1,559,690 | 1,621,493 | 1,704,491 | 1,781,618 | 1,864,175 | 1,973,072 | 2,085,752 | 2,201,300 |
| Income - Corporation | 130,010 | 81,834 | 87,550 | 87,259 | 81,806 | 83,099 | 88,726 | 95,528 | 104,217 |
| Public Service Company | 120,679 | 124,017 | 130,372 | 140,684 | 151,169 | 161,658 | 172,116 | 182,740 | 193,531 |
| Insurance Premiums | 88,068 | 92,196 | 83,334 | 84,020 | 88,529 | 91,427 | 116,616 | 133,071 | 146,762 |
| Tobacco & Licenses | 86,827 | 85,143 | 87,294 | 89,559 | 92,189 | 94,882 | 97,752 | 100,695 | 103,713 |
| Liquor & Permits | 45,955 | 46,034 | 47,137 | 48,241 | 49,332 | 50,425 | 51,524 | 52,629 | 53,742 |
| Banks & Other Fin Corps | 16,324 | 16,599 | 18,157 | 19,834 | 21,579 | 23,111 | 24,550 | 26,117 | 27,674 |
| Conveyance | 20,720 | 7,033 | 12,116 | 12,423 | 12,779 | 13,135 | 13,526 | 13,928 | 14,400 |
| Miscellaneous * | 4,551 | 1,120 | 528 | 531 | 534 | 536 | 539 | 541 | 543 |
| Transient Accommodation Tax 1/ | 16,378 | 17,076 | 15,636 | 18,061 | 20,402 | 22,655 | 24,958 | 27,427 | 30,086 |
| NET TOTAL | \$4,434,992 | \$4,586,504 | \$4,811,096 | \$5,007,980 | \$5,252,153 | \$5,499,293 | \$5,773,634 | \$6,130,322 | \$6,499,921 |
| GROWTH RATE | 10.9% | 3.4% | 4.9% | 4.1% | 4.9% | 4.7% | 5.0% | 6.2% | 6.0% |

Notes:

1/ Deposits of 44.8% of TAT revenues to counties (Act 156, SLH 1998); 32.6% to the tourism special fund and 5.3% to the TAT trust fund (Act 250, SLH 2002); 17.3% to the convention center enterprise fund (Act 253, SLH 2002); all net of general fund deposits of excess of fund ceilings. Act 235, SLH 2005, increases allocation to the tourism special fund to 34.2% and repeals the TAT trust fund. Effective on July 1, 2007. Act 209, SLH 2006, increases ceiling on allocation to the convention center enterprise fund to \$33 million. Effective on July 1, 2006.

2/ FY 2008 includes \$30 million, estimated spillover from June 30, 2007 falling on a weekend. FY 2012 excludes \$30 million, due to June 30, 2012 falling on a weekend. FY 2014 includes \$30 million, estimated spillover from June 30, 2013 falling on weekend.

3/ Act 110, SLH 2006, increases standard income tax deduction and expands income tax brackets. Effective on January 1, 2007.

4/ Act 209, SLH 2007, exempts gross income received from the sale of alcohol fuel from the general excise tax. Effective on July 1, 2007, provided that the exemption repeals on June 30, 2009.

5/ Act 210, SLH 2007, provides a one-time, refundable constitutionally mandated income tax credit. The credit is deductible from the taxpayer's 2007 individual income tax liability. Effective on June 26, 2007.

* Includes inheritance and estate tax.

Table 3. - FORECASTS OF KEY ECONOMIC INDICATORS: FY 2008 TO FY 2014

A. VALUE

Council MEAN Forecasts

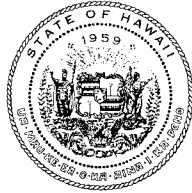
| Fiscal Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|--|--------|--------|--------|--------|--------|--------|--------|
| Total Personal Income (\$1982-1984 mil.) | 23,146 | 23,586 | 24,034 | 24,515 | 25,030 | 25,580 | 26,143 |
| Total Personal Income (\$ mil.) | 51,769 | 54,513 | 57,184 | 59,929 | 62,865 | 66,072 | 69,507 |
| Construction Completed (\$ mil.) | 7,805 | 7,751 | 7,441 | 7,478 | 7,613 | 7,856 | 8,210 |
| Honolulu CPIU (1982-1984=100) | 224 | 231 | 238 | 244 | 251 | 258 | 266 |
| Visitor Arrivals (1,000) | 7,478 | 7,590 | 7,696 | 7,804 | 7,913 | 8,024 | 8,137 |
| GDP in Current Dollars (\$ bil.) | 14,089 | 14,695 | 15,371 | 16,078 | 16,833 | 17,624 | 18,453 |
| GDP Deflator (2000=100) | 121 | 123 | 126 | 128 | 131 | 134 | 137 |
| Calendar Year Wages (\$ mil.) | 24,674 | 25,957 | 27,177 | 28,427 | 29,791 | 31,311 | 33,001 |
| Visitor Expenditures (\$ mil.) | 12,521 | 13,035 | 13,530 | 14,031 | 14,550 | 15,103 | 15,707 |
| Hawaii Real GDP (\$2000 mil.) | 50,134 | 51,287 | 52,416 | 53,569 | 54,801 | 56,116 | 57,463 |

B. ANNUAL PERCENTAGE GROWTH RATE

| | | | | | | | |
|--|-----|------|------|-----|-----|-----|-----|
| Total Personal Income (\$1982-1984 mil.) | 1.8 | 1.9 | 1.9 | 2.0 | 2.1 | 2.2 | 2.2 |
| Total Personal Income (\$ mil.) | 5.9 | 5.3 | 4.9 | 4.8 | 4.9 | 5.1 | 5.2 |
| Construction Completed (\$ mil.) | 1.7 | -0.7 | -4.0 | 0.5 | 1.8 | 3.2 | 4.5 |
| Honolulu CPIU (1982-1984=100) | 4.0 | 3.4 | 2.9 | 2.7 | 2.7 | 2.9 | 3.0 |
| Visitor Arrivals (1,000) | 1.0 | 1.5 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| GDP in Current Dollars (\$ bil.) | 4.4 | 4.3 | 4.6 | 4.6 | 4.7 | 4.7 | 4.7 |
| GDP Deflator (2000=100) | 2.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| Calendar Year Wages (\$ mil.) | 5.8 | 5.2 | 4.7 | 4.6 | 4.8 | 5.1 | 5.4 |
| Visitor Expenditures (\$ mil.) | 3.8 | 4.1 | 3.8 | 3.7 | 3.7 | 3.8 | 4.0 |
| Hawaii Real GDP (\$2000 mil.) | 2.3 | 2.3 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 |

LINDA LINGLE
GOVERNOR

JAMES R. AIONA, JR.
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COUNCIL ON REVENUES

STATE OF HAWAII
P.O. BOX 259
HONOLULU, HAWAII 96809-0259

January 10, 2008

The Honorable Linda Lingle
Governor, State of Hawaii
Executive Chambers
State Capitol, Fifth Floor
Honolulu, HI 96813

Dear Governor Lingle:

At its meeting on January 9, 2008, the Council forecast that the General Fund tax revenues would grow at the rate of 4.9% for fiscal year (FY) 2008 and 4.1% for FY 2009. Details of the updated forecasts of the State's General Fund tax revenues for FY 2008 through FY 2014 are presented in Table 2 (attached).

For FY 2008, the mean Council forecast of key economic indicators (Table 3) is that construction will grow by 1.7%, total personal income will grow by 5.9%, and visitor arrivals will increase by 1.0%. Inflation (the Honolulu Consumer Price Index) is forecast to be 4.0%. For FY 2009, the mean Council forecast is that construction will decline by 0.7%, total personal income will grow by 5.3%, visitor arrivals will grow by 1.5%, and inflation will be 3.4%. For FY 2010 and thereafter, contracting is likely to decline after adjusting for inflation. Total personal income is forecast to grow at a modest rate of about 2% after adjusting for inflation.

Recent data supports the contention that the economy is softening. The latest data released by the Department of Business, Economic Development, and Tourism (DBEDT) indicated that the pace of visitor arrivals for the first five months of FY 2008 is down 0.6% from the same period in FY 2007. Private building authorizations for the first four months of FY 2008, which indicate future private construction, were \$1.2 billion, 13.8% lower than the same period in FY 2007. The Council also noted that the consumer inflation rate, measured by the change in the Honolulu Consumer Price Index, was about 5.4% in FY 2007, which is the highest it has been since FY 1992. As a result, despite a forecast for modest real (inflation-adjusted) growth, the Council predicts that total nominal personal income will increase by 5.9% in FY 2008.

In producing its forecasts, the Council has considered the impact to the General Fund tax revenues of the changes in the tax laws passed by recent legislative sessions such as:

- Act 110, Session Laws of Hawaii (SLH) 2006 – increase in standard income tax deduction and expansion of income tax brackets, effective January 2007, approximately \$25 million a year.
- Act 209, SLH 2007 – exemption from general excise tax of alcohol fuel for FY 2008 and FY 2009, approximately \$40 million a year.
- Act 210, SLH 2007 – one time, refundable, constitutionally-mandated income tax credit, approximately \$26 million for FY 2008.
- Act 211, SLH 2007 – refundable food/excise tax credit, approximately \$24 million per year starting in FY 2009.

The Council also reviewed the growing impact of Act 215, SLH 2004, which provides for the extension of the high technology and research credits. Although tax credits can have important effects on the growth rate of tax revenues, forecasts of them are subject to large errors because of large measurement errors and the lack of adequate historical data. The Council recognizes the challenge of forecasting revenues over the next several years as the impacts of significant changes in tax laws, especially recent business incentive tax credits, interact with external factors. In addition, geopolitical events and changes in capital markets, which may alter such things as the prices of real estate and of oil, will continue to pose challenges for economic forecasters.

As always, the Council assumes that the State will not be subject to potential losses caused by decreases in federal allocations, any prolonged or crippling strikes, or any other unusual occurrences, and it has considered existing tax laws only.

General Fund non-tax revenues increased in FYs 2008–2014 due to increases in central services assessments and projected transfers from non-general funds for pension accumulation and social security reimbursements, partially offset by decreases in the reimbursement for the costs of assessing the county surcharge on the general excise tax and transfers from the Hawaii Hurricane Relief Fund.

Special Fund tax revenues increased in FYs 2008–2014 due to revisions based on Act 209, SLH 2007, which increased the license tax paid by distributors on liquid fuel by 1 cent, and Act 258, SLH 2007, which extended the sunset date for the vehicle rental surcharge until August 31, 2008; and changes to the projections of the transient accommodations tax.

Special Fund Non-Tax Revenues increased in FY 2007 based on actual funds received; FYs 2008–2014 net decreases are due to changes in projected federal funds and charges for current services for the Department of Transportation, projections in eligible Medicaid reimbursements for the Department of Health, projections in the transfer of tobacco settlement moneys for the University of Hawaii (UH); and corrections of reporting errors for the DBEDT

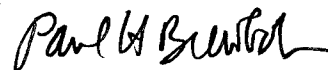
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housing bond funds, which should be more appropriately recorded as Other than Special Fund Non-Tax Revenues, and corrections of revenues for the Kapolei land sale for the UH, which were previously recorded as Other than Special Fund Non-Tax Revenues.

Other than Special Fund Non-Tax Revenues increased in FY 2007 based on actual funds received; FYs 2008–2014 net increases are due to changes in projected federal funds, projections for the public facilities development dedication fees for DBEDT, projections for private donations to support efforts to address homelessness on the Leeward coast of Oahu (Department of Accounting and General Services); and corrections of reporting errors for DBEDT housing bond funds which were previously recorded as Special Fund Non-Tax Revenues, and corrections of revenues for the Kapolei land sale for UH, which should be more appropriately recorded as Special Fund Non-Tax Revenues.

Please advise us if we can be of further assistance or if we can answer any questions you may have.

Sincerely,



PAUL H. BREWBAKER, Ph. D.
Chair, Council on Revenues

Attachments

ESTIMATES OF GENERAL FUND TAX REVENUE: FY 2008 to FY 2014

(in thousands of dollars)

| TYPE OF TAX | ACTUAL | | ESTIMATED | | | | | | |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | FY 2006 | FY 2007 | FY 2008 | FY 2009 | FY 2010 | FY 2011 | FY 2012 | FY 2013 | FY 2014 |
| General Excise & Use 2/, 4/ | \$2,355,316 | \$2,555,762 | \$2,707,479 | \$2,802,877 | \$2,952,216 | \$3,094,190 | \$3,210,255 | \$3,411,894 | \$3,623,953 |
| Income - Individual 3/, 5/ | 1,550,164 | 1,559,690 | 1,621,493 | 1,704,491 | 1,781,618 | 1,864,175 | 1,973,072 | 2,085,752 | 2,201,300 |
| Income - Corporation | 130,010 | 81,834 | 87,550 | 87,259 | 81,806 | 83,099 | 88,726 | 95,528 | 104,217 |
| Public Service Company | 120,679 | 124,017 | 130,372 | 140,684 | 151,169 | 161,658 | 172,116 | 182,740 | 193,531 |
| Insurance Premiums | 88,068 | 92,196 | 83,334 | 84,020 | 88,529 | 91,427 | 116,616 | 133,071 | 146,762 |
| Tobacco & Licenses | 86,827 | 85,143 | 87,294 | 89,559 | 92,189 | 94,882 | 97,752 | 100,695 | 103,713 |
| Liquor & Permits | 45,955 | 46,034 | 47,137 | 48,241 | 49,332 | 50,425 | 51,524 | 52,629 | 53,742 |
| Banks & Other Fin Corps | 16,324 | 16,599 | 18,157 | 19,834 | 21,579 | 23,111 | 24,550 | 26,117 | 27,674 |
| Conveyance | 20,720 | 7,033 | 12,116 | 12,423 | 12,779 | 13,135 | 13,526 | 13,928 | 14,400 |
| Miscellaneous * | 4,551 | 1,120 | 528 | 531 | 534 | 536 | 539 | 541 | 543 |
| Transient Accommodation Tax 1/ | 16,378 | 17,076 | 15,636 | 18,061 | 20,402 | 22,655 | 24,958 | 27,427 | 30,086 |
| NET TOTAL | \$4,434,992 | \$4,586,504 | \$4,811,096 | \$5,007,980 | \$5,252,153 | \$5,499,293 | \$5,773,634 | \$6,130,322 | \$6,499,921 |
| GROWTH RATE | 10.9% | 3.4% | 4.9% | 4.1% | 4.9% | 4.7% | 5.0% | 6.2% | 6.0% |

Notes:

1/ Deposits of 44.8% of TAT revenues to counties (Act 156, SLH 1998); 32.6% to the tourism special fund and 5.3% to the TAT trust fund (Act 250, SLH 2002); 17.3% to the convention center enterprise fund (Act 253, SLH 2002); all net of general fund deposits of excess of fund ceilings. Act 235, SLH 2005, increases allocation to the tourism special fund to 34.2% and repeals the TAT trust fund. Effective on July 1, 2007. Act 209, SLH 2006, increases ceiling on allocation to the convention center enterprise fund to \$33 million. Effective on July 1, 2006.

2/ FY 2008 includes \$30 million, estimated spillover from June 30, 2007 falling on a weekend. FY 2012 excludes \$30 million, due to June 30, 2012 falling on a weekend. FY 2014 includes \$30 million, estimated spillover from June 30, 2013 falling on weekend.

3/ Act 110, SLH 2006, increases standard income tax deduction and expands income tax brackets. Effective on January 1, 2007.

4/ Act 209, SLH 2007, exempts gross income received from the sale of alcohol fuel from the general excise tax. Effective on July 1, 2007, provided that the exemption repeals on June 30, 2009.

5/ Act 210, SLH 2007, provides a one-time, refundable constitutionally mandated income tax credit. The credit is deductible from the taxpayer's 2007 individual income tax liability. Effective on June 26, 2007.

* Includes inheritance and estate tax.

