LINDA LINGLE GOVERNOR

JAMES R. AIONA, JR. LT. GOVERNOR



COUNCIL ON REVENUES

STATE OF HAWAII

PAUL H. BREWBAKER

JACK P. SUYDERHOUD
VICE-CHAIR

MEMBERS:

Carl S. Bonham Dean K. Hirata Pearl Imada Iboshi Richard F. Kahle, Jr. Albert Yamada

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

January 12, 2009

The Honorable Colleen Hanabusa President of the Senate State Capitol, Room 409 Honolulu, HI 96813

Dear Senator Hanabusa:

At its meeting on January 9, 2009, the Council on Revenues adjusted downward the forecast growth rates of General Fund tax revenues. The forecast was reduced from -0.5% to -3.0% for fiscal year (FY) 2009, from 3.5% to 1.0% for FY 2010, and from 4.5% to 3.5% for FY 2011. The Council also updated its forecasts of General Fund tax revenues for FYs 2012 through 2015, generally lowering the revenue gains while leaving the percentage increases the same for the out-year projections.

The revised forecasts of state general fund tax revenues for fiscal years 2009 through 2015 are listed below:

Fiscal Year	Thousands of Dollars	% Growth From Previous Year
2009	\$4,502,616	-3.0%
2010	\$4,547,642	1.0%
2011	\$4,706,809	3.5%
2012	\$4,956,270	5.3%
2013	\$5,253,646	6.0%
2014	\$5,595,133	6.5%
2015	\$5,958,817	6.5%

Line-item detail of State General Fund tax revenues by revenue category for FY 2009 through FY 2015 are presented in the attached table. These detailed forecasts are based on the Council's forecast for total state general fund tax revenues and the econometric model currently used by the Tax Research and Planning Office.

Hawaii's economic outlook has continued to deteriorate since the Council's October 2008 meeting. The national recession is reflected in Hawaii's economy by the sharp decline in general excise tax revenues, a general barometer of the economy, and in transient accommodations tax

The Honorable Colleen Hanabusa January 12, 2009 Page 2

revenues, which is reflective of Hawaii tourism. Intensification of the financial crisis during the fall appears to have weighed heavily on investor and consumer confidence, prompting a sharp decline in economic forecasts for the end of last year and for calendar 2009.

The Council is concerned that tourism may not stabilize and recover until FY 2010. Inflation, measured by the Honolulu Consumer Price Index (CPI), is expected to subside from 4.2% in FY 2008 to 2.5% in FY 2009, a quicker deceleration than previously supposed because of the reversal in petroleum and other commodity price movements. Construction expenditures may decline for the next several years, exacerbated by the credit crunch. Hawaii real personal income growth almost surely became negative in the third calendar quarter of 2008, as nominal growth slowed sharply from 5 percent through mid-year to 1 percent thereafter, on an annualized basis (inflation-adjustment pending February 2009 release of CPI data).

In producing its forecasts, the Council has adopted specific adjustments recommended by the Hawaii Department of Taxation to reflect the impacts on General Fund tax revenues of recent tax law changes, including:

- Act 209, Session Laws of Hawaii (SLH) 2007—exemption from general excise tax of alcohol fuel; approximately \$40 million for FY 2009.
- Act 211, SLH 2007—refundable food/excise tax credit; approximately \$24 million per year starting in FY 2009.
- Act 58, SLH 2008—one-time, refundable, constitutionally-mandated income tax credit; approximately \$1 million for FY 2009.
- Act 89, SLH 2008—application of the 0.5% general excise tax rate to certain warranty work performed on behalf of manufacturers; approximately \$1.5 million for FY 2009 and annually thereafter.
- Act 143, SLH 2008—changes relating to agricultural businesses qualifying for enterprise zone benefits; approximately \$100,000 for FY 2009, \$200,000 for FYs 2010–2011, \$300,000 for FY 2012, and 500,000 for FY 2012 and annually thereafter.
- Act 156, SLH 2008—allows state and county governments to hire retired state or county government employees; approximately \$1.5 million for FYs 2009–2013.
- Act 233, SLH 2008—provides an important agricultural land qualified agricultural cost income tax credit; approximately \$7.5 million annually for FYs 2010–2014.

The dispersion of Council members' implied revenue forecasts, based on their individual economic forecast assumptions, has narrowed since the Council's last deliberations. As I noted in the October 2008 report, higher dispersion at that time reflected extraordinary financial market volatility and economic uncertainties contemporaneous to that meeting. While uncertainty has diminished somewhat, the economic outlook has worsened in the meantime.

The Honorable Colleen Hanabusa January 12, 2009 Page 3

Various revenue estimates provided to the Council by the Hawaii Department of Budget and Finance at the Council's January 9, 2009, meeting were accepted as submitted.

General Fund Non-Tax Revenues in FYs 2009 through 2015 reflect lower numbers of recording fee transactions for the Bureau of Conveyances due to current economic conditions; and reduced transfers from various special funds.

Special Fund Tax Revenues in FYs 2009 through 2015 reflect revisions to the transient accommodations tax based on the Council's October 2008 report; decreases in the vehicle surcharge (rental/tour vehicles) for FYs 2012 through 2015 pursuant to Act 226, SLH 2008, and decreases in transfers of conveyance tax for FYs 2009 through 2015 due to lower numbers of recording transactions for the Bureau of Conveyances.

Special Fund Non-Tax Revenues in FYs 2009 through 2015 reflect increases for the Department of Transportation Airport Division's signatory terminal rental rates, landing fees, airport system support charges, and concession fees; decreases in reimbursements for mental health and substance abuse treatment services; revisions in Medicaid, HMSA, and other third party payments for the Hawaii Health Systems Corporation; and transfers to the Department of Education's State Educational Facilities Improvements Special Fund.

Other Than Special Fund Non-Tax Revenues in FYs 2009 through 2015 reflect increases in federal funds for low-income housing projects; and increases in various federal research, training, and indirect cost recovery for the University of Hawaii. Increases in FY 2009 reflect a reimbursement from HMSA for collection of rate credits to the Employer-Union Trust Fund; and changes in non-revenue receipts reflects revenue bonds sold for construction or rehabilitation of affordable housing projects in the Department of Business and Economic Development and Tourism, and decreases in projected revenues for Correctional Industries (Department of Public Safety).

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

Sincerely,

PAUL H. BREWBAKER, Ph. D.

Chair, Council on Revenues

Paul H. Brewen

Attachments

c: Senator Donna Mercado Kim Chairman, Senate Committee on Ways and Means

ESTIMATES OF GENERAL FUND TAX REVENUE: FY 2009 to FY 2015

(in thousands of dollars)

	ACTUAL		ESTIMATED						
TYPE OF TAX	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
General Excise & Use 2/, 3/	\$2,555,762	\$2,618,787	\$2,525,826	\$2,559,372	\$2,636,845	\$2,718,256	\$2,878,109	\$3,067,403	\$3,243,429
Income - Individual	1,559,690	1,544,307	1,483,626	1,496,161	1,566,489	1,692,581	1,795,870	1,912,437	2,064,995
Income - Corporation	81,834	85,081	78,399	70,469	66,126	73,515	81,829	92,364	103,748
Public Service Company	124,017	127,481	136,038	143,775	151,595	159,775	168,086	176,744	186,436
Insurance Premiums	92,196	95,742	96,607	97,843	100,823	115,111	123,521	130,724	135,471
Tobacco & Licenses	84,219	83,443	93,867	94,278	96,637	99,573	102,487	105,478	108,549
Liquor & Permits	46,034	45,620	45,065	45,973	47,309	48,572	49,757	50,936	52,092
Banks & Other Fin Corps	16,599	18,212	15,771	14,401	15,106	22,122	26,222	30,164	33,973
Conveyance 4/	7,033	6,513	13,853	12,528	11,214	9,912	8,621	7,341	6,073
Miscellaneous *	1,120	751	590	589	588	587	586	585	584
Transient Accommodation Tax 1/	17,076	15,935	12,974	12,253	14,077	16,266	18,558	20,957	23,467
NET TOTAL	\$4,585,580	\$4,641,872	\$4,502,616	\$4,547,642	\$4,706,809	\$4,956,270	\$5,253,646	\$5,595,133	\$5,958,817
GROWTH RATE	3.4%	1.2%	-3.0%	1.0%	3.5%	5.3%	6.0%	6.5%	6.5%

Notes:

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^{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 2012 excludes \$40 million, due to June 30, 2012 falling on a weekend. FY 2014 includes \$40 million, estimated spillover from June 30, 2013 falling on weekend.

^{3/} 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.

^{4/} Due to the expiration of Act 222, SLH 2007, on June 30, 2008, the amount of conveyance tax deposited into the General Fund increased from 15% to 35%.

^{*} Includes inheritance and estate tax.