**STATE OF HAWAII
GENERAL FUND
MULTI-YEAR REVENUES FROM SOURCES OTHER THAN TAXES
FISCAL YEARS 2007 - 2014
(in thousands of dollars)**

| <u>Source</u> | <u>Actual FY 2007</u> | <u>Estimated FY 2008</u> | <u>Estimated FY 2009</u> | <u>Estimated FY 2010</u> | <u>Estimated FY 2011</u> | <u>Estimated FY 2012</u> | <u>Estimated FY 2013</u> | <u>Estimated FY 2014</u> |
|--|---------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Licenses & Permits | 1,245 | 1,005 | 1,002 | 1,002 | 1,002 | 1,002 | 1,002 | 1,002 |
| Revenues from Use of Money and Property | 85,420 | 69,751 | 70,018 | 69,311 | 68,859 | 65,640 | 65,204 | 65,836 |
| Federal Grants | 6,866 | 5,513 | 5,513 | 5,513 | 5,513 | 5,513 | 5,513 | 5,513 |
| Revenues from Other Agencies | 1,964 | 2,802 | 2,802 | 2,802 | 2,802 | 2,802 | 2,802 | 2,802 |
| Charges for Current Services | 212,052 | 205,330 | 210,913 | 216,688 | 223,120 | 229,359 | 238,164 | 239,941 |
| Fines, Forfeits & Penalties | 351 | 534 | 530 | 530 | 530 | 530 | 530 | 530 |
| Repayment of Loans & Advances | 26,286 | 27,629 | 24,542 | 18,716 | 22,876 | 20,554 | 18,111 | 18,111 |
| Other Non-Revenue Receipts | 186,421 | 164,101 | 168,672 | 168,363 | 168,976 | 168,977 | 168,977 | 168,977 |
| Subtotal | 520,604 | 476,665 | 483,993 | 482,925 | 493,678 | 494,377 | 500,303 | 502,712 |
| Judiciary | 31,214 | 32,025 | 32,698 | 33,215 | 33,719 | 34,232 | 34,757 | 35,292 |
| Total | 551,818 | 508,690 | 516,691 | 516,140 | 527,397 | 528,609 | 535,060 | 538,004 |

Prepared by: Department of Budget & Finance

January 9, 2008

**STATE OF HAWAII
SPECIAL REVENUE FUND
MULTI-YEAR TAX REVENUES
FISCAL YEARS 2007 - 2014
(in thousands of dollars)**

| Sources | <u>FY 2007</u> | <u>Estimated FY 2008</u> | <u>Estimated FY 2009</u> | <u>Estimated FY 2010</u> | <u>Estimated FY 2011</u> | <u>Estimated FY 2012</u> | <u>Estimated FY 2013</u> | <u>Estimated FY 2014</u> |
|-----------------------------------|----------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Transfer of Gen. Excise Tax | - | - | - | - | - | - | - | - |
| Transfer of Tobacco Tax | 1,532 | 1,490 | 1,511 | 1,532 | 1,545 | 1,552 | 1,552 | 1,552 |
| Liquid Fuel: | | | | | | | | |
| Highway | 85,868 | 92,167 | 93,229 | 94,304 | 95,392 | 96,494 | 97,610 | 97,610 |
| Aviation | 2,174 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 | 2,200 |
| Small Boats | <u>1,658</u> | <u>1,300</u> | <u>1,300</u> | <u>1,300</u> | <u>1,300</u> | <u>1,300</u> | <u>1,300</u> | <u>1,300</u> |
| Subtotal | 89,700 | 95,667 | 96,729 | 97,804 | 98,892 | 99,994 | 101,110 | 101,110 |
| Transfer of Transient Accom Tax | 106,086 | 116,261 | 119,640 | 122,261 | 128,338 | 132,820 | 136,617 | 141,645 |
| Motor Vehicle Weight Tax | 33,309 | 31,513 | 31,907 | 32,306 | 32,710 | 33,118 | 33,533 | 33,533 |
| Vehicle Registration Fee Tax | 26,499 | 26,526 | 26,792 | 27,062 | 27,335 | 27,611 | 27,891 | 27,891 |
| Vehicle Surcharge: | | | | | | | | |
| Rental /Tour | 46,989 | 52,626 | 39,678 | 40,752 | 41,847 | 42,964 | 43,676 | 43,676 |
| Environmental Response Tax | 1,741 | 1,800 | 1,800 | 1,800 | 1,800 | 1,800 | 1,800 | 1,800 |
| Unemployment Comp Tax | 139,341 | 137,000 | 137,000 | 137,000 | 137,000 | 137,000 | 137,000 | 137,000 |
| Employment & Training | 956 | 870 | 420 | 440 | 800 | 950 | 950 | 950 |
| Election Campaign Contrib T.F. | 220 | 260 | 260 | 260 | 260 | 260 | 260 | 260 |
| Transfer of Banks & Fin. Corp Tax | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 |
| Transfer of Conveyance Tax | 41,079 | 41,060 | 40,778 | 41,250 | 41,450 | 41,450 | 41,450 | 41,450 |
| Transfer of Tax on Ins. Premiums | <u>2,008</u> | <u>2,000</u> | <u>2,000</u> | <u>2,000</u> | <u>2,000</u> | <u>2,000</u> | <u>2,000</u> | <u>2,000</u> |
| Total | <u>491,461</u> | <u>509,073</u> | <u>500,515</u> | <u>506,467</u> | <u>515,977</u> | <u>523,519</u> | <u>529,839</u> | <u>534,867</u> |

STATE OF HAWAII
SPECIAL REVENUE FUND - SPECIAL FUNDS
MULTI-YEAR NON-TAX REVENUES
FISCAL YEARS 2007 - 2014
(in thousands of dollars)

| Sources | <u>FY 2007</u> | <u>Estimated FY 2008</u> | <u>Estimated FY 2009</u> | <u>Estimated FY 2010</u> | <u>Estimated FY 2011</u> | <u>Estimated FY 2012</u> | <u>Estimated FY 2013</u> | <u>Estimated FY 2014</u> |
|--|-------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Licenses & Permits | 13,494 | 14,519 | 16,736 | 16,923 | 17,429 | 17,210 | 17,475 | 17,327 |
| Revenues from Use of Money and Property | 139,358 | 105,726 | 104,827 | 101,427 | 102,330 | 104,485 | 106,843 | 106,980 |
| Federal | 192,741 | 212,835 | 215,345 | 214,805 | 219,534 | 224,453 | 229,570 | 229,570 |
| Other Agencies | 37,341 | 103,858 | 103,858 | 53,878 | 53,878 | 53,878 | 53,858 | 53,858 |
| Charges for Current Services: | | | | | | | | |
| Utils & Other Enterprises | 320,635 | 346,920 | 365,801 | 381,710 | 392,732 | 401,269 | 412,545 | 421,501 |
| Others | 391,258 | 754,051 | 811,086 | 837,339 | 873,098 | 910,142 | 930,293 | 930,828 |
| Fines, Forfeits & Penalties | 4,069 | 2,857 | 2,711 | 2,725 | 2,789 | 2,854 | 2,868 | 2,868 |
| Non-Revenue Receipts | 598,513 | 128,930 | 122,082 | 121,886 | 121,881 | 121,878 | 121,883 | 121,883 |
| Judiciary | 7,873 | 9,609 | 9,780 | 9,740 | 9,871 | 9,904 | 10,040 | 10,179 |
| Office of Hawaiian Affairs | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> |
| Total | <u>1,705,282</u> | <u>1,679,305</u> | <u>1,752,226</u> | <u>1,740,432</u> | <u>1,793,542</u> | <u>1,846,073</u> | <u>1,885,375</u> | <u>1,894,994</u> |
| Adjustment for Transfers within Special Fund Category | <u>337,072</u> | <u>96,446</u> | <u>89,598</u> | <u>89,402</u> | <u>89,397</u> | <u>89,394</u> | <u>89,398</u> | <u>89,398</u> |
| Adjusted Total | <u>1,368,210</u> | <u>1,582,859</u> | <u>1,662,628</u> | <u>1,651,030</u> | <u>1,704,145</u> | <u>1,756,679</u> | <u>1,795,977</u> | <u>1,805,596</u> |

STATE OF HAWAII
SPECIAL REVENUE FUND - OTHER THAN SPECIAL FUNDS
Multi-Year Revenues from Sources Other than Taxes
Fiscal Years 2007 - 2014
(in thousands of dollars)

| Sources | <u>FY2007</u> | Estimated <u>FY 2008</u> | Estimated <u>FY 2009</u> | Estimated <u>FY 2010</u> | Estimated <u>FY 2011</u> | Estimated <u>FY 2012</u> | Estimated <u>FY 2013</u> | Estimated <u>FY 2014</u> |
|---|-------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Licenses & Permits | 477 | 493 | 493 | 493 | 493 | 493 | 493 | 493 |
| Revenues from Use of Money and Property | 95,795 | 92,732 | 90,398 | 89,962 | 89,639 | 88,399 | 88,018 | 87,991 |
| Federal | 1,766,114 | 1,818,405 | 1,816,594 | 1,853,895 | 1,888,757 | 1,931,481 | 1,973,829 | 1,973,943 |
| Other Agencies | 18,369 | 12,637 | 12,966 | 12,488 | 12,493 | 12,493 | 12,498 | 12,498 |
| Charges for Current Services | 124,878 | 124,786 | 121,000 | 129,618 | 121,228 | 123,487 | 121,190 | 121,200 |
| Fines, Forfeits & Penalties | 2,269 | 1,108 | 958 | 958 | 958 | 958 | 958 | 958 |
| Non-Revenue Receipts | 722,619 | 745,114 | 793,348 | 827,214 | 844,194 | 882,084 | 919,838 | 957,805 |
| Office of Hawaiian Affairs | <u>41,250</u> | <u>15,100</u> | <u>15,100</u> | <u>15,100</u> | <u>15,100</u> | <u>15,100</u> | <u>15,100</u> | <u>15,100</u> |
| TOTAL | <u>2,771,771</u> | <u>2,810,375</u> | <u>2,850,857</u> | <u>2,929,728</u> | <u>2,972,862</u> | <u>3,054,495</u> | <u>3,131,924</u> | <u>3,169,988</u> |
| Adjustment for Transfers within Other Than Special Fund Category | (240) | 5,000 | 0 | 141 | 0 | 0 | 0 | 0 |
| Adjusted Total | 2,772,011 | 2,805,375 | 2,850,857 | 2,929,587 | 2,972,862 | 3,054,495 | 3,131,924 | 3,169,988 |



HAWAII ECONOMIC TRENDS

October 31, 2007

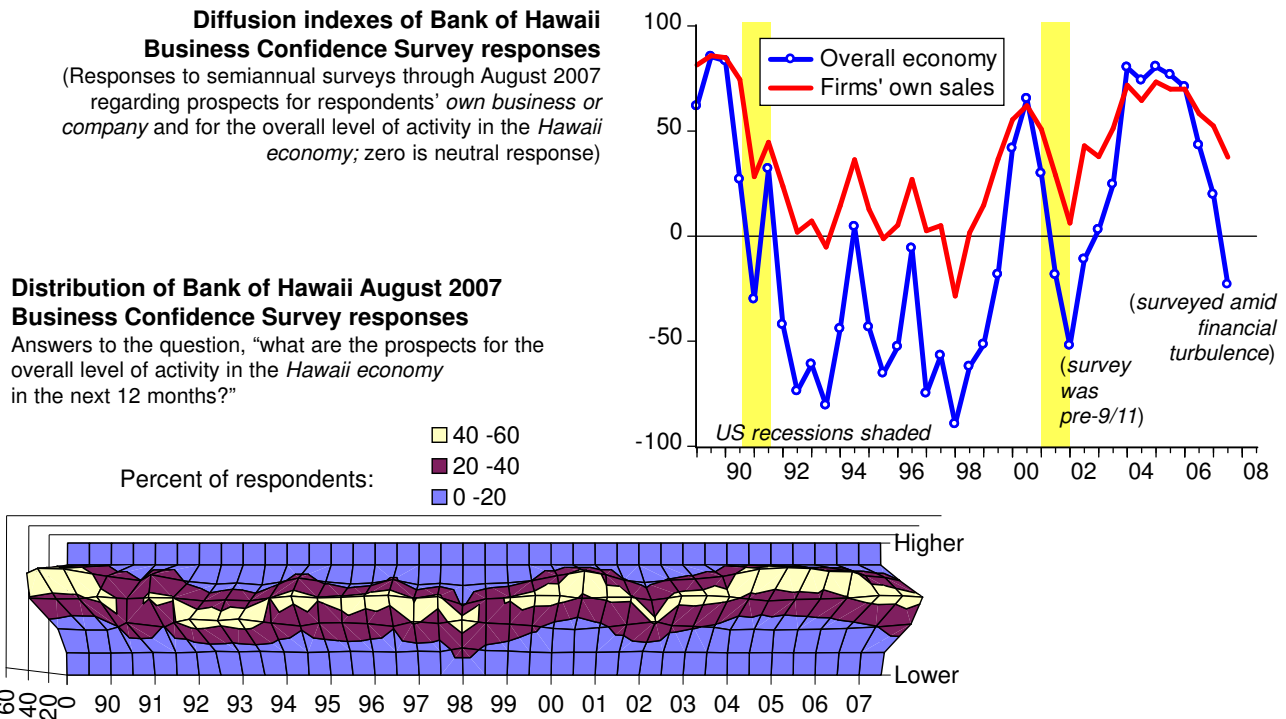
prepared by

Paul H. Brewbaker, Chief Economist
Bank of Hawaii

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

Executive Summary
October 31, 2007

- A dramatic quarter of financial turbulence has concluded despite continuing fears over sub-prime mortgage contagion from the financial services sector into the real economy and confusion over valuations of complex financial structures. However, resilience in personal consumption expenditure and growth in net exports have offset adverse effects of declining residential investment, and real growth in the US economy near its potential—abating inflation risks—continues as our forecast.
- Hawaii’s economic deceleration began in 2006, led by declines in housing investment and flattening tourism. Real visitor expenditure has actually declined recently, and arrivals volumes have sagged 1 percent year-to-date from recent record levels. Residential sales and production have dropped 20-30 percent from peaks in 2004-05, when real economic growth in Hawaii also was highest. Constraints on Hawaii’s labor force and productive capacity combined to generate local inflation above the national norm, with energy costs an external inflationary influence. Real income growth in Hawaii slowed below 1 percent but should reaccelerate to 2 percent in 2007 and beyond as inflation burns off.
- Housing’s proportionate decline in Hawaii is smaller than nationwide, and Hawaii construction overall is being offset by relative strength in private *nonresidential* and federal military housing initiatives that are forecast to continue for several years. Sub-prime mortgage exposure in Hawaii is comparatively small. The historical experience of mortgage delinquency and default rates running at fractions of national norms, on average and on a cyclically-adjusted basis, continues in the recent data: Hawaii currently has the lowest mortgage delinquencies in the country.
- Hawaii’s moderate economic growth forecast for the remaining years of the decade reflect the challenges that its principle export, tourism, faces against serious declines in foreign travel to the US, as well as overall capacity constraints. Complicating matters is the continuing drag of regulatory restrictions on economic activity. Business confidence in Hawaii (illustrated below) has subsided lately in the face of these constraints, and partly because of financial turbulence. Still, a consensus forecast sees continued real economic growth in Hawaii accompanied by gradual disinflation from 2007-2009.



Hawaii Economic Indicators

Seasonally-adjusted data

| | | 2005:1 | 2005:2 | 2005:3 | 2005:4 | 2006:1 | 2006:2 | 2006:3 | 2006:4 | 2007:1 | 2007:2 | 2007:3 |
|------------------------------|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Real personal income | <i>billion 2006 \$</i> | 46.770 | 47.242 | 46.945 | 47.449 | 47.291 | 47.671 | 47.602 | 47.709 | 48.020 | 48.400 | |
| Growth rate | <i>% y-o-y</i> | 5.2 | 5.2 | 3.5 | 2.5 | 1.1 | 0.9 | 1.4 | 0.5 | 0.9 | 0.9 | |
| Honolulu CPI inflation* | <i>% y-o-y</i> | 3.2 | 3.1 | 4.1 | 4.5 | 5.4 | 5.8 | 5.8 | 5.8 | 5.2 | 5.0 | |
| Civilian Labor Force | <i>thousands</i> | 623.20 | 628.83 | 635.34 | 637.67 | 639.57 | 642.02 | 644.56 | 647.68 | 650.91 | 653.96 | 648.74 |
| Civilians Employed | <i>thousands</i> | 605.70 | 612.30 | 618.35 | 620.62 | 623.72 | 625.67 | 629.46 | 634.17 | 635.54 | 638.39 | 631.98 |
| Civilian Unemployment rate | <i>percent</i> | 2.8 | 2.7 | 2.7 | 2.6 | 2.4 | 2.6 | 2.4 | 2.0 | 2.4 | 2.4 | 2.6 |
| Total Wage and Salary Jobs | <i>thousands</i> | 601.02 | 607.15 | 611.87 | 614.30 | 617.62 | 622.19 | 624.68 | 629.40 | 631.78 | 631.16 | 634.01 |
| Private building permits | <i>million 2006\$</i> | 751.5 | 757.0 | 1,106.8 | 1,039.7 | 796.0 | 872.7 | 1,001.0 | 1,105.9 | 774.3 | 594.5 | |
| Nonresidential | <i>million 2006\$</i> | 438.4 | 491.0 | 671.6 | 723.7 | 487.0 | 471.8 | 451.2 | 391.9 | 423.5 | 370.0 | |
| Residential | <i>million 2006\$</i> | 313.1 | 266.1 | 435.2 | 316.0 | 309.0 | 400.9 | 549.8 | 714.0 | 350.8 | 224.5 | |
| Government contracts | <i>million 2006\$</i> | 204.5 | 138.0 | 215.5 | 167.4 | 264.9 | 211.9 | 145.9 | 302.4 | | | |
| Oahu home sales | <i>units</i> | 3,130 | 3,159 | 3,291 | 3,004 | 2,987 | 2,707 | 2,428 | 2,341 | 2,527 | 2,471 | 2,151 |
| Single family: Honolulu | <i>units</i> | 1,140 | 1,161 | 1,189 | 1,117 | 1,100 | 1,020 | 980 | 955 | 1,008 | 985 | 877.6 |
| Condominium: Honolulu | <i>units</i> | 1,990 | 1,998 | 2,102 | 1,888 | 1,887 | 1,687 | 1,447 | 1,386 | 1,519 | 1,486 | 1,272.9 |
| SF Median Price: Honolulu | <i>thousand \$</i> | 539.9 | 570.3 | 611.7 | 630.0 | 638.7 | 637.4 | 627.5 | 626.1 | 633.0 | 652.7 | 642.7 |
| Condo Median Price: Honolulu | <i>thousand \$</i> | 232.5 | 257.3 | 277.8 | 302.2 | 312.3 | 302.1 | 317.4 | 312.3 | 323.3 | 324.9 | 327.5 |
| Visitor arrivals | <i>thousand</i> | 1,866.1 | 1,794.6 | 1,881.5 | 1,874.0 | 1,851.5 | 1,836.9 | 1,859.9 | 1,867.6 | 1,835.1 | 1,830.2 | 1,862.2 |
| Domestic arrivals | <i>thousand</i> | 1,341.5 | 1,266.2 | 1,349.5 | 1,355.8 | 1,339.7 | 1,343.5 | 1,374.1 | 1,393.6 | 1,366.4 | 1,379.1 | 1,364.8 |
| International arrivals | <i>thousand</i> | 524.7 | 528.4 | 532.0 | 518.2 | 511.8 | 493.4 | 485.8 | 474.0 | 468.7 | 451.1 | 497.4 |
| Hotel occupancy | <i>percent</i> | 80.2 | 80.9 | 81.4 | 81.7 | 80.3 | 80.7 | 79.4 | 78.6 | 74.3 | 73.4 | 77.2 |
| Average daily room rate | <i>2006\$</i> | 172.60 | 170.59 | 178.57 | 181.03 | 182.68 | 185.61 | 186.07 | 185.19 | 188.64 | 187.65 | 187.33 |

*nonlinear interpolation

Sources: Bureau of Economic Analysis, US Department of Commerce;
 Bureau of Labor Statistics, US Department of Labor;
 Hawaii Department of Labor and Industrial Relations;
 Hawaii Department of Business and Economic Development;
 Honolulu Board of Realtors;
 Hospitality Advisors, LLC;

Note: Personal income, inflation and employment data are seasonally-adjusted by source, all others by Bank of Hawaii.

Comparative Hawaii economy 2007-2009 forecasts

October 24, 2007

| Annual percent changes ¹ | Jobs | | | | | Personal Income (real) | | | | | CPI Honolulu | | | | |
|-------------------------------------|------|------|------|------|------|---------------------------|------|------|------|------|-----------------|------|------|------|------|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2005 | 2006 | 2007 | 2008 | 2009 | 2005 | 2006 | 2007 | 2008 | 2009 |
| BOH ² | 3.1 | 2.5 | 1.9 | 1.3 | 0.9 | 2.9 | 0.9 | 1.8 | 2.2 | 2.1 | 4.0 | 4.6 | 4.6 | 3.8 | 2.8 |
| UHERO ³ | 2.7 | 2.6 | 2.0 | 1.7 | | 4.6 | 1.1 | 1.9 | 2.2 | | 3.7 | 5.1 | 4.8 | 3.7 | |
| DBEDT ⁴ | | | 2.0 | 1.5 | 1.3 | | | 1.8 | 1.9 | 1.9 | | | 4.5 | 3.8 | 3.4 |
| Actual(p) | 3.0 | 2.4 | | | | 2.9 | 0.2 | | | | 3.8 | 5.9 | | | |

| Annual percent changes ¹ | Total Visitor Arrivals | | | | | Domestic (UHERO: US) Arrivals | | | | | International (UHERO: Japan) Arrivals | | | | |
|-------------------------------------|------------------------|------|------|------|------|-------------------------------------|------|------|------|------|---|------|------|------|------|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2005 | 2006 | 2007 | 2008 | 2009 | 2005 | 2006 | 2007 | 2008 | 2009 |
| BOH ² | 4.2 | -0.5 | -1.6 | 1.6 | 2.1 | 2.9 | 1.7 | -0.1 | 1.7 | 2.2 | 7.2 | -5.9 | -5.3 | 1.2 | 1.8 |
| UHERO ³ | 6.7 | 0.4 | -1.4 | 0.5 | | 6.9 | 2.4 | -0.9 | 0.1 | | 3.4 | -8.6 | -2.5 | -0.9 | |
| DBEDT ⁴ | | | -0.3 | 1.5 | 2.0 | | | | | | | | | | |
| Actual(p) | 7.3 | 0.6 | | | | 8.5 | 3.3 | | | | 5.0 | -4.8 | | | |

| Annual percent changes ¹ | Total Visitor Expenditures | | | | | Construction ⁵ (UHERO ; see footnote) | | | | |
|-------------------------------------|----------------------------|------|------|------|------|---|------|------|------|------|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2005 | 2006 | 2007 | 2008 | 2009 |
| BOH (June 2006) ² | | | | | | 9.6 | 8.9 | -1.2 | -6.0 | -3.2 |
| UHERO (07Q3) ⁵ | | | | | | | | 5.3 | -0.7 | |
| UHERO (07Q1) | | | | | | 13.5 | 8.4 | 4.4 | -3.5 | |
| UHERO (06Q3) | | | | | | 6.3 | 10.0 | -1.9 | | |
| DBEDT ⁴ | | | 2.6 | 4.5 | 5.0 | | | | | |
| Actual(p) | 9.6 | 4.0 | | | | 10.75 | 9.2 | | | |

Notes:

¹ 2005-2006 "forecasts" are taken from last published forecasts prior to end of each year

² Paul Brewbaker, Chief Economist, Bank of Hawaii; June 2006 construction forecast is unpublished

³ Professors Carl Bonham and Byron Gangnes (University of Hawaii Economic Research Organization) September 28, 2007; outyear detail available to subscribers (http://www.uhero.hawaii.edu/eis/eis_forecastarchive.html)

⁴ Hawaii DBEDT quarterly forecast (posted August 16, 2007) www.hawaii.gov/dbedt/info/economic/data_reports/info/economic/data_reports/qser/outlook-economy

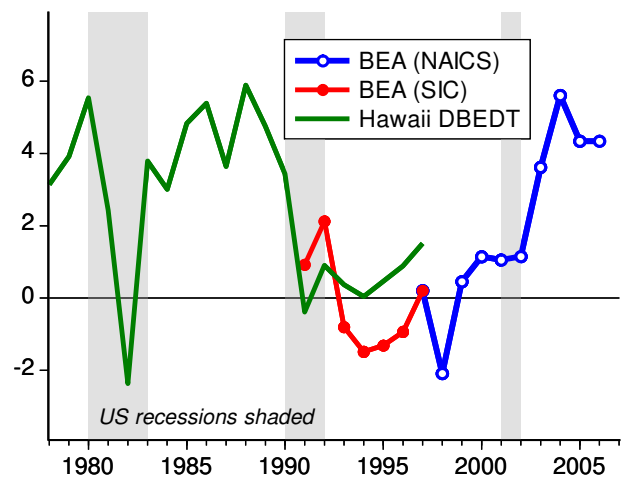
⁵ "UHERO Annual Hawaii Construction Forecast: Despite Credit Concerns, Soft Landing Expected" (September 7, 2007) by Carl Bonham, Byron Gangnes (UHERO) and Paul Brewbaker (BOH) (http://www.uhero.hawaii.edu/eis/eis_forecastarchive.html)

Note: data were compiled by Bank of Hawaii but users are encouraged to refer to original sources.

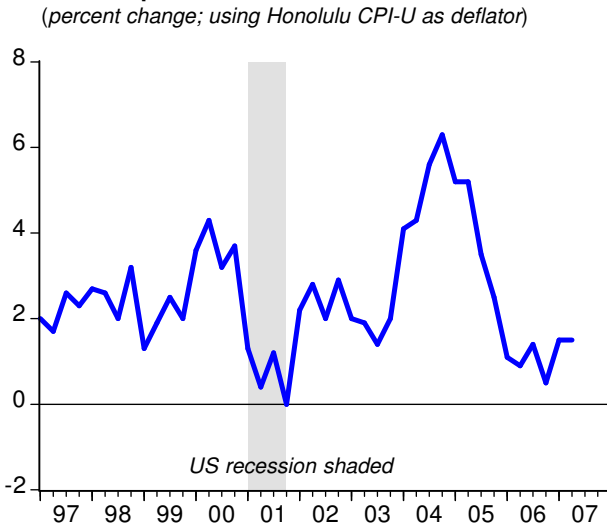
Hawaii real economy slower, resilient

Recent *upward* revisions in Hawaii quarterly personal income show that real economic growth slowed in 2006 and 2007 but remained positive. Adjusted for changes in the Honolulu CPI-U (5.9 percent inflation in 2006 and 5.0 percent inflation in first-half 2007), real income growth in the six quarters ending in mid-2007 remained around 1 percent. Above-national average growth in Hawaii during the 2003-05 interval, when residential investment was growing fastest, ranged from 4-6 percent, after inflation. The housing upswing dissipated after 2005: valuations sales have been falling for three years, and production commitments and valuations have been falling for two years. Real gross product growth matches real personal income growth (personal income comprises 80 percent of gross product), but is published using national deflators (shown at right). Hawaii's 2004 growth peak parallels the 1989 peak, when a housing contraction made the economy vulnerable to geopolitical risk, the Persian Gulf War, which caused *consumption* to precipitate recession.

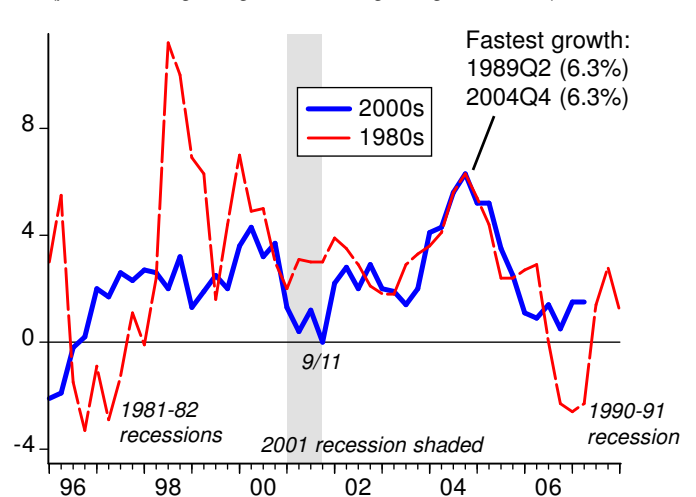
Hawaii real gross product growth through 2005
(percent change; deflators vary slightly)



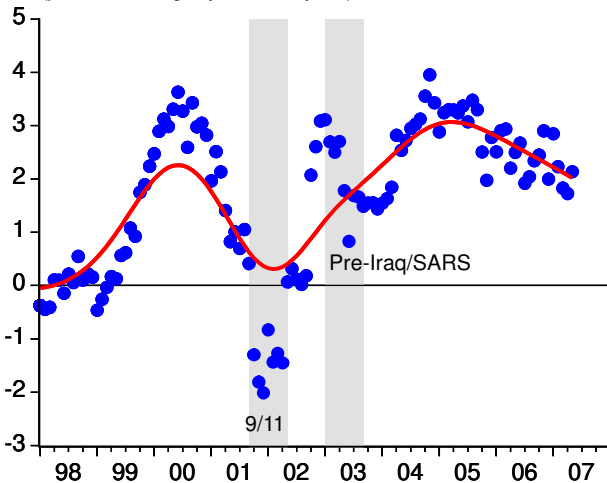
Hawaii real total personal income growth through second quarter 2007
(percent change; using Honolulu CPI-U as deflator)



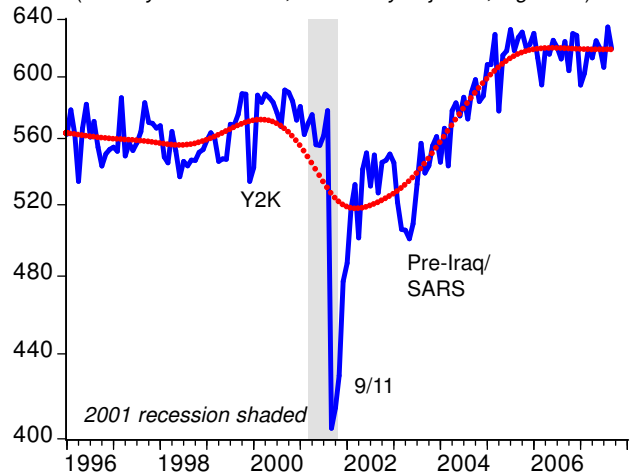
Hawaii real total personal income growth in the 1980s expansion and the 2000s expansion
(percent change; aligned to last highest growth rates)



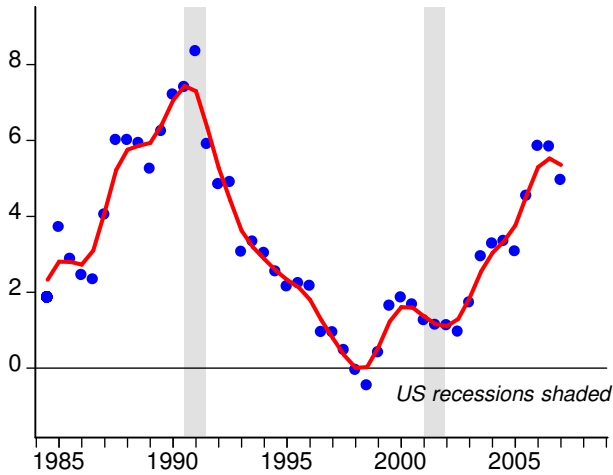
Hawaii monthly payroll employment growth
(percent change, year-over-year)



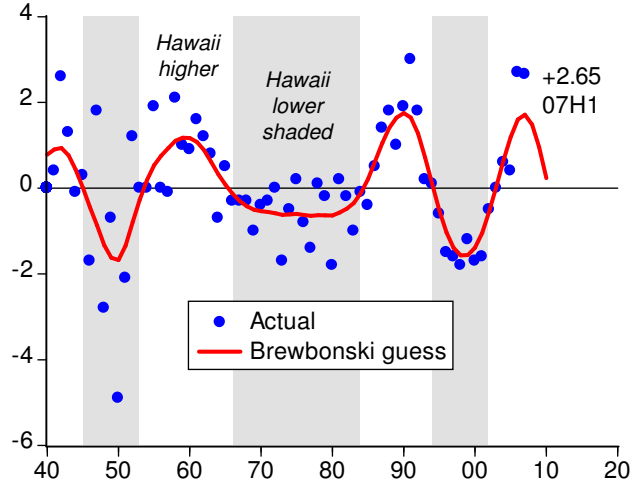
Hawaii tourist arrivals through September 2007
(monthly in thousands, seasonally-adjusted, log scale)



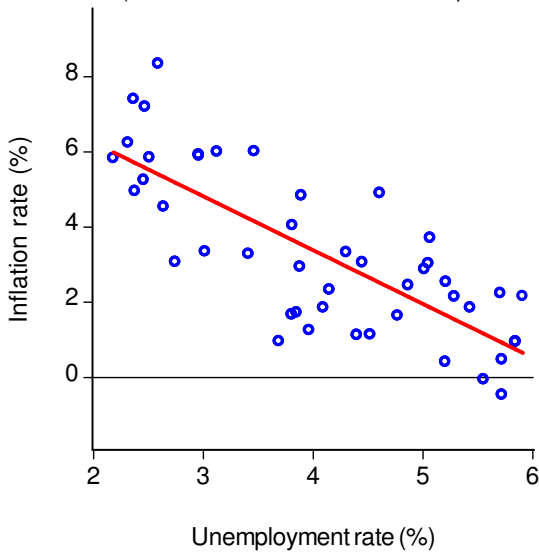
Honolulu CPI-U inflation rate through 2007H1
(percent, year-over-year)



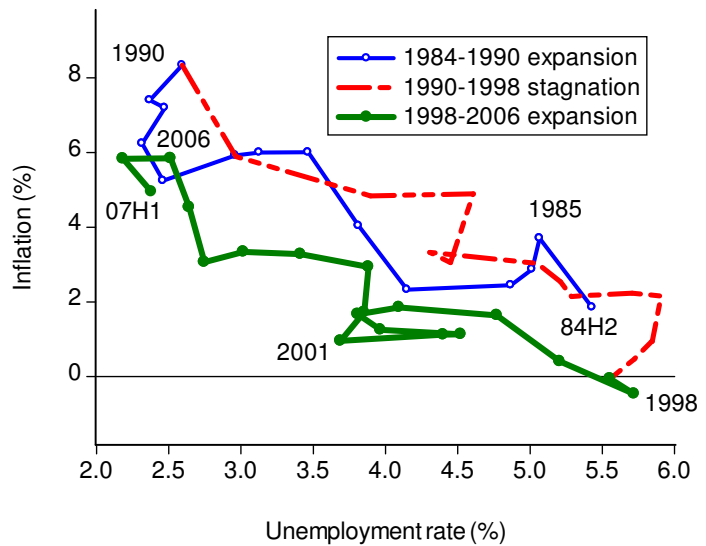
Honolulu minus US inflation differential
(percentage points, annual except first half 2007)



Hawaii inflation-unemployment "trade-off" with linear regression 1984H2-2007H1
(Scales as noted, annual data except first half 2007)



Hawaii inflation-unemployment "trade-offs" with separate business cycle phases 1984H2-2007H1
(Scales as noted, annual data except first half 2007)