STATE OF HAWAII GENERAL FUND MULTI-YEAR REVENUES FROM SOURCES OTHER THAN TAX FISCAL YEARS 2008 - 2015

(in thousands of dollars)

Sources	Actual FY 2008	Estimated FY 2009	Estimated FY 2010	Estimated FY 2011	Estimated FY 2012	Estimated FY 2013	Estimated FY 2014	Estimated FY 2015
Licenses & Permits	1,510	1,006	1,006	1,006	1,006	1,006	1,006	1,006
Revenues from Use of Money and Property	89,520	70,018	69,311	68,859	65,640	65,204	65,836	65,836
Federal	4,536	5,281	4,706	4,571	4,571	4,571	4,571	4,571
Revenues from Other Agencies	2,328	2,814	2,814	2,814	2,814	2,814	2,814	2,814
Charges for Current Services	238,966	214,313	218,855	227,310	235,444	247,089	249,323	251,912
Fines, Forfeits & Penalties	494	545	545	545	545	545	545	545
Repayment of Loans & Advances	30,019	24,494	18,616	22,776	20,454	17,961	17,961	17,961
Non-Revenue Receipts	202,414	188,883	183,344	180,037	182,957	182,957	182,957	182,957
Judiciary	34,209	32,698	<u>35,176</u>	<u>35,915</u>	36,666	37,441	38,237	39,054
Total	603,997	540,052	534,373	543,833	550,097	559,588	563,250	566,656

Prepared by: Department of Budget & Finance

January 9, 2009

STATE OF HAWAII SPECIAL REVENUE FUND MULTI-YEAR TAX REVENUES FISCAL YEARS 2008 - 2015

(in thousands of dollars)

<u>Sources</u>	Actual F <u>Y 2008</u>	Estimated FY 2009	Estimated FY 2010	Estimated FY 2011	Estimated FY 2012	Estimated FY 2013	Estimated FY 2014	Estimated FY 2015
Transfer of Gen. Excise Tax	-	-	-	<u>-</u>	-	-	-	-
Transfer of Tobacco Tax	5,822	9,276	14,148	22,908	32,281	34,772	34,772	34,772
Liquid Fuel: Highway Aviation	88,135 4,216	88,115 4,452	88,774 4,452	89,438 4,452	90,107 4,452	90,781 4,452	92,145 4,452	92,145 4,615
Small Boats Subtotal	1,640 93,991	1,300 93,867	1,300 94,526	1,300 95,191	1,300 95,859	1,300 96,533	1,300 97,897	1,300 98,060
Transfer of Transient Accom Tax	112,900	109,493	112,849	117,813	122,486	126,875	131,290	135,915
Motor Vehicle Weight Tax	34,010	34,435	34,865	35,301	35,743	36,189	36,642	37,100
Vehicle Registration Fee Tax	26,445	26,735	27,003	27,274	27,548	27,826	28,108	28,392
Vehicle Surcharge: Rental /Tour	49,196	50,180	51,183	52,207	41,141	38,451	38,932	39,418
Environmental Response Tax	1,695	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Unemployment Comp Tax	103,882	137,000	137,000	137,000	137,000	137,000	137,000	137,000
Employment & Training	1,125	420	440	500	950	950	950	950
Election Campaign Contrib T.F.	190	200	200	200	200	200	200	200
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	32,647	27,578	25,660	25,860	27,560	28,060	28,060	28,060
Transfer of Tax on Ins. Premiums	<u>1,745</u>	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Total	<u>465,650</u>	<u>494,984</u>	<u>503,676</u>	<u>520,054</u>	<u>526,568</u>	<u>532,656</u>	<u>539,651</u>	<u>545,667</u>

Prepared by: Department of Budget & Finance

January 9, 2009

STATE OF HAWAII SPECIAL REVENUE FUND - SPECIAL FUNDS MULTI-YEAR REVENUES FROM SOURCES OTHER THAN TAX FISCAL YEARS 2008 - 2015

(in thousands of dollars)

Sources	Actual FY 2008	Estimated FY 2009	Estimated FY 2010	Estimated FY 2011	Estimated FY 2012	Estimated FY 2013	Estimated FY 2014	Estimated FY 2015
Licenses & Permits	14,412	16,341	17,333	17,772	17,528	17,802	17,595	17,880
Revenues from Use of Money and Property	151,723	104,761	104,326	104,227	102,840	101,231	100,840	100,176
Federal	308,390	234,574	233,336	242,395	242,396	244,292	244,564	246,605
Revenue from Other Agencies	59,228	78,857	82,465	57,465	57,465	57,465	57,465	57,465
Charges for Current Services: Utils & Other Enterprises Others	329,810 812,025	383,779 773,907	387,884 846,403	414,879 888,325	439,198 905,561	470,954 910,847	498,270 915,559	539,821 916,179
Fines, Forfeits & Penalties	5,062	5,403	3,088	3,053	3,119	3,135	3,151	3,168
Non-Revenue Receipts	286,296	124,439	115,994	115,989	115,986	115,990	115,990	115,988
Judiciary	10,570	10,216	<u>10,180</u>	10,348	10,421	10,598	10,779	10,964
Total	1,977,515	1,732,277	1,801,009	1,854,451	<u>1,894,514</u>	1,932,314	1,964,213	2,008,246
Adjustments: Revenue Transfers	245,764	87,895	79,450	79,445	79,442	79,446	79,446	79,444
Adjusted Total	<u>1,731,751</u>	<u>1,644,382</u>	<u>1,721,559</u>	<u>1,775,006</u>	<u>1,815,072</u>	<u>1,852,868</u>	<u>1,884,767</u>	<u>1,928,802</u>

Prepared by: Department of Budget & Finance

January 9, 2009

STATE OF HAWAII SPECIAL REVENUE FUND - OTHER THAN SPECIAL FUNDS MULTI-YEAR REVENUES FROM SOURCES OTHER THAN TAX FISCAL YEARS 2008 - 2015

(in thousands of dollars)

Sources	Actual FY2008	Estimated FY2009	Estimated FY2010	Estimated FY2011	Estimated FY2012	Estimated FY2013	Estimated FY2014	Estimated FY2015
Licenses & Permits	543	558	678	564	563	563	563	563
Revenues from Use of Money and Property	100,361	96,644	90,820	90,097	89,371	89,060	88,177	88,099
Federal	1,832,950	1,904,817	1,894,514	1,923,151	1,955,407	1,996,082	1,996,019	1,996,149
Revenues from Other Agencies 17		13,057	12,942	12,947	12,947	12,952	12,952	12,952
Charges for Current Services	125,237	181,772	118,500	122,830	122,552	120,237	119,775	119,407
Fines, Forfeits & Penalties	1,905	909	908	908	908	908	908	908
Repayment of Loans & Advances	30,294	33,537	34,032	34,446	34,876	34,440	30,004	30,147
Non-Revenue Receipts	764,222	866,514	867,394	787,619	818,206	858,101	888,271	920,956
Office of Hawaiian Affairs	23,801	21,250	<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	2,896,366	3,119,058	3,034,888	2,987,662	3,049,930	3,127,443	3,151,769	3,184,281
Adjustments: Revenue Transfers	7,080	2,344	2,344	2,344	2,344	2,344	2,344	2,344
Adjusted Total	2,889,286	<u>3,116,714</u>	3,032,544	2,985,318	3,047,586	3,125,099	3,149,425	3,181,937

Prepared by: Dept. of Budget & Finance



Aspects of Hawaii's economic and tax revenue forecasts



Prepared for a presentation to the Hawaii Senate Committee on Ways and Means and the Hawaii House of Representatives Committee on Finance

January 13, 2009

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



Preliminaries

The views expressed by the author of this report are not intended to reflect the views of Bank of Hawaii Corporation or its subsidiaries, and should not be construed as investment advice.

Financial crisis intensification

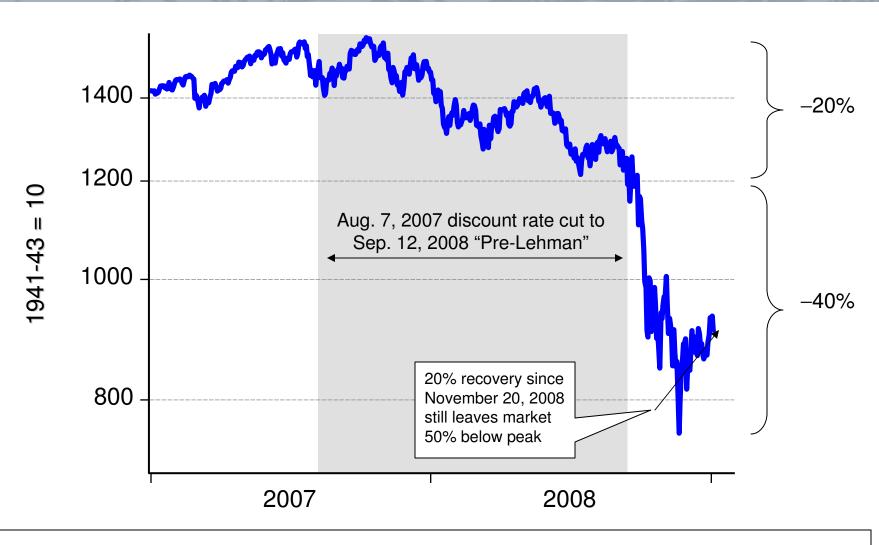
- S&P500: –20%, Oct 2007 to Sep 2008 "Bear Market"
- S&P500: –40%, mid-Sep ("Pre-Lehman") to Thanksgiving
- Huge jump in uncertainty ⇒ volatility, "deep discount"
- Flight to quality: from risky asset classes to liquid assets
- Jump in liquidity risk premium
- "Increased liquidity preference" induces Federal Reserve response to avoid 1930s monetary contraction
- Treasury "switches" TARP to Capital Purchase Plan

Liquidity = confidence (Kevin Warsh)

No mo da kine



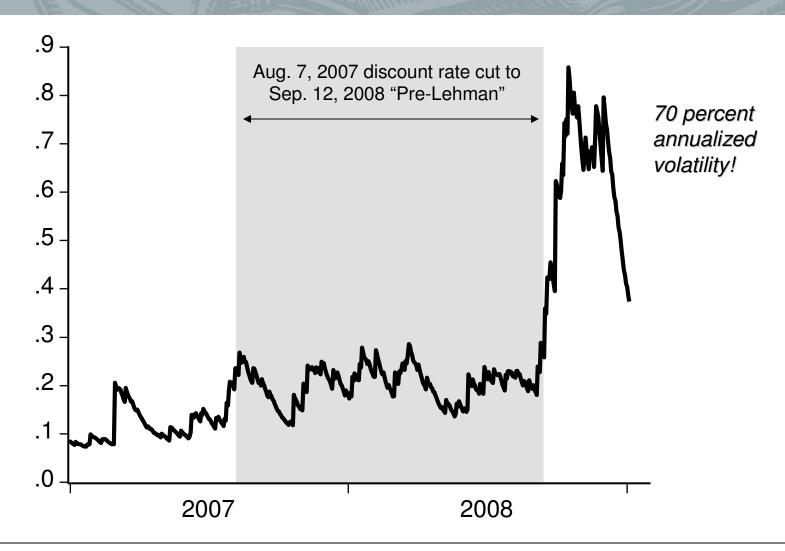
S&P 500 daily values through January 7, 2009