Selected Honolulu CPI-U component inflation rates

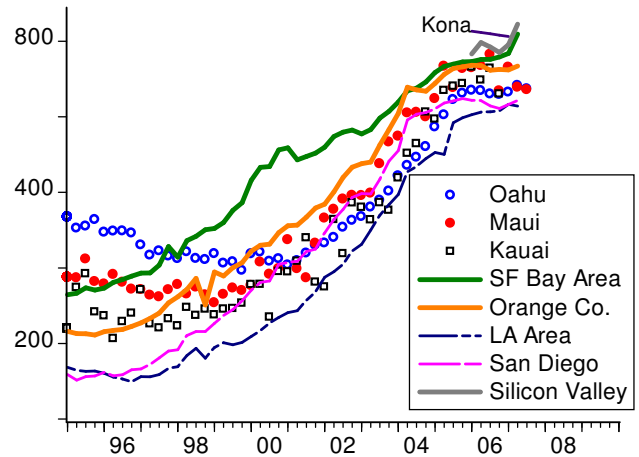
| percent change as noted | Weight | Year-over-year | | | Annualized 2007H1 |
|--------------------------------------|---------|----------------|--------|--------|-------------------|
| | | 2006H1 | 2006H2 | 2007H1 | |
| All Items | 1.00000 | 5.8 | 5.8 | 5.0 | 4.1 |
| Food and beverages | 0.19646 | 3.7 | 5.2 | 5.9 | 6.3 |
| Shelter | 0.38160 | 8.7 | 10.0 | 9.3 | 6.1 |
| Household fuels and utilities | 0.03513 | 21.0 | 6.3 | -3.2 | -8.8 |
| Household furnishings and operations | 0.03496 | -2.1 | -0.9 | 1.2 | 3.2 |
| Apparel | 0.02970 | -0.8 | 4.7 | -1.4 | -3.9 |
| Transportation | 0.17511 | 7.1 | 3.8 | 1.4 | 1.8 |
| Medical care | 0.05352 | No data | | | |
| Recreation | 0.04899 | 2.4 | 4.4 | 1.1 | 1.5 |
| Education and communication | 0.05180 | -1.3 | 0.8 | -1.2 | -1.4 |
| Other goods and services | 0.03231 | 3.4 | 3.5 | 4.3 | 5.5 |
| All items less food and energy | 0.79175 | 5.0 | 6.0 | 5.3 | 4.4 |
| Energy (special index) | 0.05908 | 23.2 | 5.3 | -2.1 | -3.9 |

Home prices reach the cyclical plateau

As in previous housing cycles, Hawaii existing home sales prices have topped out for the cycle in conjunction with the sales and production declines. Unlike some regional markets where new home inventories grew rapidly relative to existing home demand, Hawaii homebuilding never caught up. The perennially tight housing market in Hawaii saw valuations outstrip affordability and lose upward momentum, as investors' expectations for above-average capital gains for housing, as an asset class, gradually diminished. Capital mobility assures that long-term valuations trends are aligned, even if short-term deviations can arise. As a result, Hawaii's cycle--and cyclical home price movements--historically lag those of California and the mainland. An early-2000s valuation gap stimulated capital flows from California to Hawaii; Hawaii's 1990s stagnation was partly the result of a reverse alignment. Hawaii's current cyclical position relative to California valuations probably limits downside risk, compared to its cyclical position relative to California in the early-1990s.

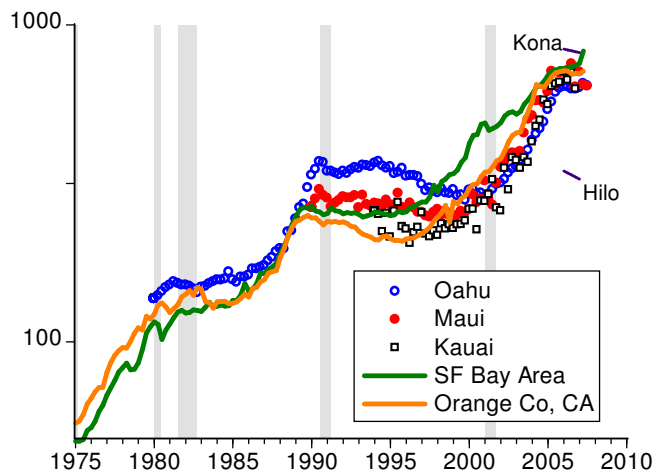
Median existing single-family home sales prices in selected Hawaii and California markets

(thousand dollars, seasonally-adjusted, log scale; data through second quarter 2007 except Oahu and Maui)



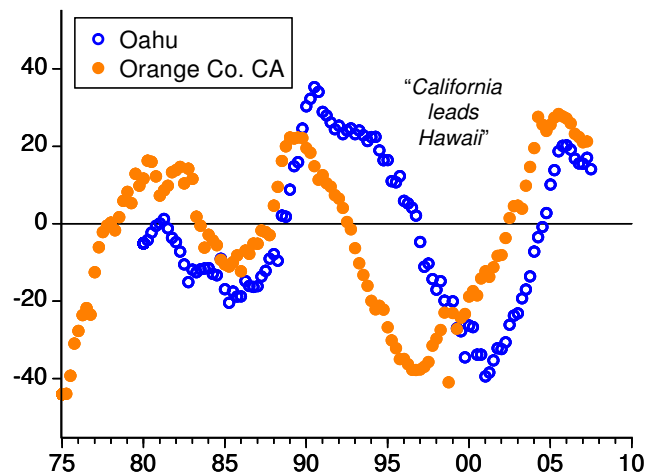
Median existing single-family home sales prices

(thousand dollars, s.a., log scale)



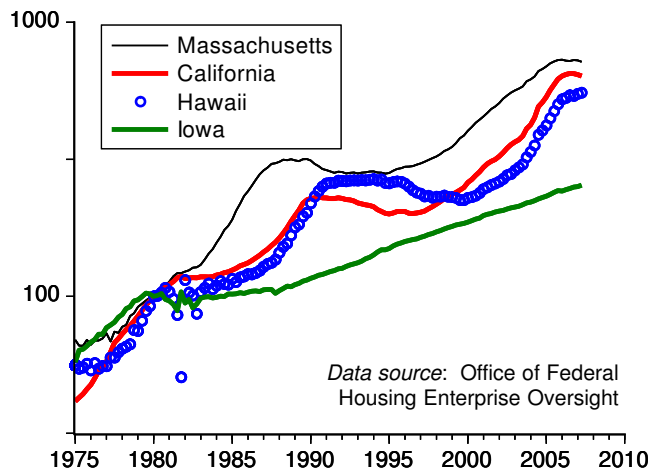
Deviations from existing home sales price trends

(quarterly in thousand dollars relative to trends)



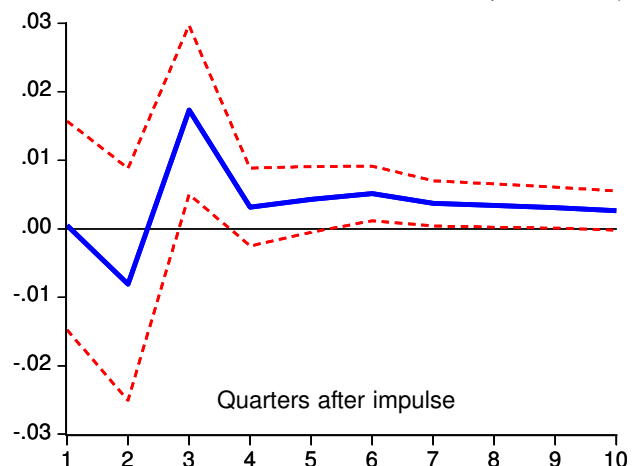
OFHEO same-home "quality-adjusted" price indexes for single-family homes, selected states

(Indexes 1981Q1 = 100, log scale; through 2007Q2)



Impulse responses of price changes in Hawaii to price changes in California--3 quarters' lag

(Impulse responses, plus and minus two standard errors, in a quarterly vector-autoregression of the log changes of Hawaii and California OFHEO home price indexes)

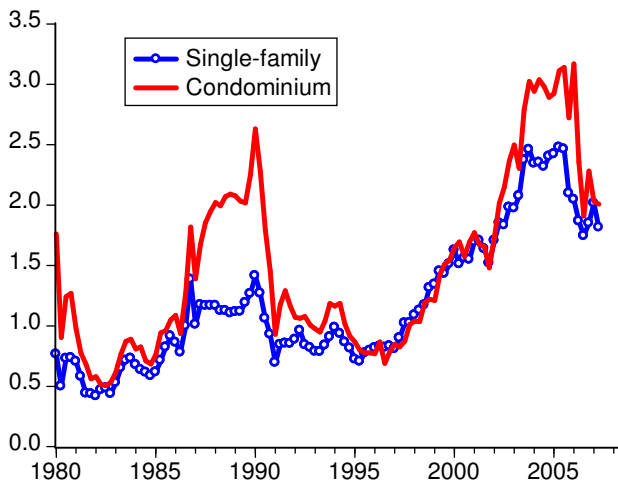


Hawaii's investment cycle: dominated by housing

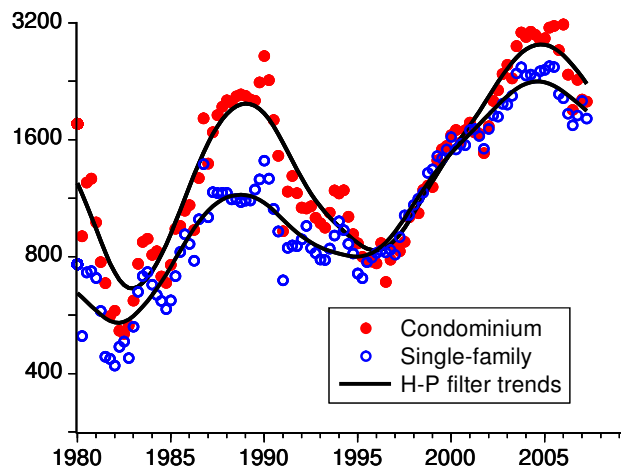
Though nonresidential fixed investment is expected to provide a certain amount of countervailing support for economic activity in Hawaii through 2010, residential investment tends to be the dominant influence overall. Unlike regions with a strong manufacturing presence, or where the technology sector makes equipment and software investment predominant, Hawaii's economy has a principle export--receipts from tourism services--in a sector that has not seen significant new hotel investment in the current cycle. Only resort-area condominium and time-share conversion and construction is carrying the ball for the nonresidential investment sector. Home sales transactions volume is dominated by condominiums because of the dominance of Oahu's sales volumes in the totals: Honolulu's urban core comprises an overwhelming number of residential condominiums. Single-family home sales are

predominant on the neighbor islands. Hawaii existing home sales have declined slightly more than 30 percent in recent years, more than nationwide, but Hawaii home *building* is falling much slower than nationwide: Hawaii did not experience as severe a production "bubble" and, despite the deterioration in housing affordability brought on by higher housing valuations, a housing shortage persists. One other wild card continues to support Hawaii construction and investment: a military housing privatization initiative that is adding about \$300 million in annual construction activity to the taxable construction spending totals. Overall construction is forecast to remain around the 2006 level \$7 billion, after briefly surging to \$7.2 billion at this cycle's peak in 2007. (Construction forecast details are available from the University of Hawaii Economic Research Organization; Google "UHERO.")

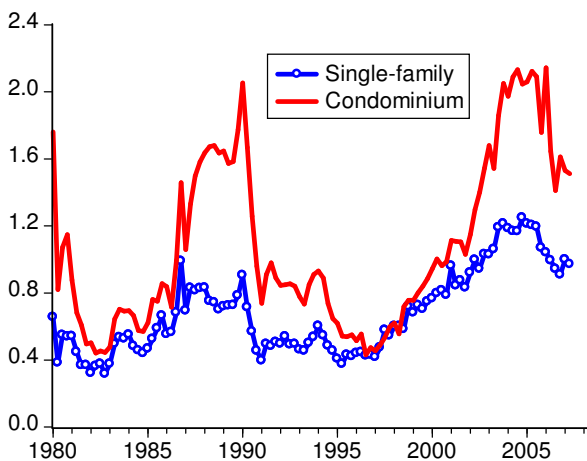
Quarterly Hawaii sales of existing single-family homes and condominiums through 2007Q2
(units, seasonally-adjusted; level scale)



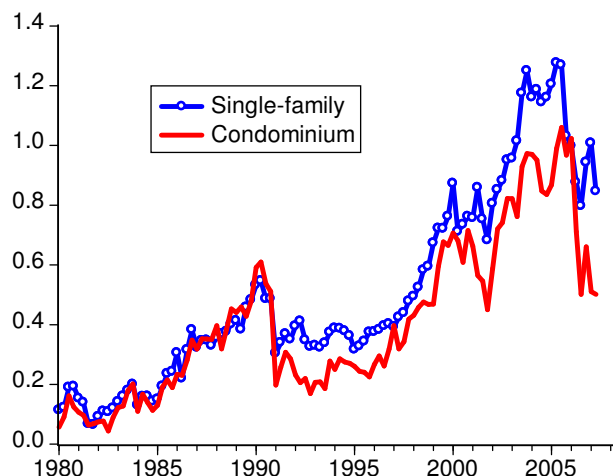
Quarterly Hawaii sales of single-family homes and condominiums with growth trends
(units, s.a., logarithmic scale; Hodrick-Prescott filters)



Quarterly Oahu sales of existing single-family homes and condominiums through 2007Q2
(thousands, seasonally-adjusted; level scale)



Neighbor island sales of existing single-family homes and condominiums through 2007Q2
(thousands, seasonally-adjusted; level scale)

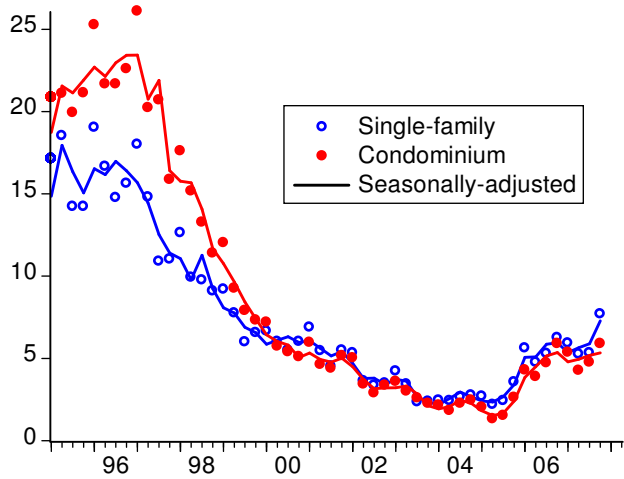


Excess inventory less problematic than elsewhere

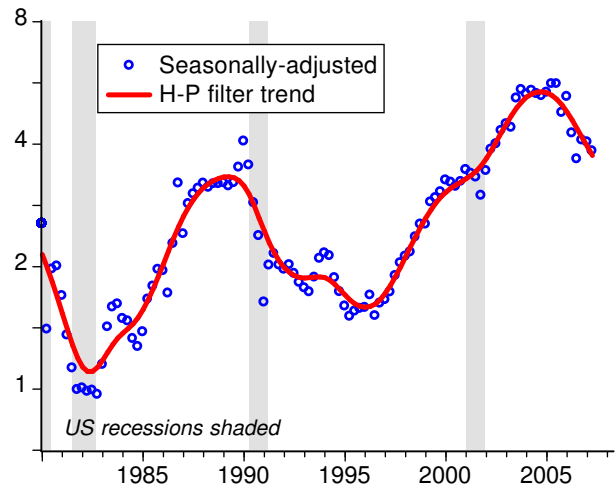
Hawaii's housing cycle has idiosyncratic characteristics of its own that minimize the state economy's vulnerability to the ongoing construction contraction. For example, sub-prime mortgage lending is a lower proportion of the total for the state than nationwide, or in states like California. Hawaii's mortgage delinquency and default rates are dramatically lower than national averages, on average and over the housing cycle. In 2007 Hawaii's mortgage delinquency rate has remained the lowest in the country, despite its home-grown housing compression. Months of inventory remain on the island of Oahu have doubled to six; inventory absorption had remained stable for about 12 months, then began piling up in October 2007. These levels are still one-third to one-fourth those of the mid-1990s residential investment trough. The 1980s housing boom--peaking in the very early-1990s--was followed by a

brief period prior to mid-decade when housing production commitments actually exceeded existing home sales volumes, partly as a result of ill-advised government affordable housing initiatives pursued through production subsidies. (Prospective homeowners literally "won the lottery," under these initiatives.) The more recent cycle has been absent government production interventions. Indeed, Hawaii is notorious for its unusually restrictive regulatory environment for residential development. Partly as a consequence of this public policy posture, housing construction in the current cycle peaked well below the peak in existing home sales (graph bottom right). Homebuilding peaked with the customary one-year lag after sales volumes began declining, with production commitments falling from a cyclical peak lower than in the previous cycle.

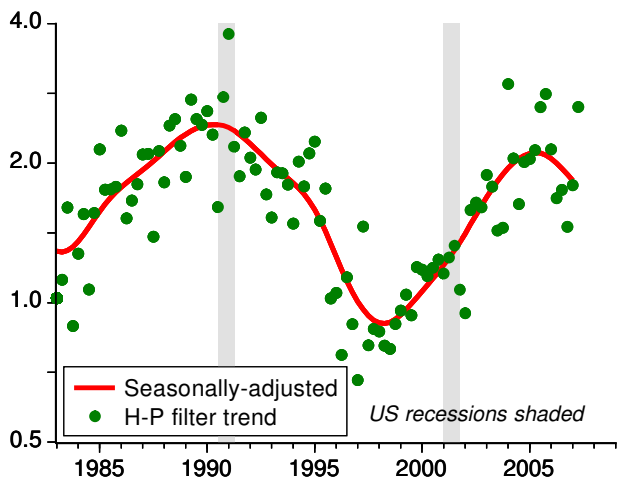
Oahu months of inventory remaining at current sales rates through 2007Q4 (based on October)
(quarterly, actual and seasonally-adjusted)



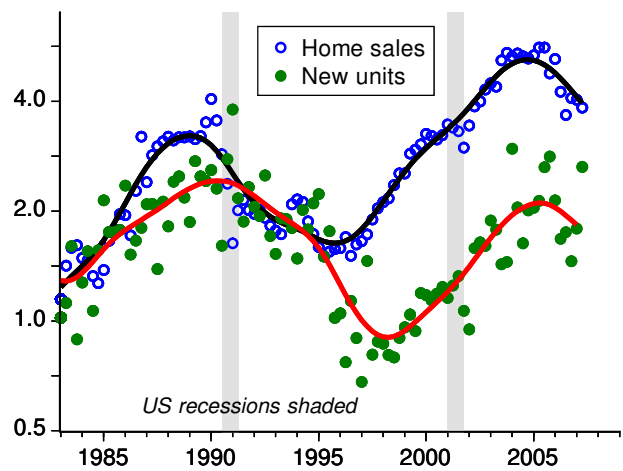
Statewide sales of existing single-family homes and condominiums through second quarter 2007
(quarterly in thousands, seasonally-adjusted; log scale)



Quarterly housing units authorized by building permit in Hawaii through second quarter 2007
(thousands, seasonally-adjusted; logarithmic scale)

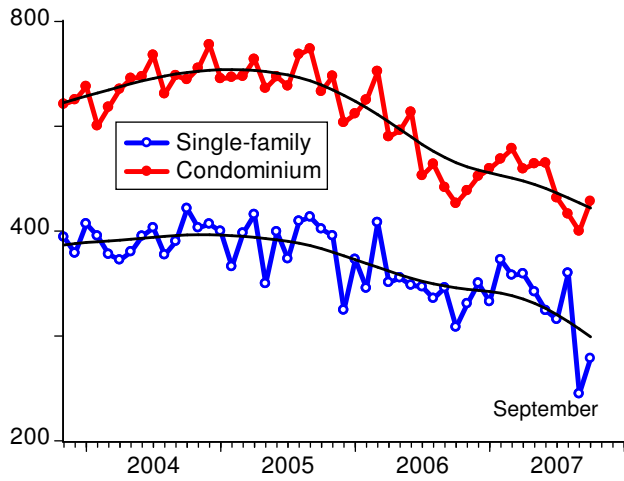


Statewide homebuilding and home sales cycles aligned through second quarter 2007
(thousands, seasonally-adjusted; logarithmic scale)



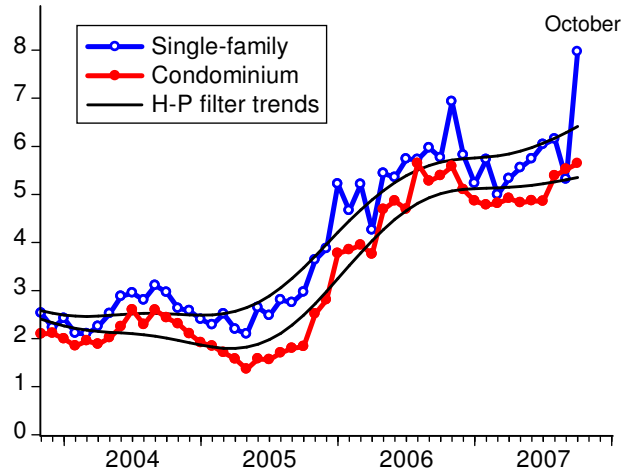
Oahu sales of existing single-family homes and condominiums through October 2007

(monthly in thousands, seasonally-adjusted; log scale)



Oahu MLS months of inventory remaining at current sales rates through October 2007

(monthly, seasonally-adjusted)



| Oahu October stats | SF | Condo |
|--|-------|-------|
| Sales ¹ | 265 | 423 |
| Median prices (thousand dollars) ² | 655.0 | 322.5 |
| Months of inventory remaining ³ | 7.70 | 5.90 |

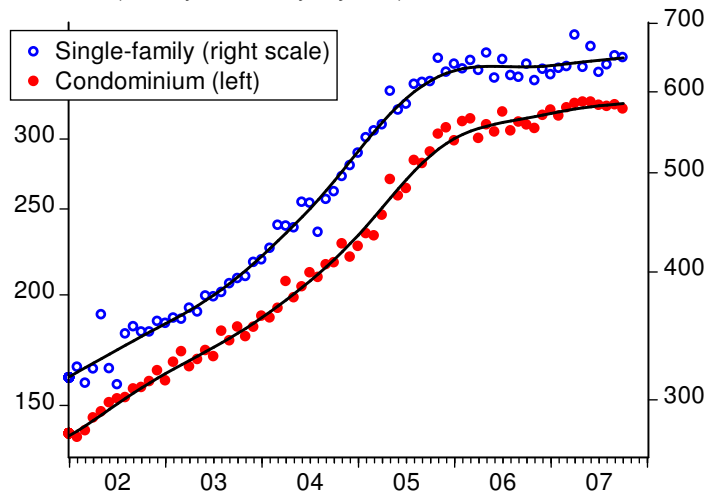
¹Year-to-date down 7.6 percent single-family, down 13.3 percent condo.

²Year-to-date \$649,000 (up 2.2%) single-family and \$325,000 condo (up 4.8%)

³Earlier this year was 5.0-5.5 single-family and 4.0-5.0 condo

Oahu median existing home sales prices through October 2007

(monthly, seasonally-adjusted)

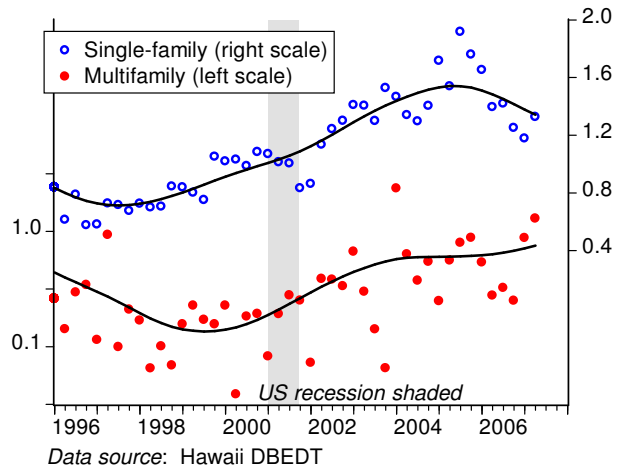


Affordable housing segments seeing production shift

Overall housing construction is declining for the usual cyclical reasons. Because of supply constraints, largely regulatory, a typical housing cycle in Hawaii (and California) witnesses rapid demand growth that outstrips supply. Home prices surge upward in a short interval of double-digit annual appreciation, roughly doubling, until affordability is exhausted and expectations of future returns to housing diminish. The corresponding reduction in the "in-the-moneyness" of options to build--building permits--causes both a reduction in homebuilding overall and a shift towards a more affordable product mix, where possible. In Hawaii, housing units accessible to the median-income family at the end of a home price upswing are largely to be found in the multifamily dwelling inventory. Currently, two years after the cyclical production peak, multi-family home commitments to build are still hovering, while single-family homebuilding commitments are falling. Still an overall decline in residential construction leads the overall construction forecast (see footnote on page 4).

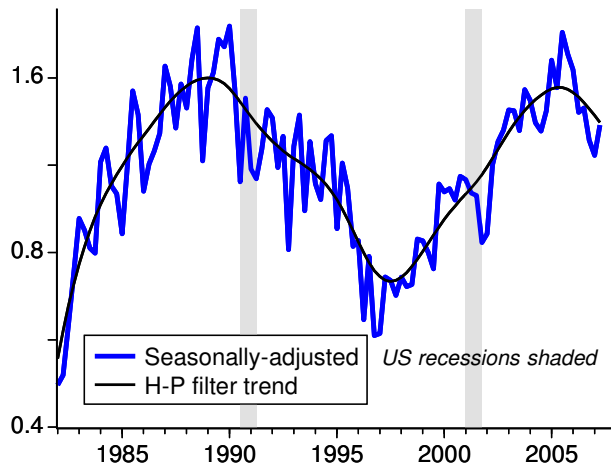
Authorizations by county building permit for single-family and multifamily housing units

(quarterly, seasonally-adjusted, through 2007Q2)



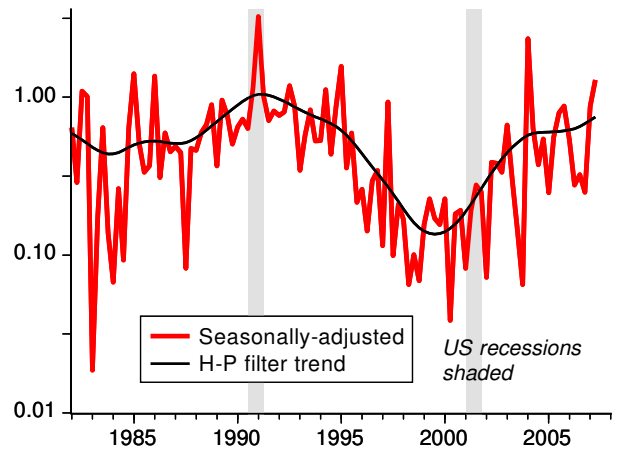
Hawaii single-family home building permits

(units, seasonally-adjusted, through 2007Q2)



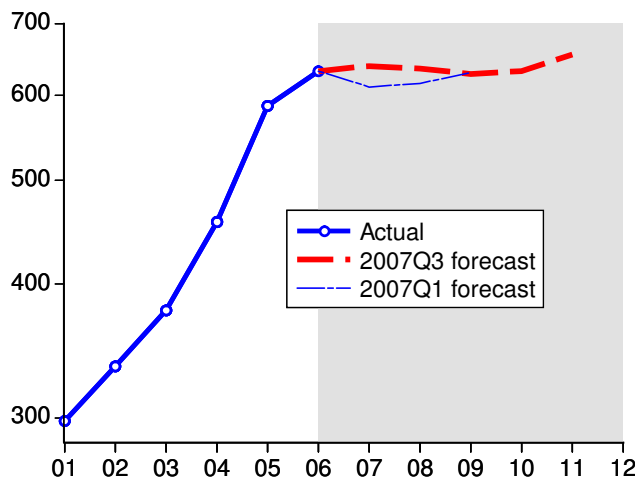
Hawaii multifamily home building permits

(units, seasonally-adjusted, through 2007Q2)



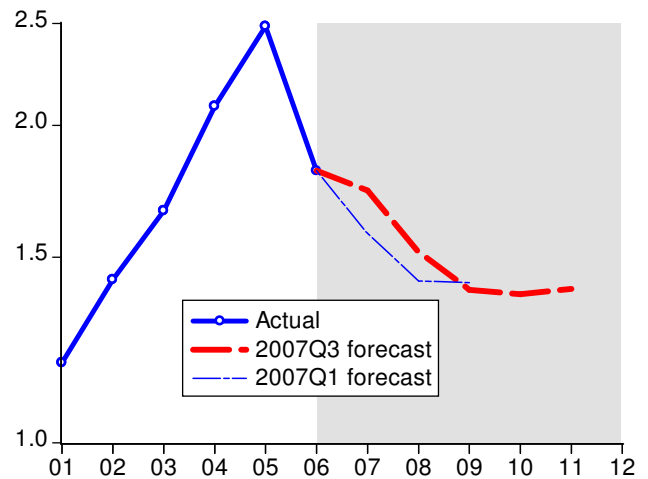
UHERO September 2007 forecast for median Oahu single-family home prices, with subscriber forecast detail, through 2011

(thousand dollars, used by permission of UHERO)



UHERO September 2007 forecast for real Hawaii new housing construction commitments, with subscriber forecast detail, through 2011

(thousand dollars, used by permission of UHERO)

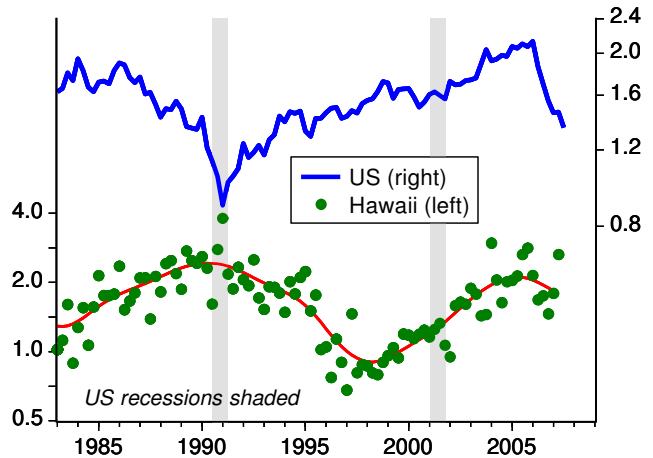


Housing contraction not yet a recession-precipitant

US economic growth forecasts for the next several quarters continue to hover around 2 percent, in real terms, with a reacceleration expected in the latter quarters of 2008, despite a sharp decline in residential investment of up to nearly 20 percent quarterly on an annualized basis. The amazing resilience of the US economy, with the additional burden of over-\$90/barrel oil prices, has partly been the result of the weak US dollar's impact through rising US net exports and corporate earnings. Forecasts for growth in the economy continue because personal consumption expenditure has not collapsed, as it did following Iraq's invasion of Kuwait in third quarter 1990 and the ensuing Persian Gulf War. A housing contraction absent a consumption decline is "makeable." In Hawaii, where the housing compression has been less dramatic, there is even smaller likelihood of a housing-led recession, because overall construction should have a soft landing.

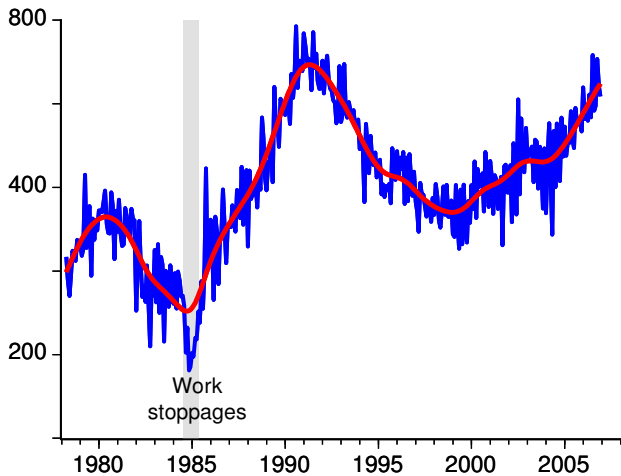
Monthly US housing starts and Hawaii new home construction authorizations by building permit

(housing starts in millions at seasonally-adjusted annual rates, permits in thousands, s.a.; log scales)



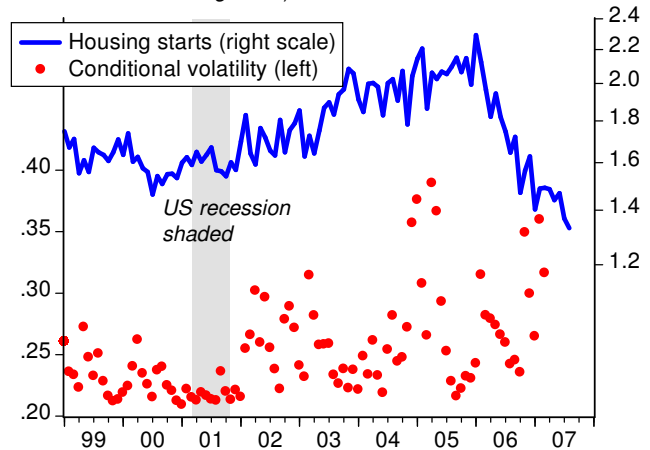
Real Hawaii total contracting receipts

(monthly, million 2006\$, seasonally-adjusted, with H-P filter trend)



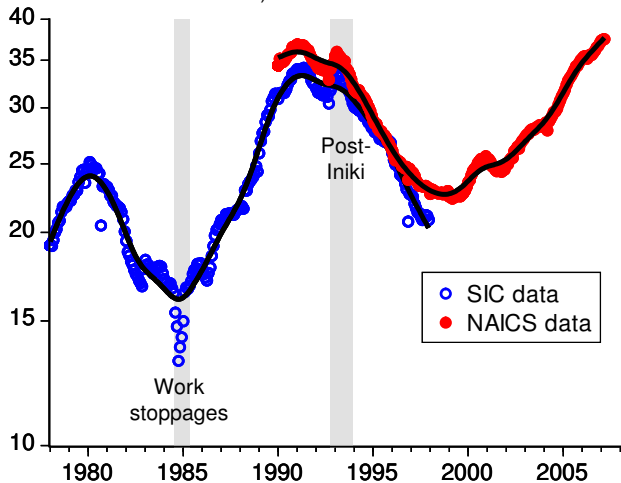
Monthly US housing starts through August 2007