Source: Standard & Poor's; author's calculations



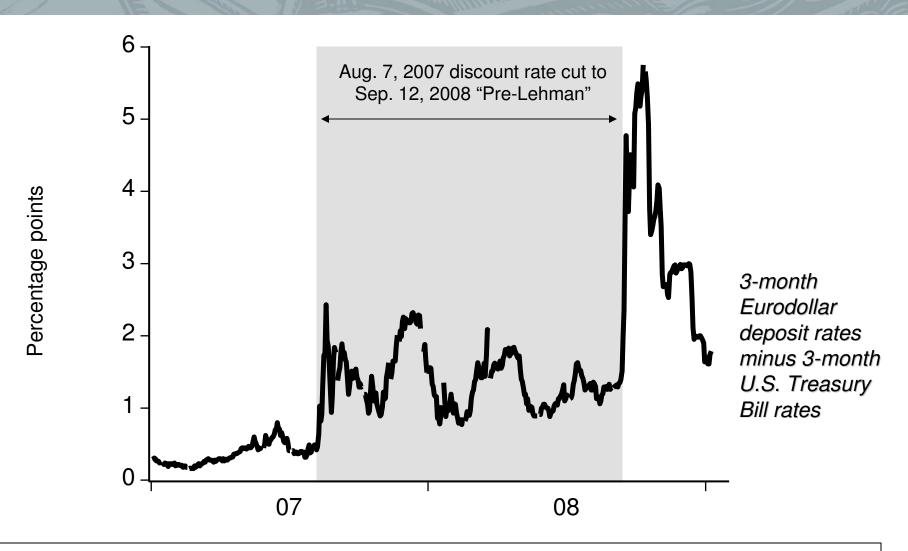
Conditional annualized daily volatility of the S&P500



Source: Threshold ARCH(1,1) conditional daily S&P 500 closing value calculations by author through January 7



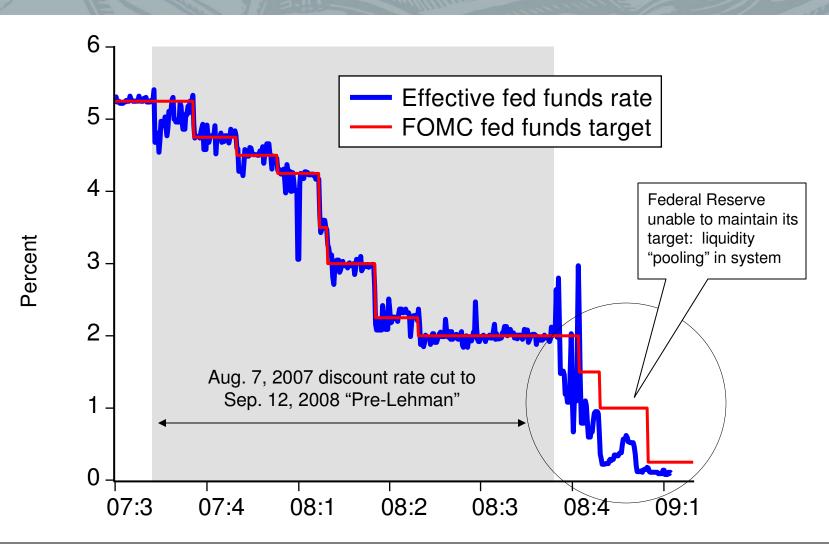
Liquidity risk premium through January 8, 2008



Sources: Bloomberg, Federal Reserve Board; calculations by author



Fed funds rate and target through January 8, 2008



Sources: Federal Reserve Board; calculations by author



Sharp downward shift in economy in FY 2009

■ U.S. real GDP

annualized growth	%
Second half 2007	2.26
First half 2008	1.84
Third quarter 2008	-0.51

U.S. personal consumption

annualized growth	%
Second half 2007	1.48
First half 2008	1.04
Third quarter 2008	-3.81

 Intensification of financial crisis "Post-Lehman" (mid-September 2008)

US real GDP growth: downward forecast revisions

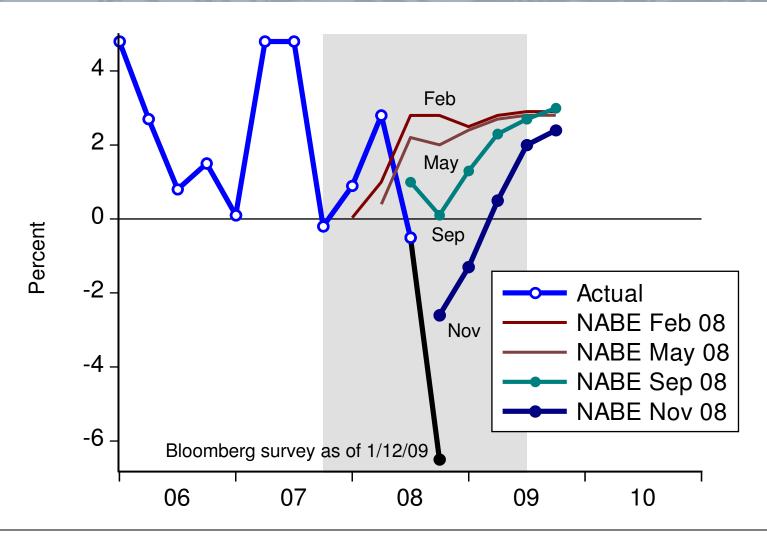
percent*		07.3	07.4	08.1	08.2	08.3	08.4	09.1	09.2	09.3	09.4	
NABE	Feb 08			0.0	1.0	2.8	2.8	2.5	2.8	2.9	2.9	
	May 08				0.4	2.2	2.0	2.4	2.7	2.8	2.8	
	Oct 08					1.0	0.1	1.3	2.3	2.7	3.0	
	Nov 08						-2.6	-1.3	0.5	2.0	2.4	
Brew	Dec 07		0.5	-0.2	0.5	1.7	2.7	2.9	3.0	3.1	3.1	
	Apr 08			0.8	0.3	1.4	2.1	2.4	2.6	2.6	2.6	
	Jul 08				1.8	0.7	1.2	1.8	2.0	2.3	2.5	
	Nov 08						-0.1	-1.5	-1.2	-0.4	0.9	
Actual	Oct 08	4.8	-0.2	0.9	2.8	-0.3	-6.5	Bloomberg survey as of 1/12				

^{*}Quarterly percent changes at annual rates

8



Quarterly US real GDP growth actual and forecast



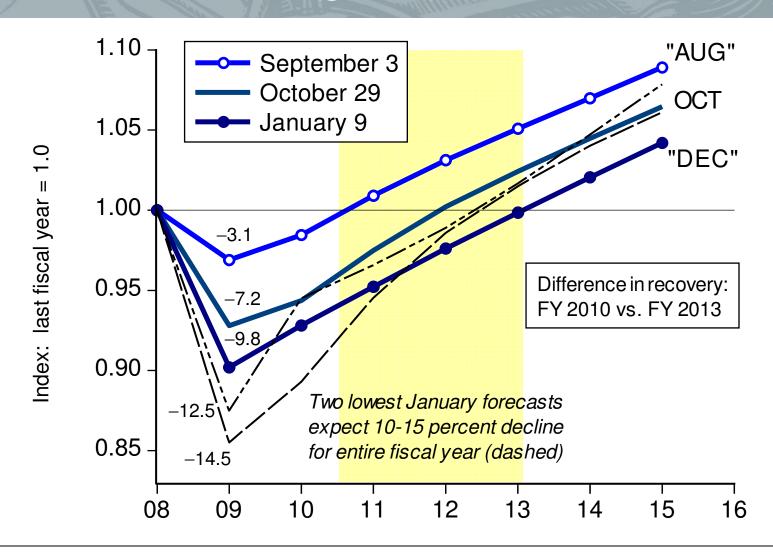
Source: Bureau of Economic Analysis, National Assn. for Business Economics, Bloomberg; Author's calculations

Sharp downward shift in tourism in FY 2009

- First quarter of calendar 2008: no worse than 2007
- Second quarter (post-Aloha/ATA): forecasts "too low!"
- Third quarter 2008 = first quarter FY 2009: oops
- COR "mean" tourism forecast: chasing reality ever since
- COR forecasts Jul/Sep/Oct 2008; January 2009
 - July: fairly close views around "normal" central tendency
 - October: greater dispersion among members' forecasts
 - January: "tighter" consensus, but negative skew