(millions at seasonally-adjusted annual rates; starts illustrated on a log scale)



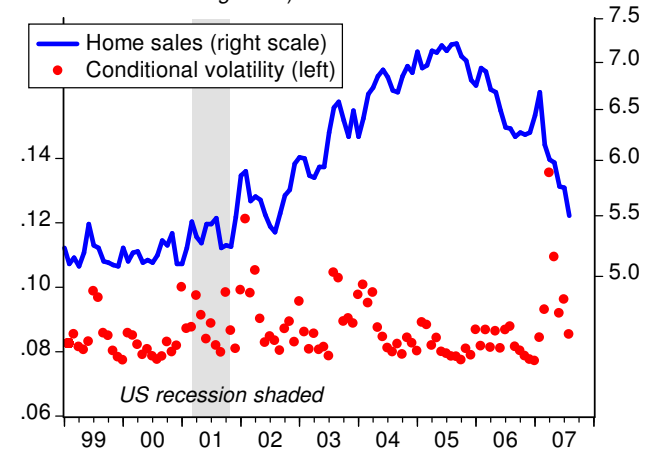
Hawaii construction payroll employment

(monthly, thousand jobs, seasonally-adjusted, with H-P filter trends)



Monthly US sales of existing homes

(millions at seasonally-adjusted annual rates; home sales illustrated on a log scale)

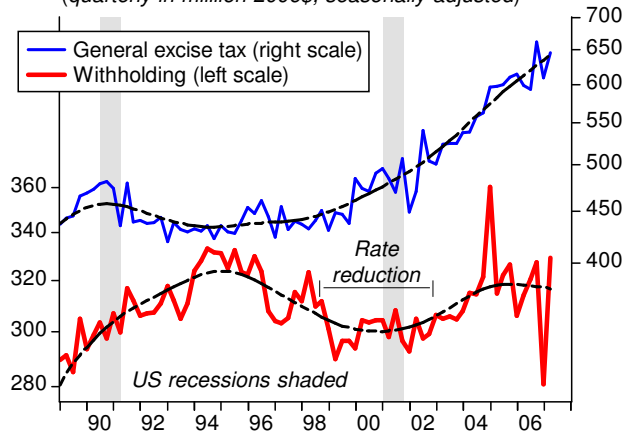


As goes the economy so go tax revenues

Hawaii's state and county jurisdictions have an unusual relationship wherein public education is State-run, and property tax revenues accrue solely to County governments. The State's fiscal concentration places heavier reliance on taxes of gross and net business and individual incomes. Hawaii's effective property tax rates are lowest in the country by half the next lowest jurisdictions', one-quarter the national norm, and one-eighth the highest property tax rates. Its general excise tax, a broad-based gross business receipts tax--exempting B2B sales to reduce "pyramiding"--is lucrative despite a low 4.0 to 4.5 percent rate. It captures revenues from sales of goods and services and information, and is a legal liability of sellers, not buyers, as is the case with a sales tax. Individual income tax revenues have been truncated by tax rate reductions. A highly cyclical, residual component channels much economy-wide movement into the totals.

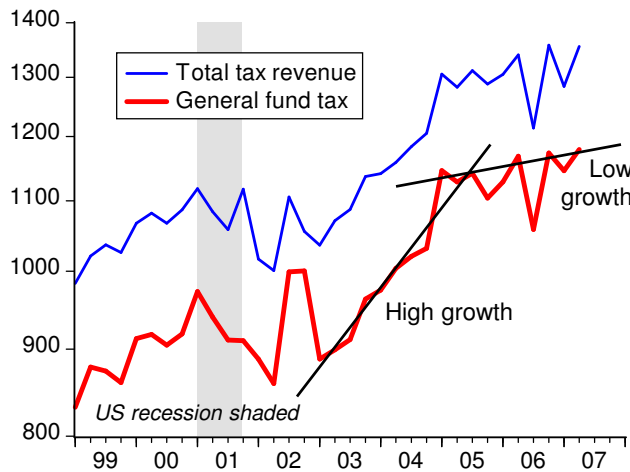
Biggest Hawaii tax revenues (82.5% of total)

(quarterly in million 2006\$, seasonally-adjusted)



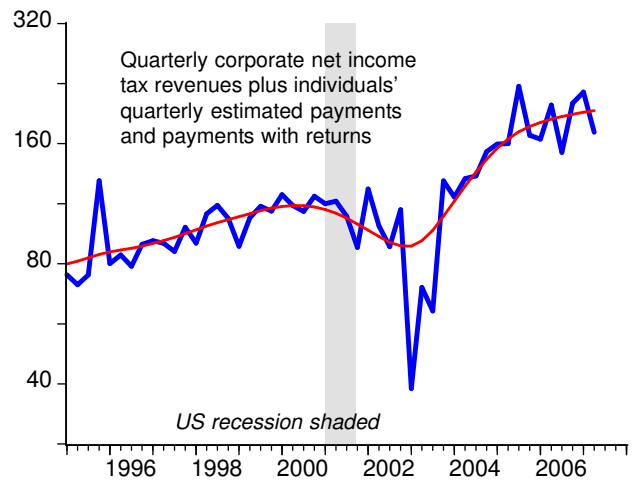
Hawaii State tax revenue streams

(quarterly in million 2006\$, seasonally-adjusted)



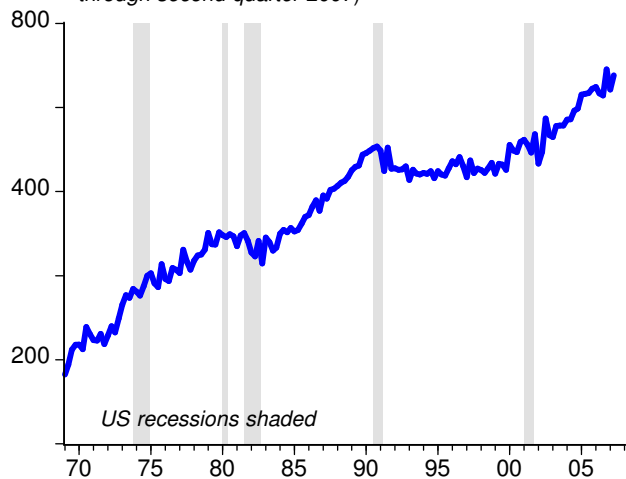
Highly cyclical tax components (16.0% of total)

(quarterly in million 2006\$, seasonally-adjusted)



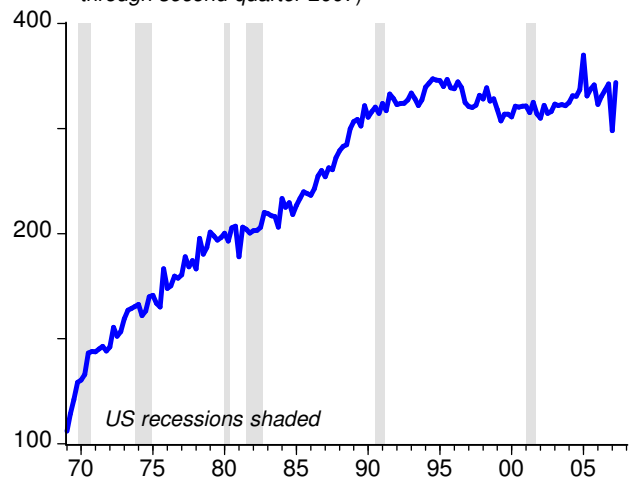
Hawaii State general excise tax revenue

Hawaii's principal tax revenue stream is from gross business receipts, which captures services- and information- as well as good-producing sales (quarterly in million 2006\$, seasonally-adjusted, through second quarter 2007)



Hawaii State individual income tax revenue

Hawaii's income tax experienced significant rate reductions from 1998-2002, and expanded tax credits throughout the early 2000s (quarterly in million 2006\$, seasonally-adjusted, through second quarter 2007)

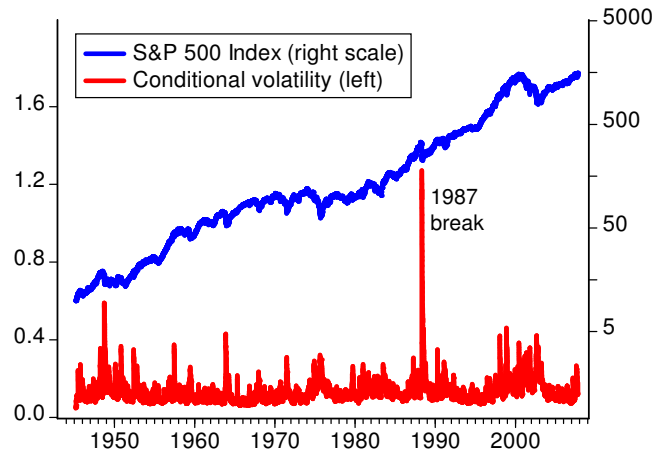


A volatile year, with continued economic prosperity

Consider the evidence. US employment remains in a range, 4.5-5.0 percent unemployment, consistent with price stability. Real GDP growth, 3.1 percent in 2005, 2.9 percent in 2006, was 2.8 percent during the first three quarters of 2007, *accelerating* to 3.8 percent in the second quarter and 3.9 percent in the third quarter. Yet, financial markets have experienced several bouts of turbulence this year. One followed a speech in Shanghai in February 2007 by Alan Greenspan. More recently one accompanied the credit crunch that followed a breakdown in markets for structured investment vehicles built-up from sub-prime mortgages. Even more recently, third quarter earnings results for financial corporations produced new surprises. Contagion from financial volatility to the real economy is possible. The credit crunch should slow aggregate demand somewhat, but recession remains relatively improbable. The volatility itself is not all that extreme, in the historical context. Hang on for the ride.

Historical values and volatility of the S&P 500

(1941-43 = 100, through October 2007)



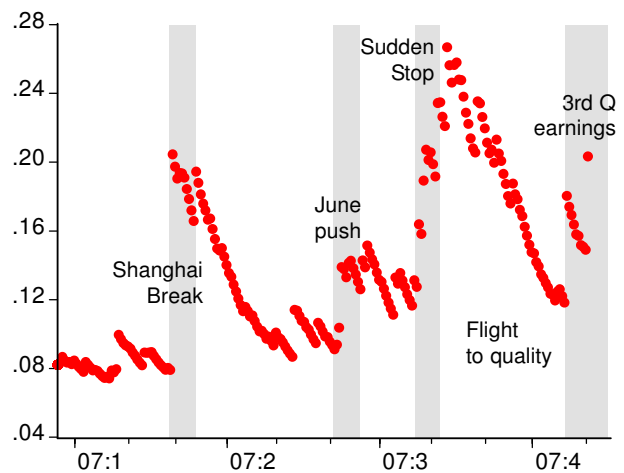
Daily closing values of the S&P 500 index

(1941-43 = 100, through October 2007)



Conditional daily volatility of the S&P 500

(Threshold autoregressive conditional heteroskedasticity [TARCH] standard deviations)



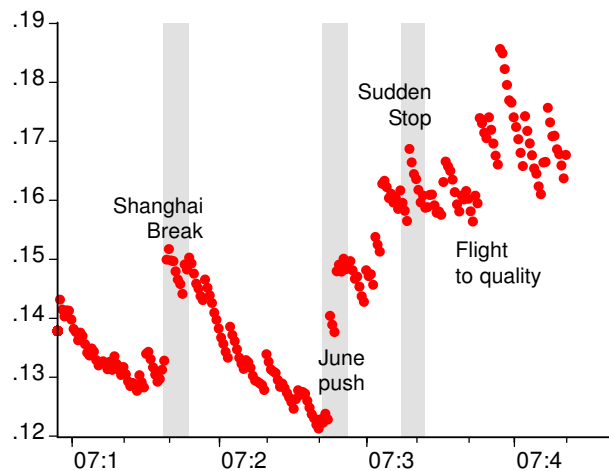
Daily yields on 10-year US Treasury Notes

(percent, adjusted to constant maturities, through October 2007)



Conditional daily volatility of 10-year T-Note yields

(Generalized autoregressive conditional heteroskedasticity [GARCH] standard deviations)

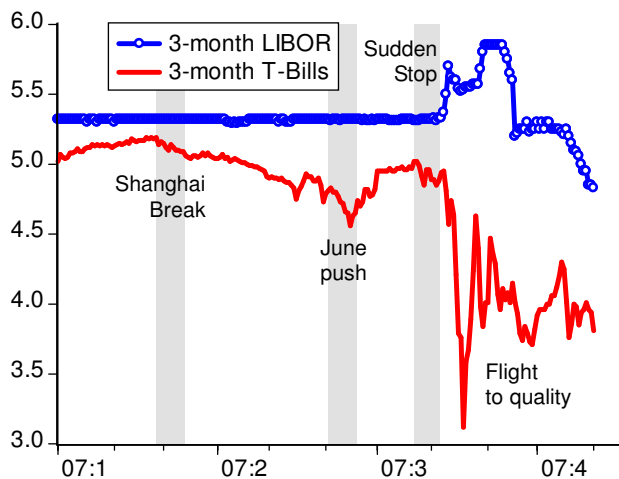


Breakdown of the “price discovery” process

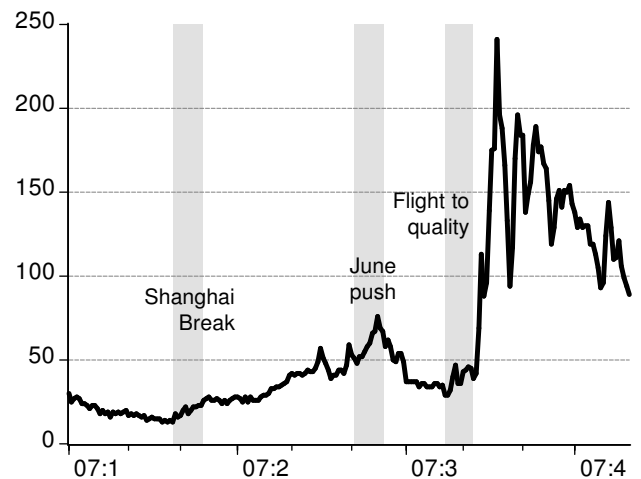
Financial turbulence during third quarter reflected, in the words of Fed Governor Randall Kroszner, a breakdown in “the price discovery mechanism” by which markets reveal valuations of financial assets. To be sure, the rising delinquency and default experience of sub-prime mortgages, at the end of a two-year long downward slide in US housing production and sales, had raised uncertainty about the economic outlook. Still, neither the housing recession nor the riskiness of sub-prime lending was new in July 2007. Instead, a series of revelations from hedge funds and investment banks during the course of the summer, both within the United States (where the sub-prime mortgages were originated) as well as overseas,

caused price discovery to break down. The most complex of the structured investment vehicles (SIVs), such as sub-prime mortgage collateralized deposit obligations (CDOs) became increasingly difficult to value as prices for their underlying assets tumbled and sources of short-term liquidity for their packagers, particularly asset-backed commercial paper markets, evaporated quickly in August. Credit risk premia widened out dramatically, illustrated below as the gap between the LIBOR/Swap and US Treasury yield curves, as liquidity constraints and asset valuation uncertainties led to a generalized flight to quality. “Price discovery” will be restored over time, but likely to a different-looking world from the one that just exploded.