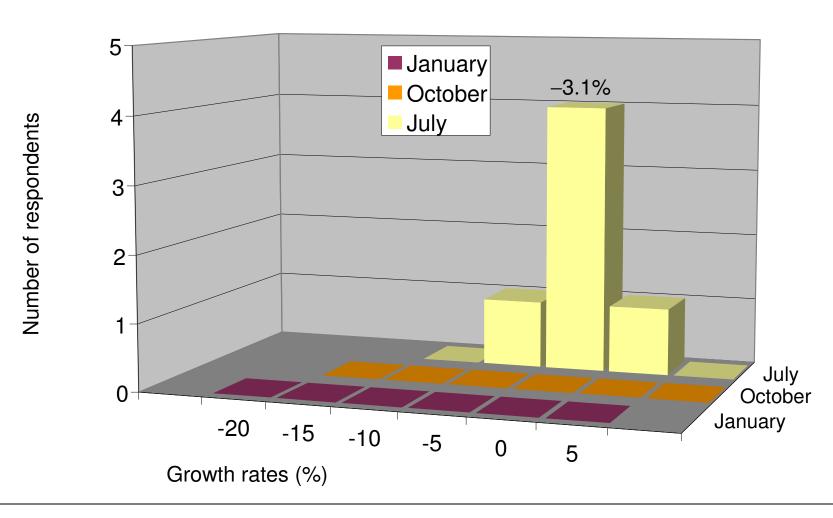


COR tourism (growth) forecasts since June 2008



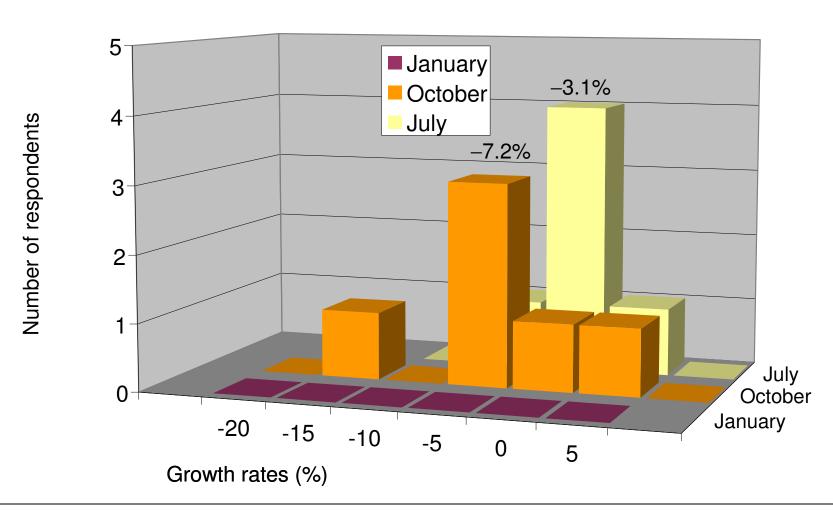


COR members' visitor arrivals growth forecasts (%)



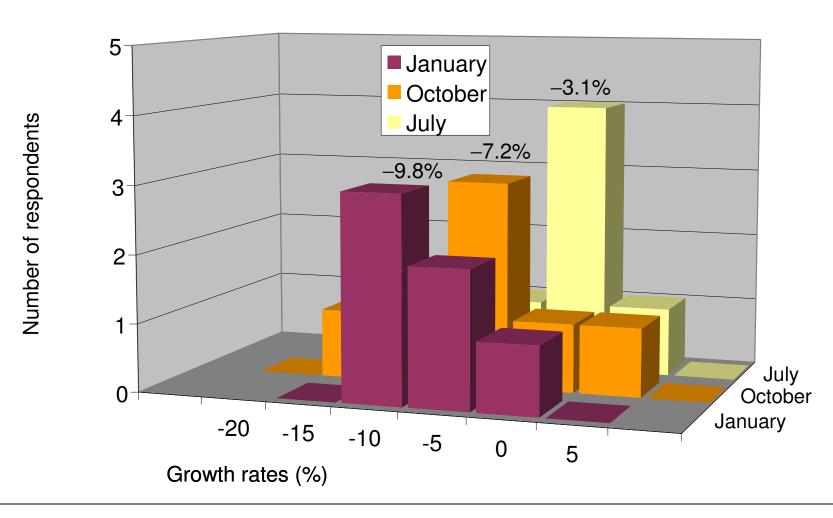


COR members' visitor arrivals growth forecasts (%)





COR members' visitor arrivals growth forecasts (%)



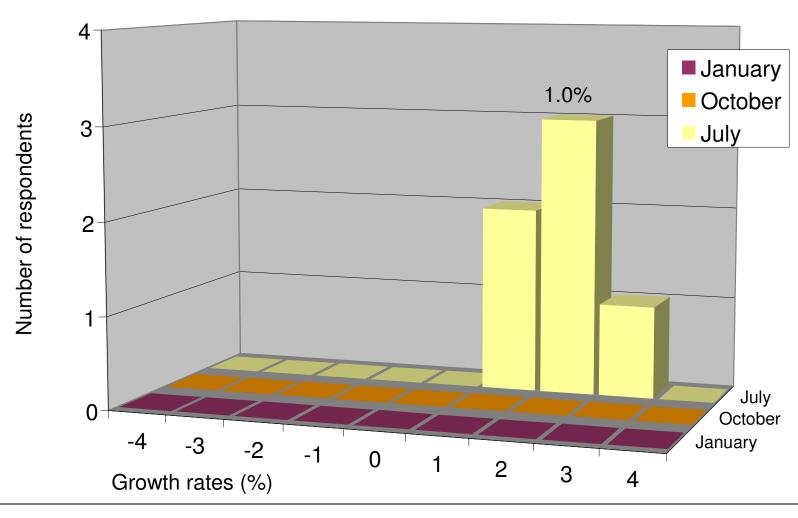


Same downshift in General Fund forecast in FY 2009

- COR forecasts Jul/Sep/Oct 2008; January 2009
 - July: fairly close views around central tendency
 - October: wider dispersion among members' forecasts
 - January: "tighter" consensus around more negative view

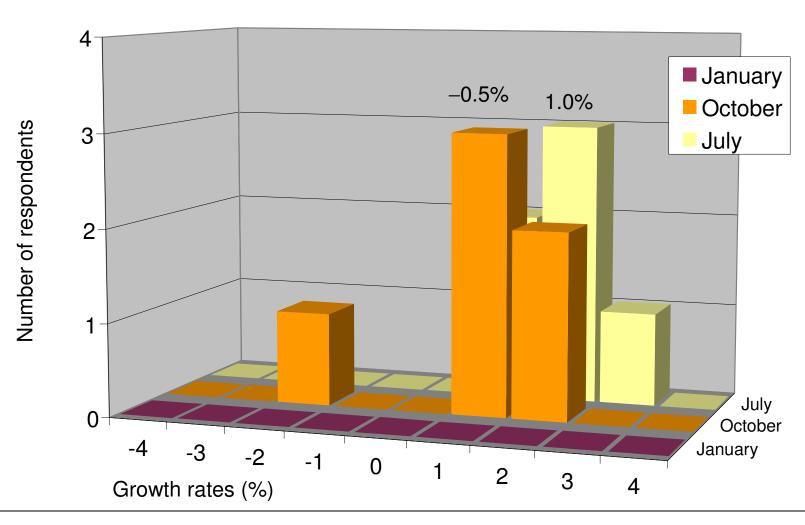


COR members' implied General Fund revenue growth forecasts (%)



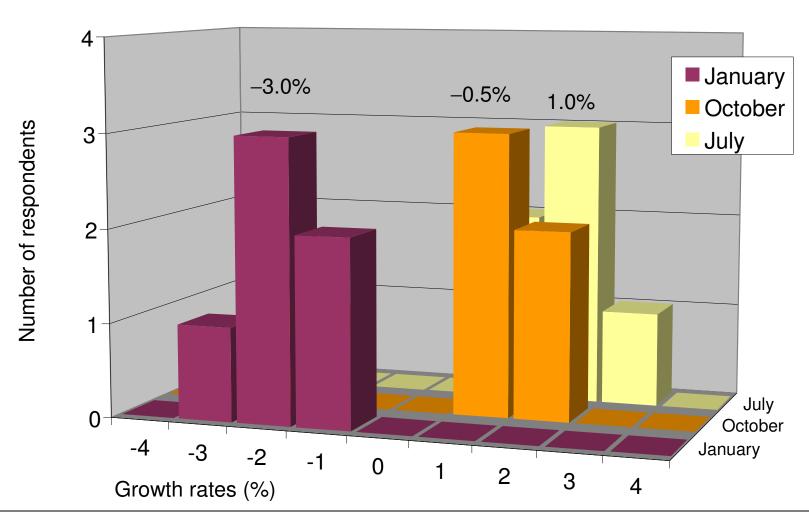


COR members' implied General Fund revenue growth forecasts (%)



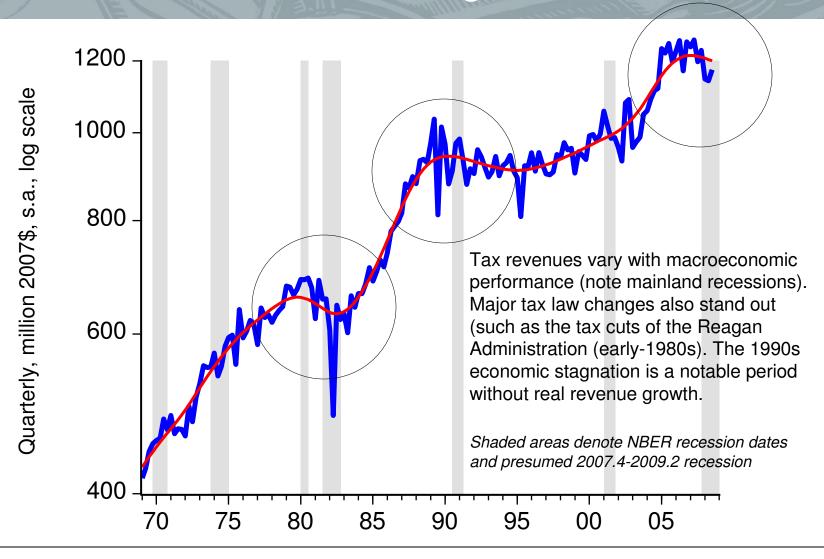


COR members' implied General Fund revenue growth forecasts (%)





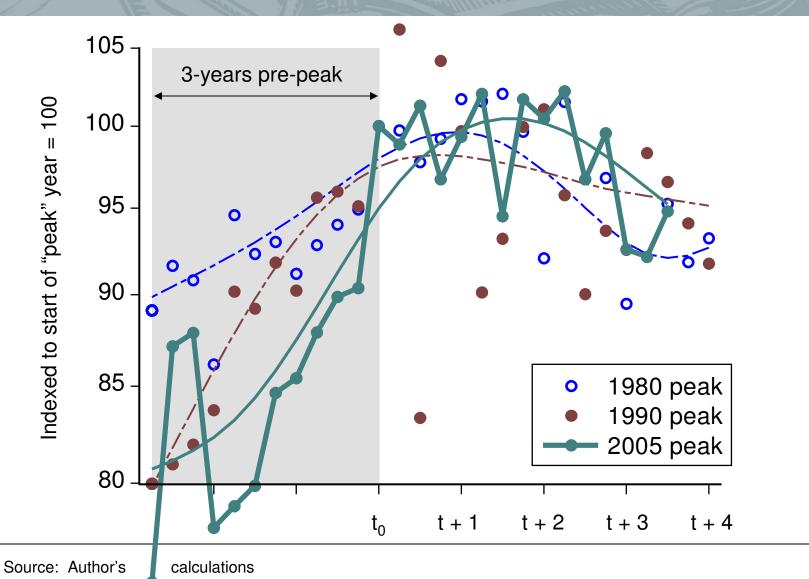
Hawaii real general fund tax revenues



Source: Hawaii Department of Taxation; author's calculations



Real general fund tax revenue "peaks," aligned

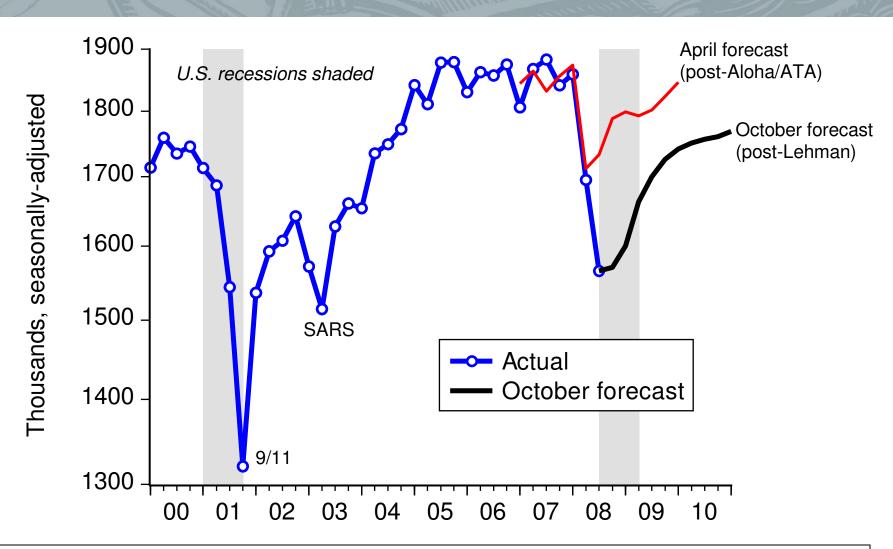


Notes on the Hawaii tourism forecast

- Adverse wealth effects, income effects on demand side
- Lift reductions, cruise ship withdrawals reduce supply
- More recent petroleum price declines reverse earlier adverse effects of rising travel cost
- My forecast now reflects some positive "substitution" responses to travel and destination costs decrease
- My view of tourism outlook:
 - Prices matter, material to recovery (personal view)
 - This time, deeper for longer (shared by Council members)



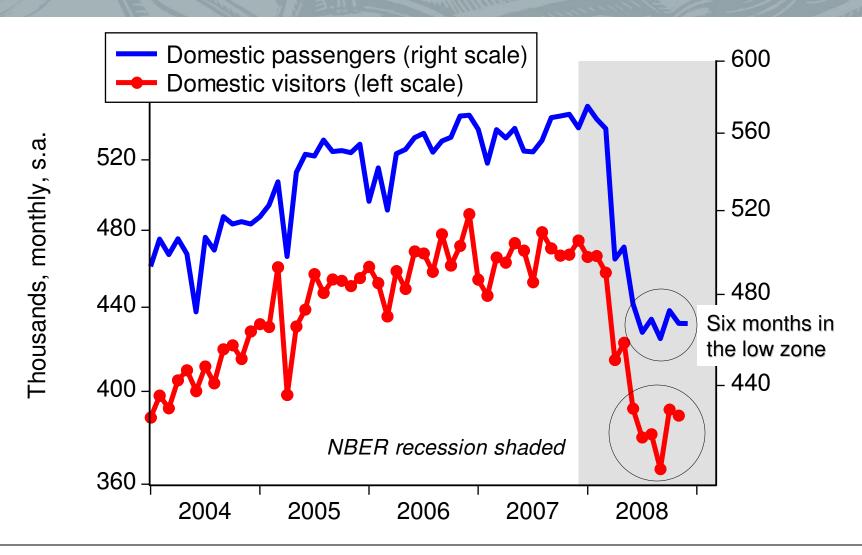
Hawaii quarterly total visitor arrivals



Source: Hawaii DBEDT; author's calculations (e.g. seasonal-adjustment) and author's forecasts



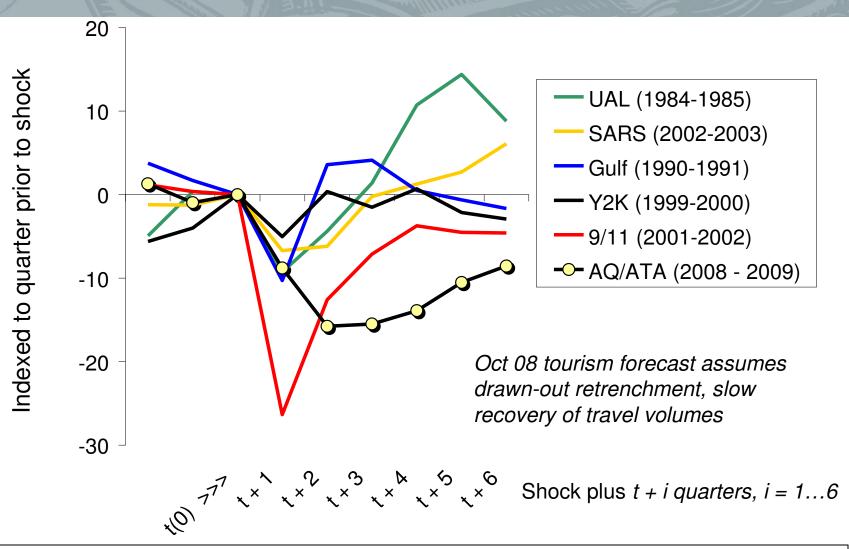
Domestic passenger (Dec) and visitor (Nov) arrivals



Source: Hawaii DBEDT; author's calculations



Comparative responses to tourism shocks



Source: Hawaii DBEDT; author's calculations

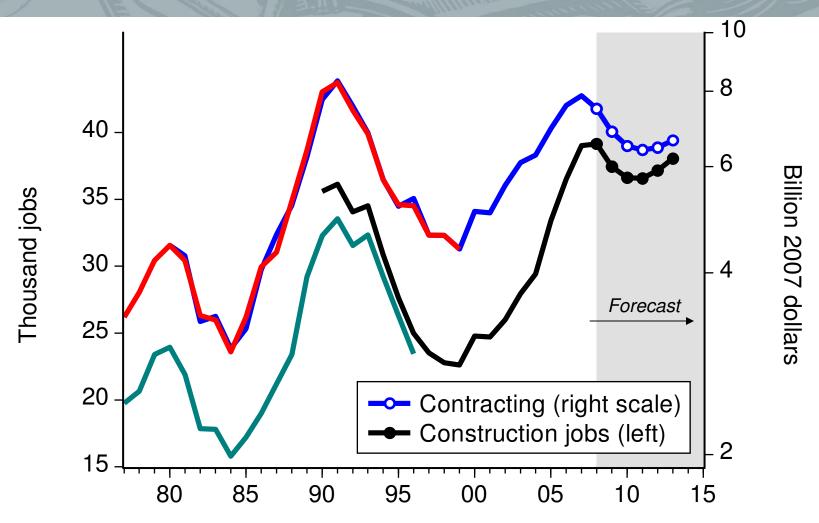
Add construction to the overall Hawaii forecast

- UHERO (September): *half* the 1990s cyclical decline
- Even less job loss, because of military housing privatization
- Now: credit crunch now constrains project finance
- Public investment impaired by municipal bond markets
- Obamanomics probably requires matching funds (uh-oh)
- Brewbonski construction forecast for January 2009 COR meeting assumed deeper trough than in September, but more TheTrain than in September:

More "V" than "U"



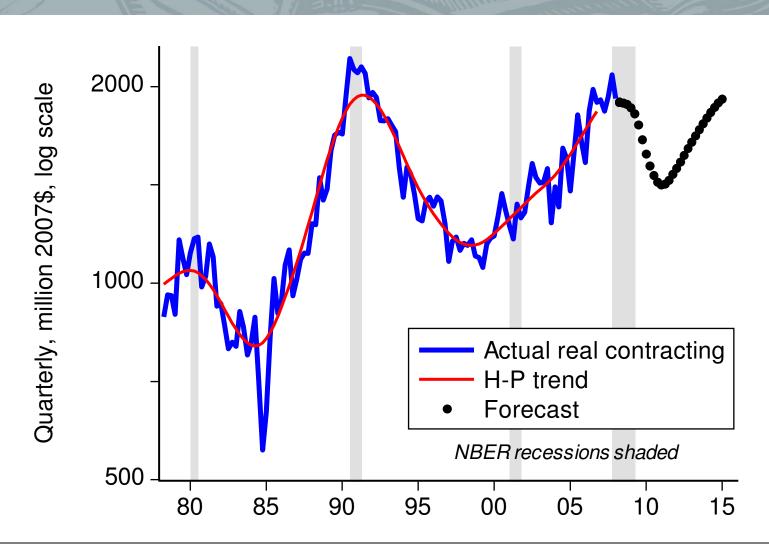
Real construction September 2008 UHERO forecasts