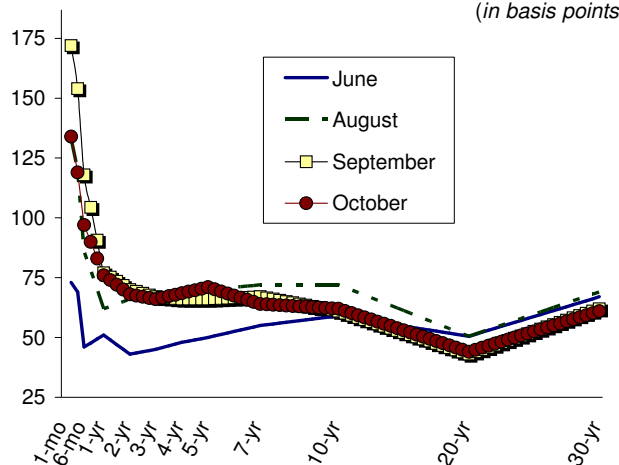
Short-term (3-month) interest rate benchmarks
(percent as noted, adjusted to constant maturities)



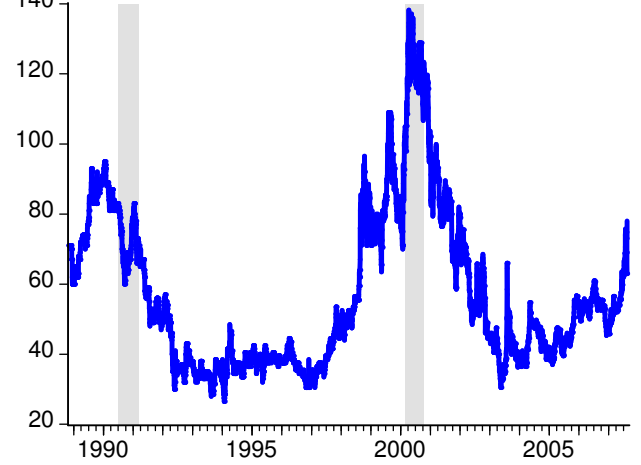
Spreads from 3-month LIBOR yields to yields on 3-month US Treasury Bills
(in basis points)



Spreads from LIBOR/Swap yields to US Treasury yields across the term structure
(in basis points)



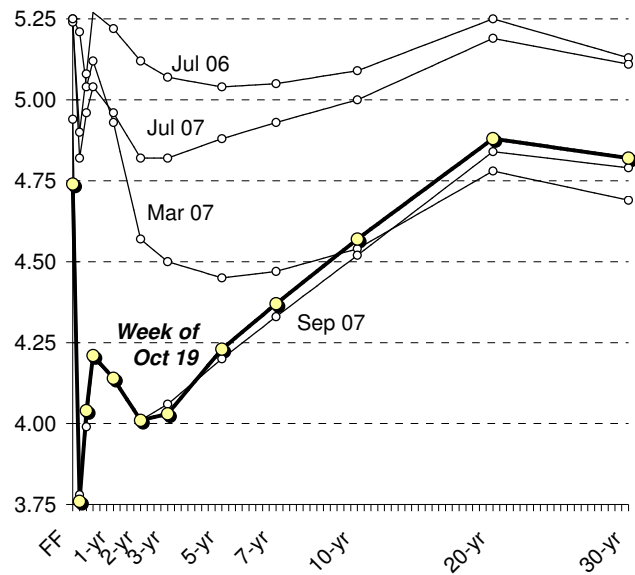
Basis spread from 10-year Swap to 10-year US Treasury yields adjusted to constant maturities
(Basis points, recessions shaded)



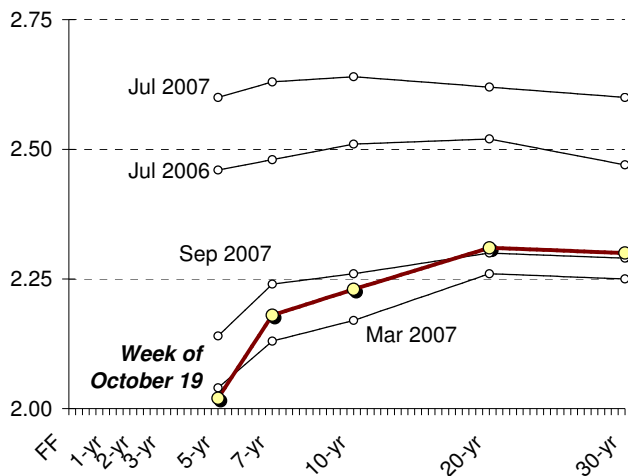
Flight to quality pushes downward Treasury yields

By the summer of 2007 risk-free interest rates along the US Treasury yield curve had returned to their configuration one year earlier when, in June 2006, the Federal Reserve's "Federal Open Market Committee" (FOMC) concluded a two-year long succession of 25 basis point increases in the target Federal Funds rate. From "removing monetary accommodation" through "further firming," the Fed had raised the target to pre-empt incipient inflation pressures. Financial turbulence beginning in July 2007 quickly lowered Treasury yields, especially at the short end, and "steepened" the yield curve. Short-term risk-free interest rates plummeted in both real and nominal terms. Implied inflation expectations also subsided, as subjective probability estimate for recession swelled from one in four to one in three. Meanwhile, core inflation subsided into the target range consistent with forecasts, giving the FOMC more leeway for the monetary easing that financial turbulence required and that financial markets expected. Treasury yields should remain low until recession risks abate and financial uncertainties are resolved.

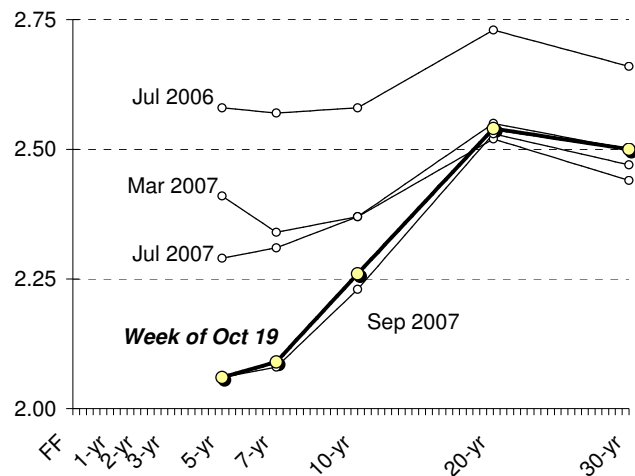
US Treasury nominal yield curve
(percent, adjusted to constant maturities)



US Treasury real (TIPS) yield curve
(percent, adjusted to constant maturities)



Implied long-term inflation expectations plus inflation risk premium
(percent, difference between nominal and TIPS yield curves)

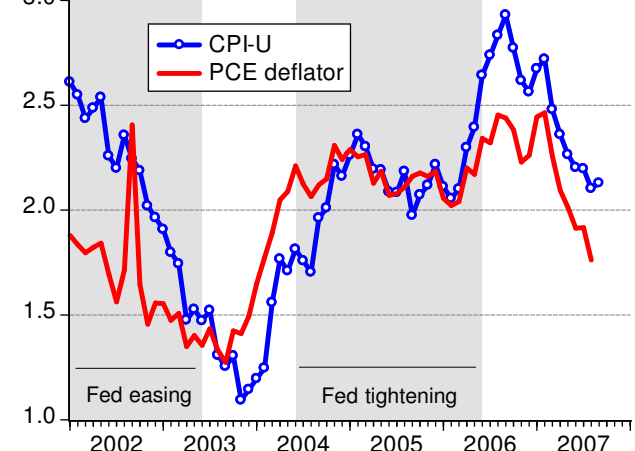


U.S. core PCE deflator forecasts for 2007-08

| Percent change | Vintage | 2007 forecast | 2008 forecast |
|--|----------------|---------------|---------------|
| American Banker's Association Economic Advisory Committee* | June 2007 | 2.2 | 2.1 |
| Federal Reserve Board Report to Congress (Bernanke) | July 2007 | 2.00-2.25 | 1.75-2.00 |
| National Association for Business Economics survey | September 2007 | 2.0 | 2.0 |

* Core CPI-U

US core inflation through September 2007
(percent, adjusted to constant maturities)

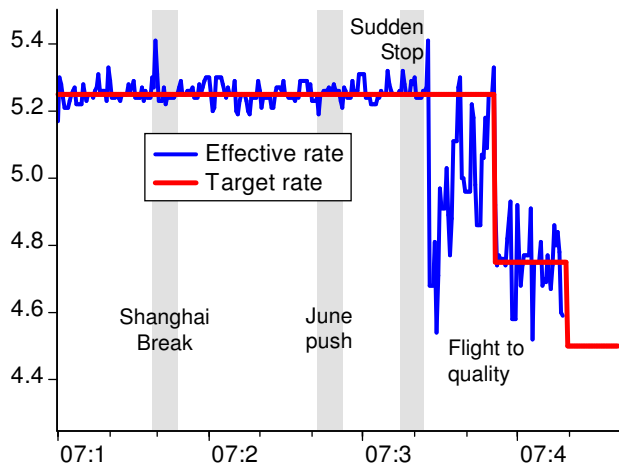


Monetary policy shifts to easing

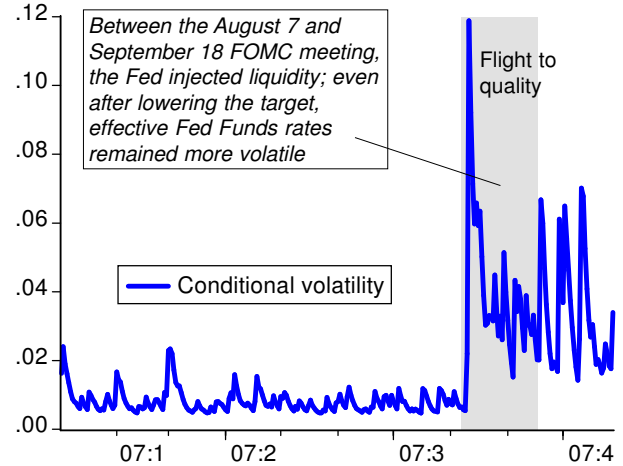
Prior to August 2007 the FOMC emphasized “the risk that inflation will fail to moderate as expected.” On August 17, observing that “financial market conditions have deteriorated, and tighter credit conditions and increased uncertainty have the potential to restrain economic growth going forward,” the FOMC opined that “downside risks to growth have increased appreciably.” It shifted emphasis to reflect “the outlook for both inflation and economic growth, as implied by incoming information.” The FOMC in August was “monitoring the situation and [was] prepared to act as needed to mitigate the adverse effects on the economy arising from the disruptions in financial markets.” On September 18 the FOMC reduced the Fed Funds target from 5.25 to 4.75 percent, with a matching discount rate reduction, observing that tightening credit conditions could “intensify the housing correction and...restrain economic growth.” They took action to “forestall some of the adverse

effects on the broader economy, since financial turbulence had “increased the uncertainty surrounding the economic outlook.” The FOMC said it “will act as needed to foster price stability and sustainable economic growth.” Observing in its October 31 statement that third quarter economic growth was “solid” (3.9 percent, following 3.8 percent growth in 2007Q3), and that “strains in the financial market have eased somewhat on balance,” the FOMC forecast that “the pace of economic expansion will likely slow in the near term, partly reflecting the intensification of the housing correction.” It thus lowered the Fed Funds target further, to 4.50 percent, judging that “the upside risks to inflation roughly balance the downside risks to growth.” Injecting liquidity, the Fed stabilized financial markets in 2007Q3, but a Monday morning quarterback might criticize the Fed for tightening too late in 2004, and easing too late in 2007, based on the Taylor Rule for monetary policy.

Daily effective Fed Funds rate through October 2007 and the FOMC target
(percent)

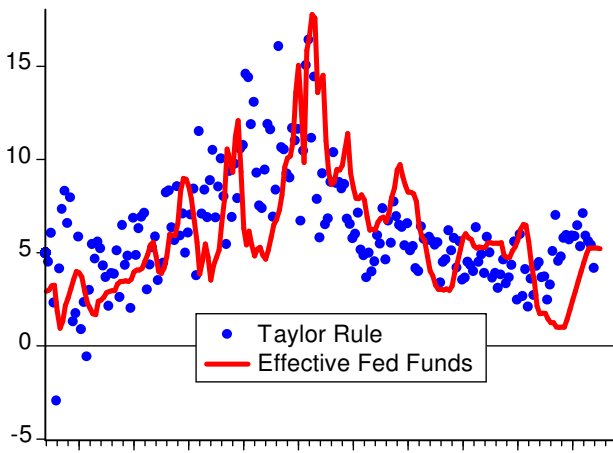


Fed Funds conditional standard deviations
(GARCH (1,1) estimates)



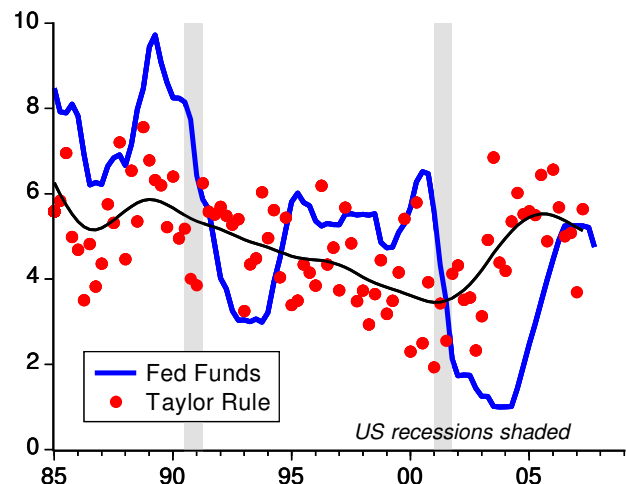
A Taylor Rule and effective Fed Funds rates

[percent, where r = Fed Funds rate, p = annual increase in the GDP deflator, target $p^* = 2$, y = real GDP growth rate, y^* = real potential GDP growth rate (Congressional Budget Office) and target $r^* = 5.1 + (1.5)(p - p^*) + (0.5)(y - y^*)$]



A Taylor Rule for monetary policy

A version of John Taylor’s famous rule illustrates how policy-makers recently might have waited too long to raise interest rates, and too long to lower them.

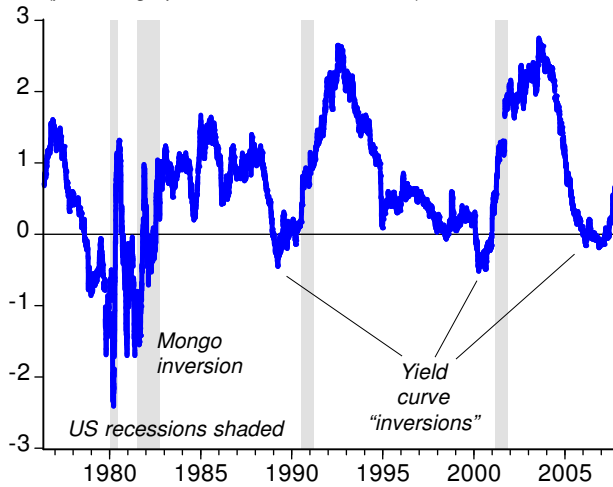


Whatever happened to the inverted yield curve?

Two years ago, the “smart money” was betting that an inverted yield curve would *cause* a US economic recession. Inversion means that short-term interest rates are higher than long-term interest rates, so that the term spread (graph to the right) is negative. Recessions abound in history, but correlation is not causation. A global glut of savings has swarmed to the safe haven of US Treasury securities in recent years, reducing long term rates. The reduction in real economic volatility and increased monetary policy credibility, with lower inflation expectations, also have narrowed the term spread. This summer’s financial volatility raised credit risk, widened credit spreads and exacerbated the flight to *short-term* quality. Term spreads increased as a result. As the risk premium subsides and the opaqueness that undermined valuations of complex financial instruments fades, risk-free rates will rise. Still, an historically narrow term spread is expected persist as volatility subsides in 2008.

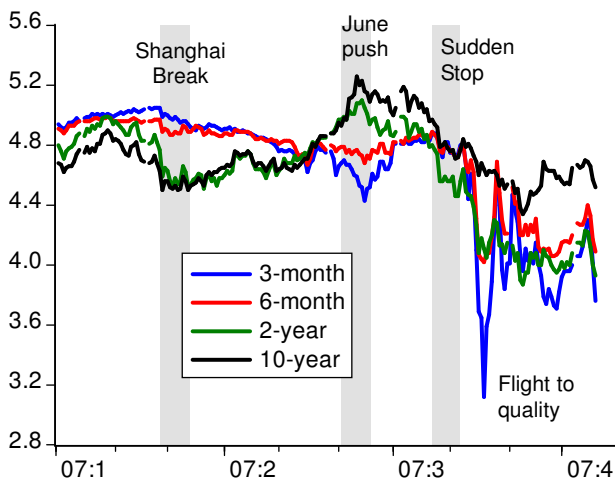
Term spread from 10-year to 2-year US Treasury Notes, yields adjusted to constant maturities

(percentage points, recessions shaded)



Daily yields on US Treasury securities

(percent as noted, adjusted to constant maturities)



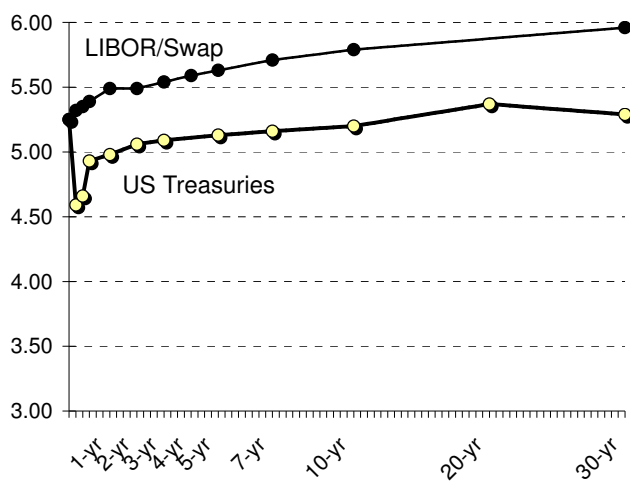
Term spread from 10-year to 2-year Treasuries

(basis points, daily in 2007, through October)



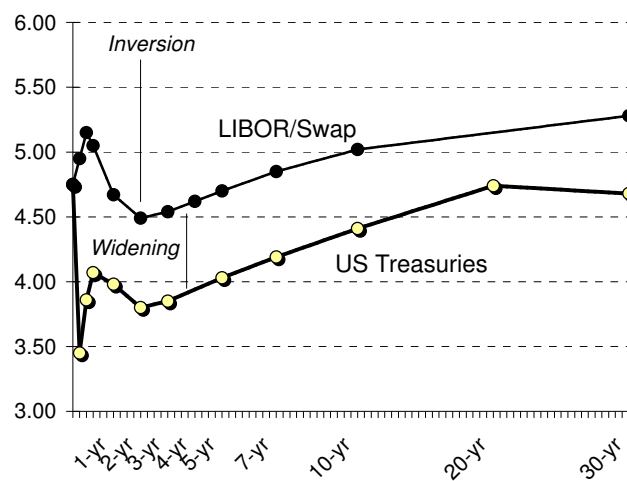
LIBOR/Swap and constant maturity US Treasury yield curves for the week of June 15, 2007