Sources: Bank of Hawaii, UHERO; author's calculations



My construction forecast January 2009 COR meeting



Sources: Author's calculations



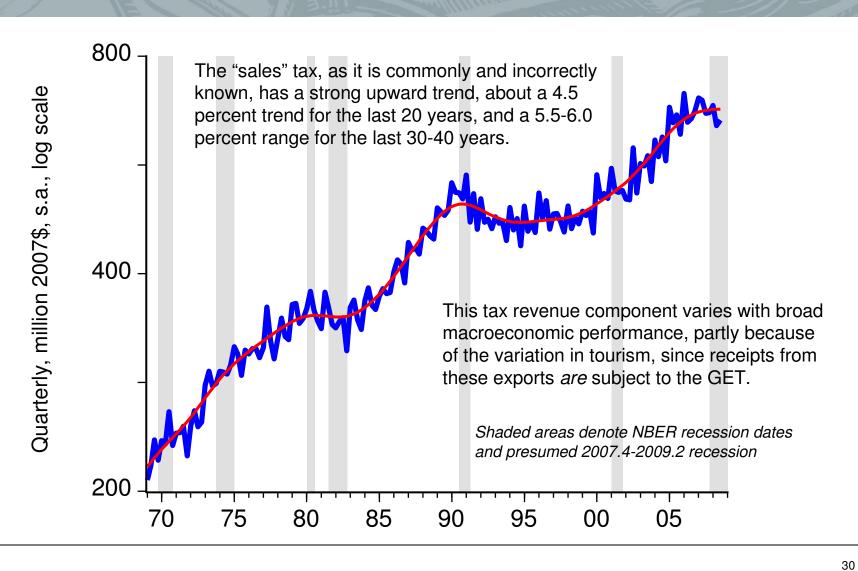


Appendix 1: General Fund tax revenue components

- General Excise (0.55): pressure—tourists and residents
- Payroll withholding (0.29): nothing but downside
- Everything else (0.16): business cycle roller-coaster

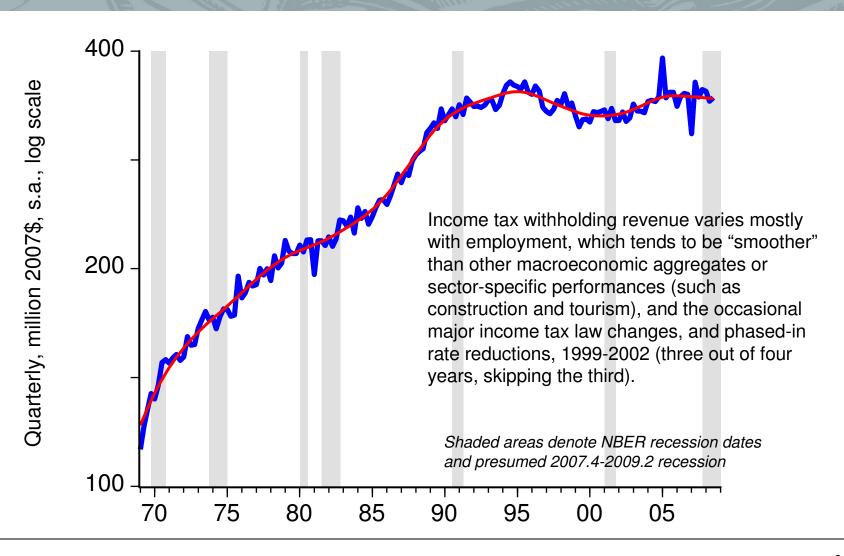


General excise tax revenues (55% of total)





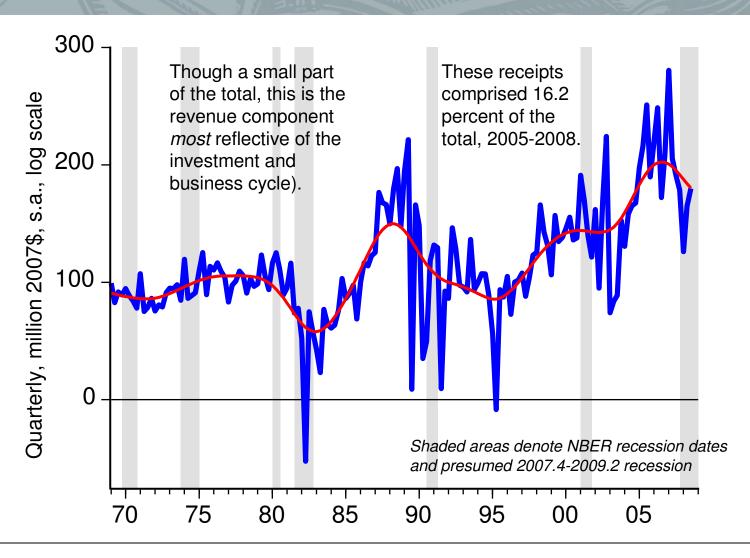
State income tax withholding (29% of the total)



Source: Hawaii Department of Taxation; author's calculations



Other (mostly corporate, quarterly individuals' filings)



Source: Hawaii Department of Taxation; author's calculations

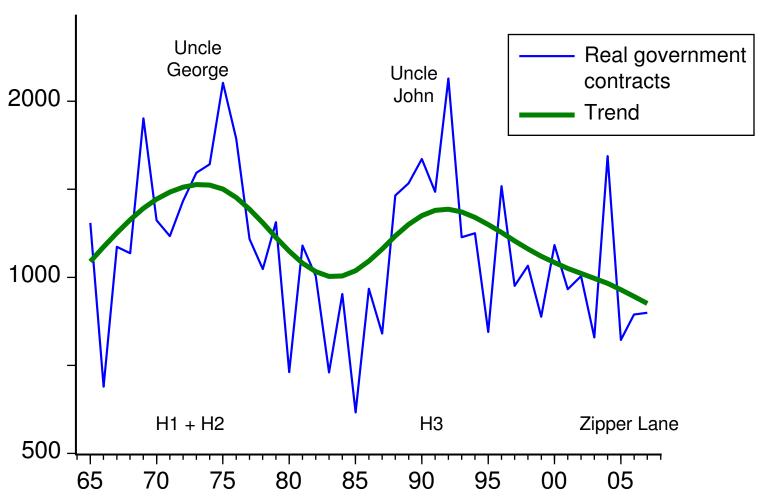


Appendix 2: more public capital spending

Got? Need more? No duh, what was your first clue.



Constant-dollar *total* government construction contracts in Hawaii (federal, state, county)



Source: Bank of Hawaii, Hawaii DBEDT, UHERO; author's calculations

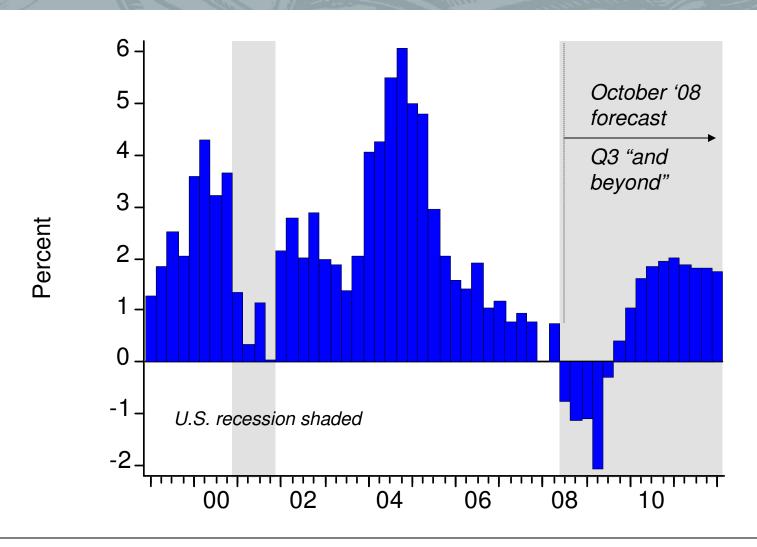


Appendix 3: the rest of Hawaii's macroeconomic picture

Sharper deterioration beginning in 2008Q3.



Hawaii real personal income growth



Sources: BEA, U.S. Department of Commerce; calculations by author



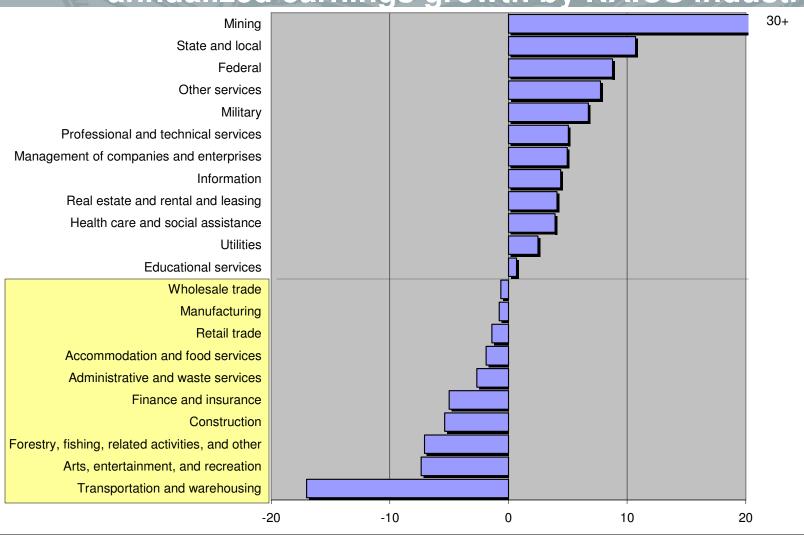
Third quarter 2008 actual Hawaii personal income annualized earnings growth by NAICS industry

Quarterly	2008.3 \$mil	Share %	2007 y-o-y % _	2008.1 annualize	2008.2 ed percent	2008.3 changes
HAWAII PERSONAL INCOME	52,556	100.0	5.9	5.2	6.2	1.0
Dividends, interest, and rent Earnings By Place of Work Less: Contributions for gov't social insurance Personal current transfer receipts (included above: State UI benefits)	8,433 41,091 4,184 7,215 272	16.0 78.2 8.0 13.7 0.5	8.7 4.5 3.6 9.7 17.0	-0.7 6.1 11.1 10.8 91.3	2.5 1.7 1.3 37.5 161.9	3.4 2.3 0.6 -8.9 347.6
Earnings By Industry (shares of earnings) Farm Earnings	41,091 166	0.4	1.4	-74.2	1.7	13.0
Nonfarm Earnings (shares of nonfarm earnings) Government and government enterprises Private earnings	40,925 13,883 27,042	99.6 33.9 66.1	4.5 6.4 3.6	6.8 12.5 4.1	6.8 -0.8	2.3 8.7 -0.8

Sources: BEA, U.S. Department of Commerce; calculations by author



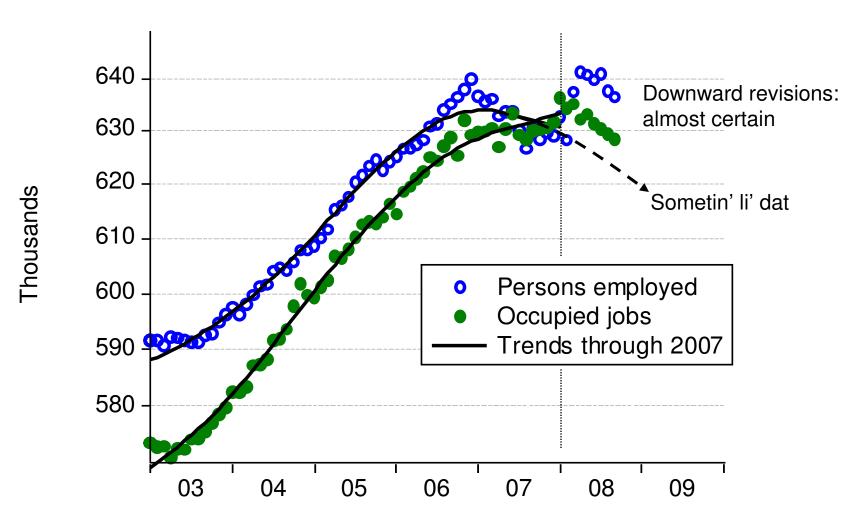
Third quarter 2008 actual Hawaii personal income annualized earnings growth by NAICS industry



Sources: BEA, U.S. Department of Commerce; calculations by author



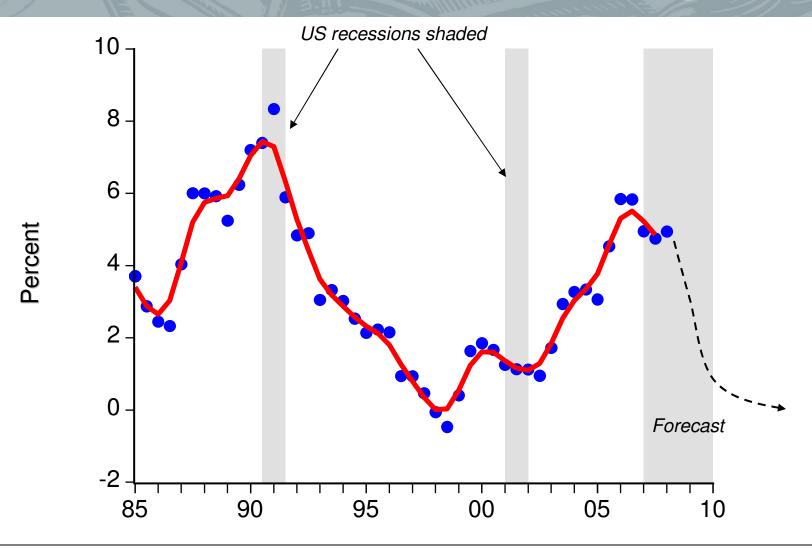
Hawaii employment indicators and anticipated February 2009 revisions



Sources: Hawaii DBEDT; calculations by author



Honolulu semi-annual CPI inflation through mid-2008



Source: Bureau of Labor Statistics, US Department of Labor; H-P filter calculations by author

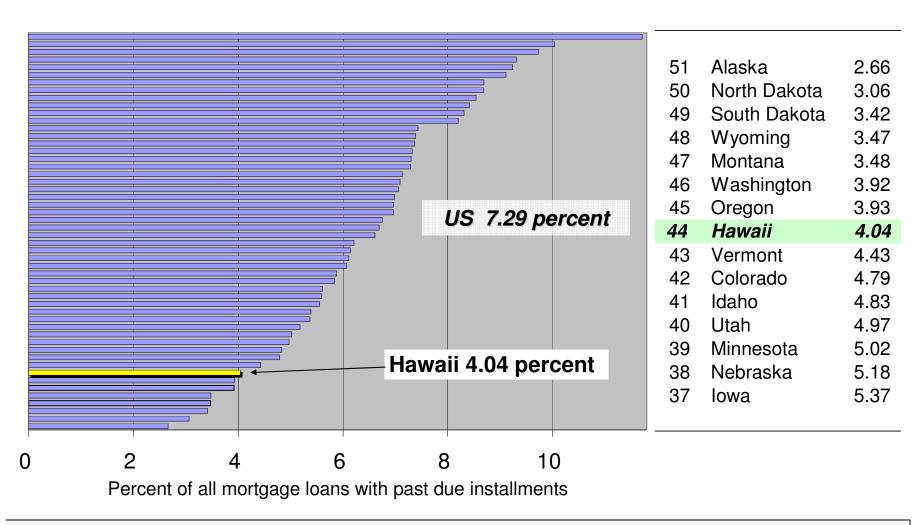
Appendix 4: Hawaii housing relatively resilient

- Hawaii: low mortgage delinquency
- Oahu home prices stable: no glut
- Neighbor islands California-like (except Hilo side)
- Most previous recessions investment-led
 - 1980(Jan-Jun)/1981(Jul)-1982(Nov) interest rates, housing
 - 1990(Jul)-1991(Mar) housing (S&L), consumption (Gulf War)
 - 2001(Mar-Nov), equipment and software investment (dot.com)
 - 2005-2008 housing recession offset by export growth
- 2008-09 recession aggravated by drop in consumption:

First half-2008 \rightarrow 2008Q3: +2% \rightarrow -3% for Hawaii, that means *tourism*.



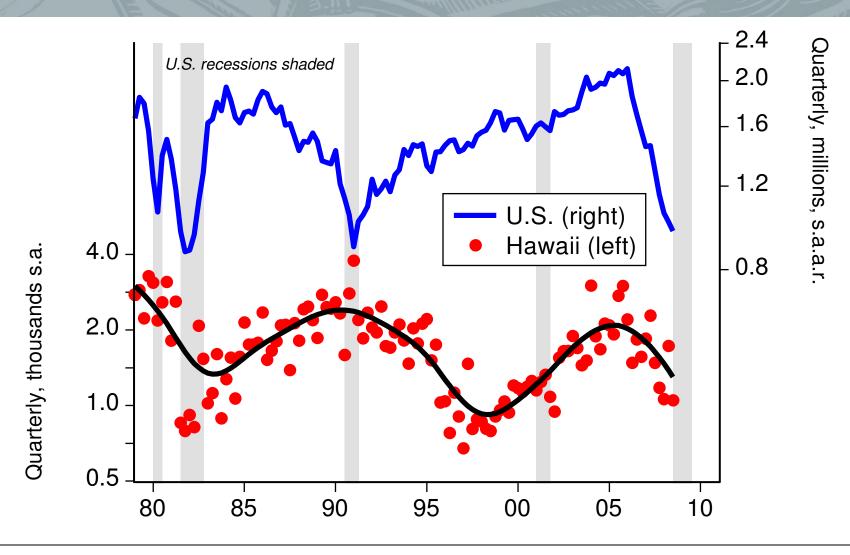
Mortgage delinquency rates ranked by state 2008Q3



burce: Mortgage Bankers Association, 30 days or more past due; foreclosure inventory is 1.67% of Hawaii loan universe; "historically, about of half of foreclosures starts" result in borrower loss of home (Bernanke, 12-1-08)