(percent at each term point)



LIBOR/Swap and constant maturity US Treasury yield curves for October 18, 2007

(percent at each term point)



**LATE
TESTIMONY**

Revenue trends through 2007Q3

prepared for a presentation to the informational briefing
Senate and House money committees

Friday, January 11, 2008
Hawaii State Capitol Auditorium

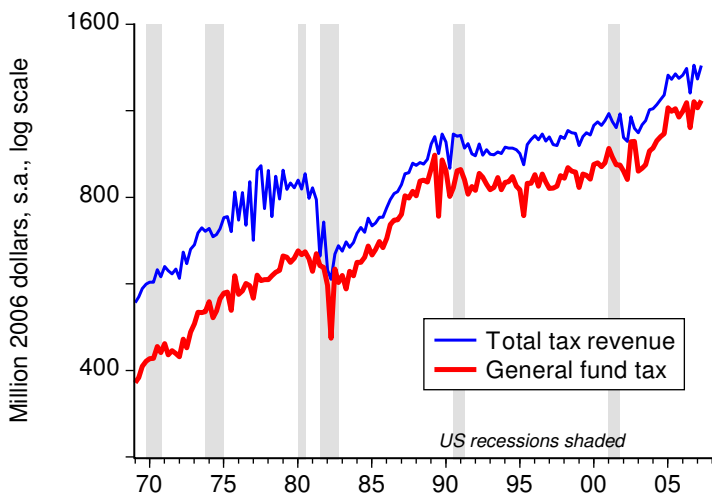
by Paul H. Brewbaker, Senior Vice President
and Chief Economist, Bank of Hawaii
and Chair, Hawaii Council on Revenues



State of Hawaii tax revenue trends

- Tax revenues procyclical: rise and fall with real economy
- Price inflation is a separate boost to GET (dollar-for-dollar) and withholding from wages (depending on wage inflation)
>>> conceptually separate real from nominal
- Inflation is forecast to fall back to the national norm (from 2006 peak of 6 percent eventually to 2 percent)
- Real Hawaii economic growth rates will be decelerating—employment, income, much sector-specific activity
- Transition to slower real growth (2005-2009) normalizing to somewhat higher growth in the 20-teens will be offset by disinflation, producing roughly stable *nominal* State tax revenue growth forecast growth rates

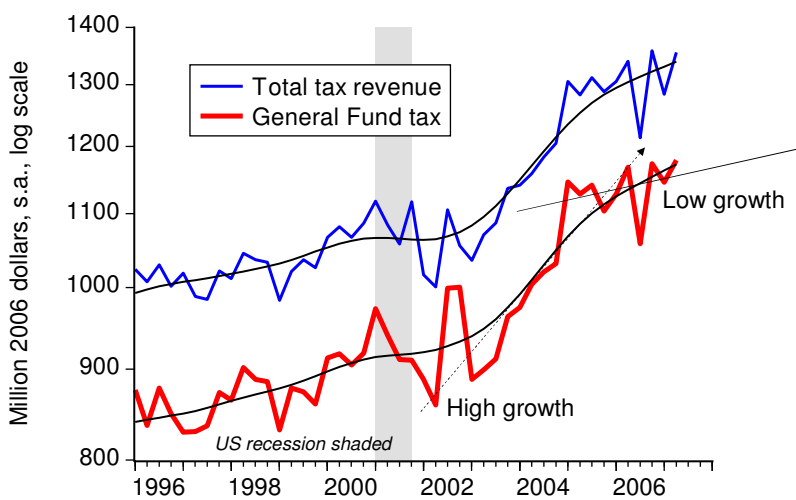
Real quarterly total and general fund tax revenues



Sources: Tax Research and Planning, Hawaii Department of Taxation; calculations by Bank of Hawaii

2

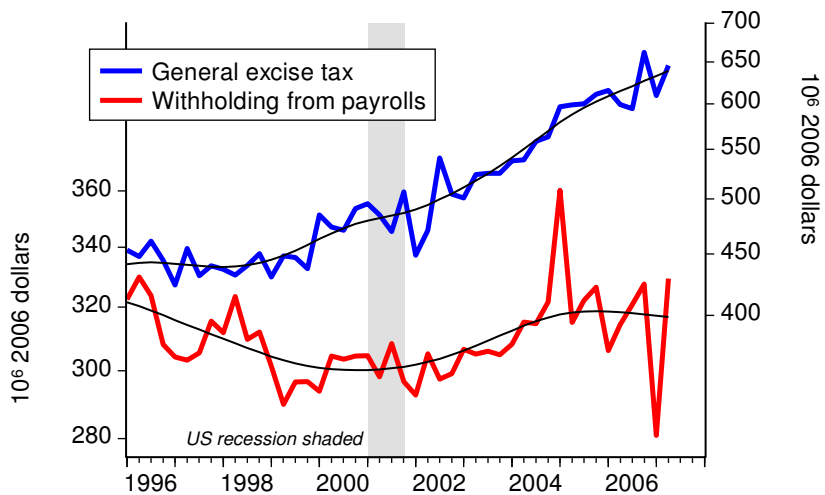
Past higher growth; more recent lower growth



Sources: Tax Research and Planning, Hawaii Department of Taxation; calculations by Bank of Hawaii

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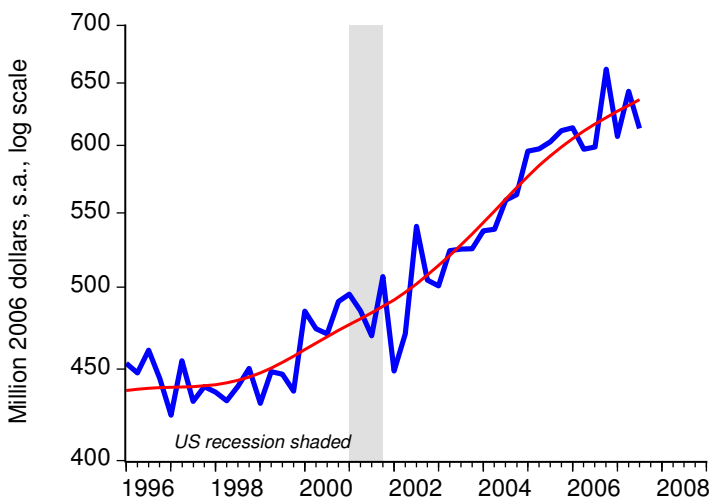
Real GET and withholding: 82.5% of the total



Sources: Tax Research and Planning, Hawaii Department of Taxation; calculations by Bank of Hawaii

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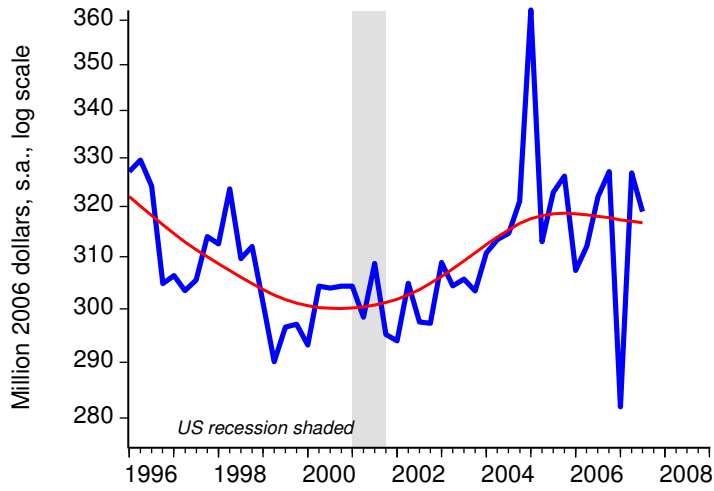
Real GET receipts through third quarter 2007



Sources: Tax Research and Planning, Hawaii Department of Taxation; calculations by Bank of Hawaii

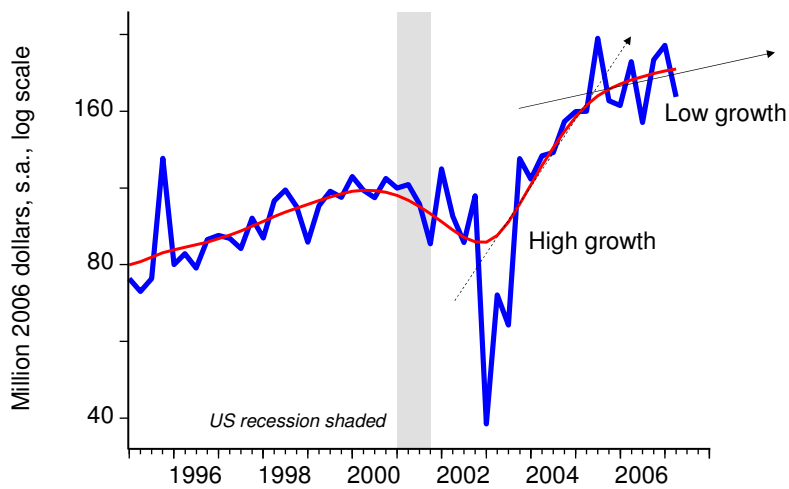
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Real withholding from wages through 2007Q3



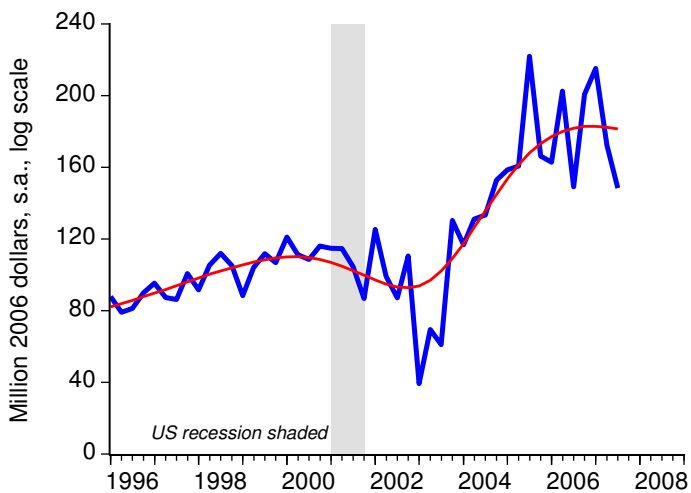
Sources: Tax Research and Planning, Hawaii Department of Taxation; calculations by Bank of Hawaii

Corporate and quarterly filers: 16.0% of the total



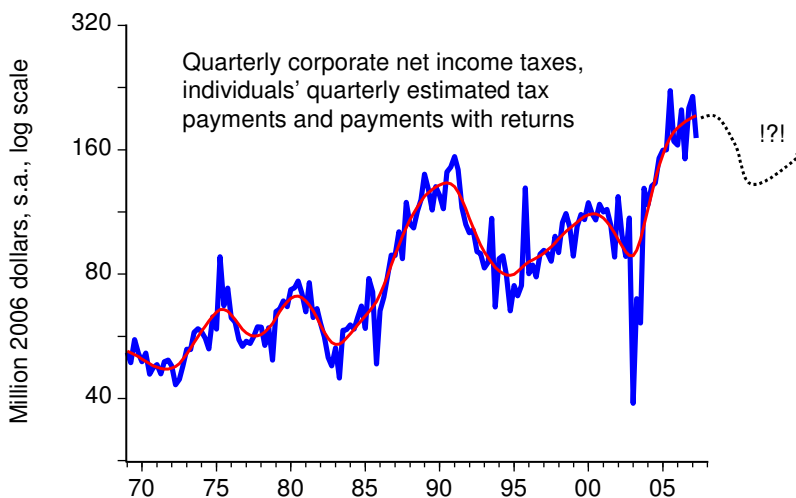
Sources: Tax Research and Planning, Hawaii Department of Taxation; calculations by Bank of Hawaii

Corporate and quarterly filers through 2007Q3

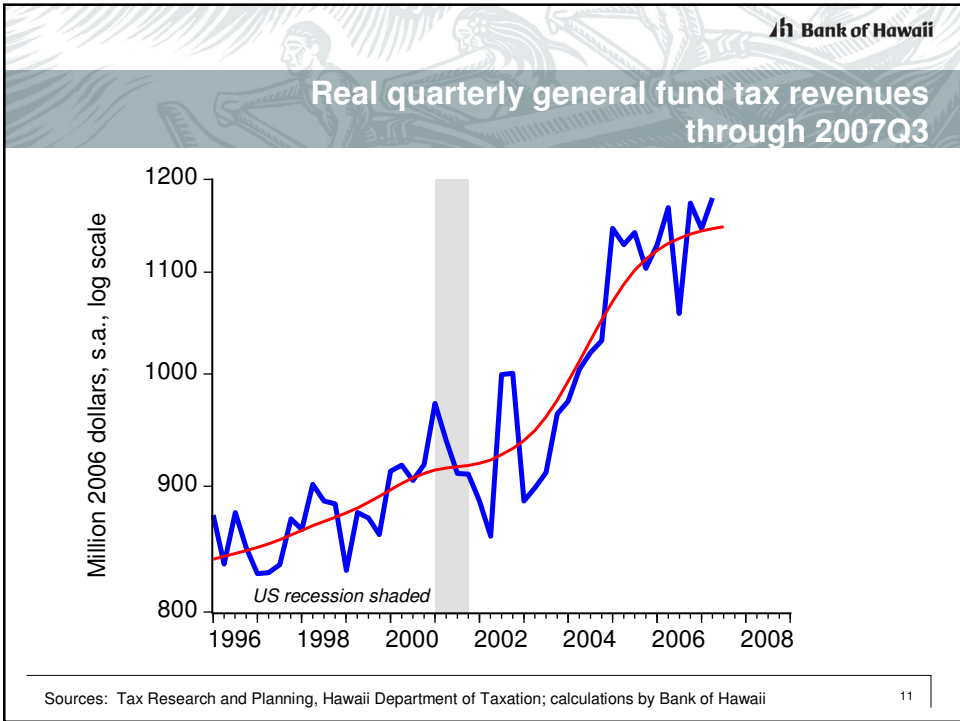
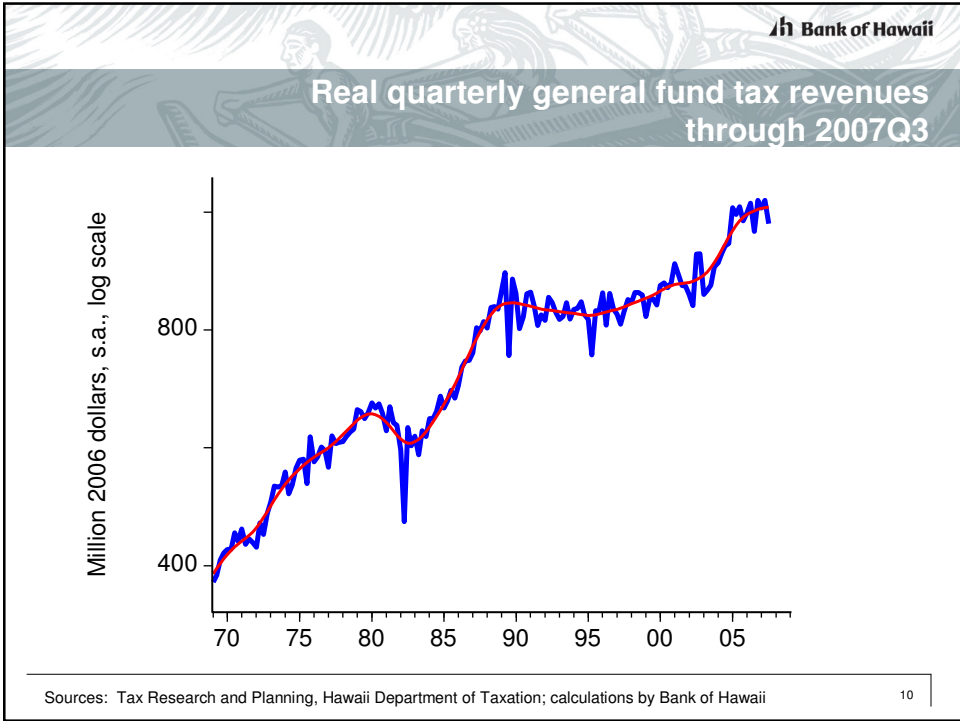


Sources: Tax Research and Planning, Hawaii Department of Taxation; calculations by Bank of Hawaii

Corporate and individual's quarterly taxes vary with real investment and the valuation cycle



Sources: Tax Research and Planning, Hawaii Department of Taxation; calculations by Bank of Hawaii



Some conclusions

- Slower real growth with declining inflation means *nominal* revenue growth will stay roughly the same as present
- General excise tax and payroll withholding (80+ percent of general fund tax revenue) currently are decelerating with the underlying economy, slightly more than expected:
 - >>>> *risk is to the downside*
- A disproportionately large share of the forecast uncertainty comes from small pieces (corporate net income taxes, individual's quarterly estimated payments and payments with returns) that vary more widely with the investment cycle
- Forecastability complicated by tax credits, tax code changes

Pau