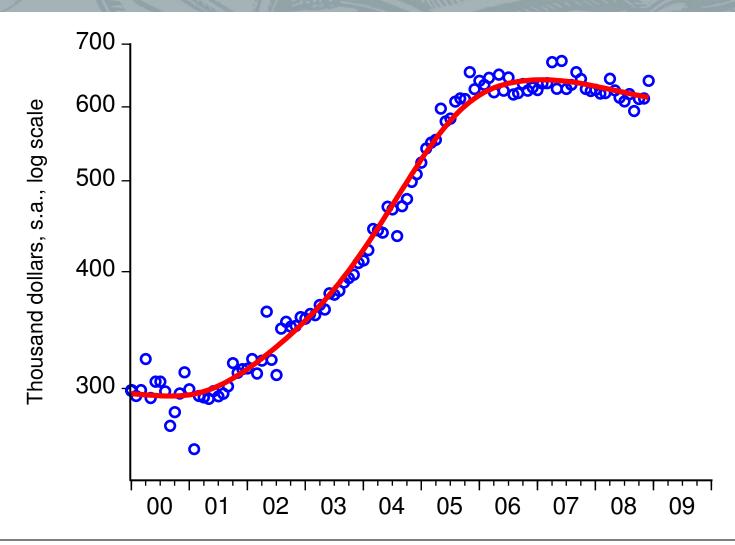
New housing units started (US) and authorized (HI)



Sources: Federal Reserve Bank of St. Louis, Bank of Hawaii, Hawaii DBEDT; calculations by author



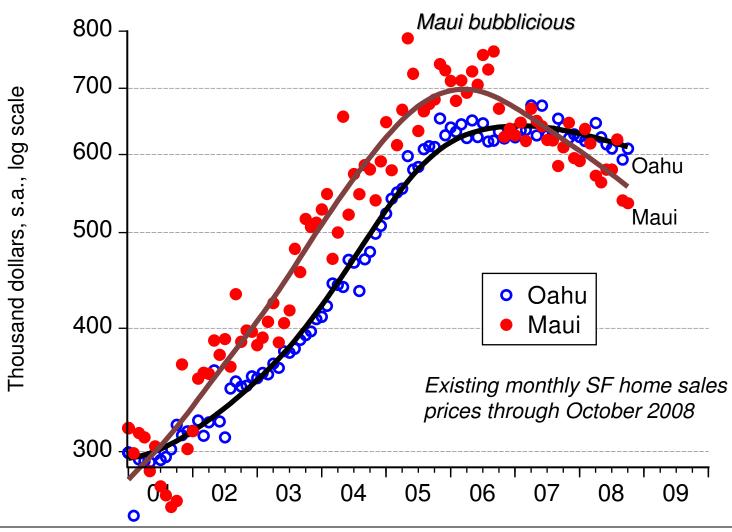
Oahu median single-family home prices, scrubbed



Sources: Honolulu Board of Realtors; seasonal adjustment calculation and application of Hodrick-Prescott filter for trend by author



Oahu and Maui median single-family home prices

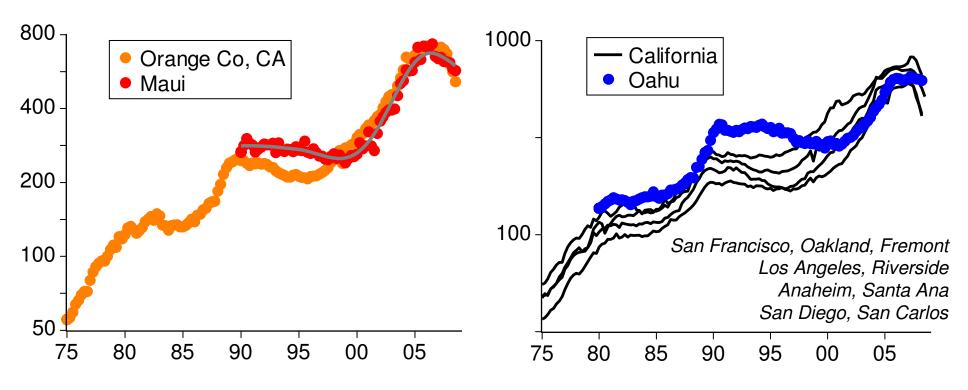


Sources: Honolulu Board of Realtors, Realtors Association of Maui; seasonal adjustment calculation and application of Hodrick-Prescott filter for trend by author



California and Hawaii median SF home sales prices

Thousand dollars, s.a., log scale

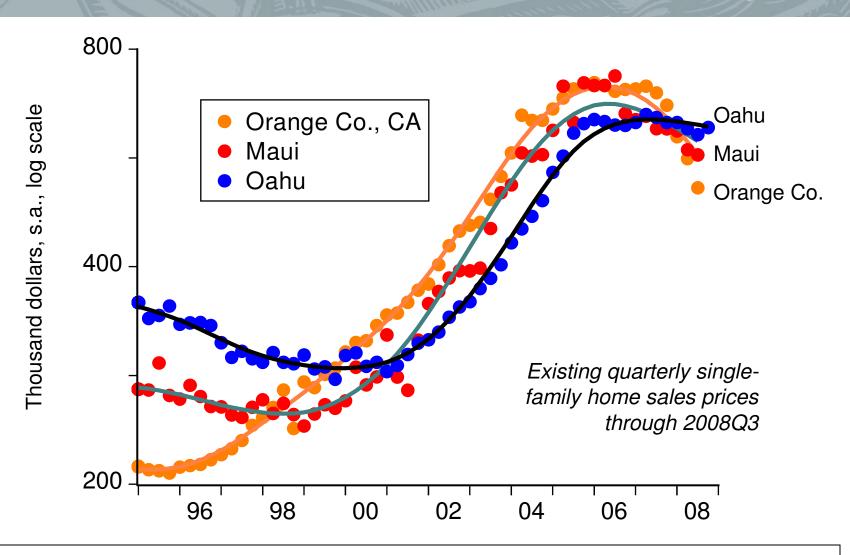


Existing quarterly single-family home sales prices through 2008Q3

Source: Realtors Association of Maui; National Association of Realtors; author's calculations



California and Hawaii median SF home sales prices



Source: Honolulu Board of Realtors; Realtors Association of Maui; National Association of Realtors; author

Th Bank of Hawaii

Pau, seriously

Celebrating Ten Years of Service to Hawaii

Quarterly Forecast Update: No Quick Recovery From Hawai'i Recession

Senate Ways & Means — House Finance
Joint Economic Briefing
January 13, 2009

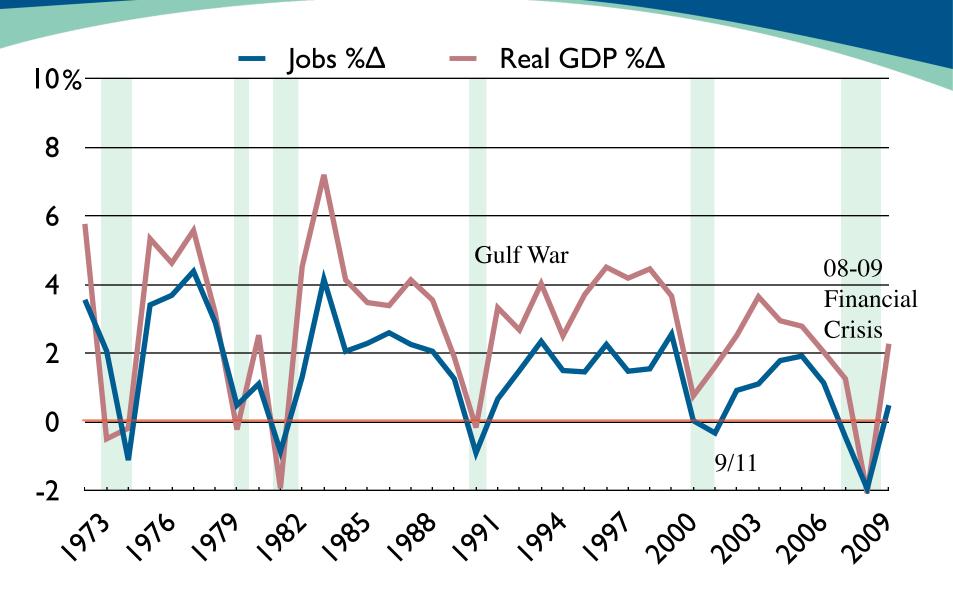


Dr. Carl Bonham Executive Director, UHERO

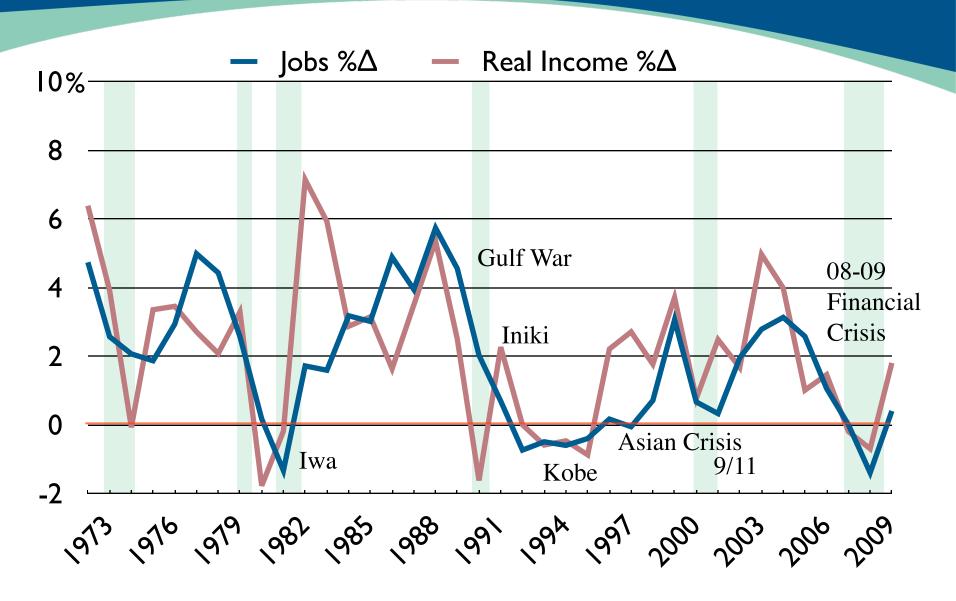
Overview

- State of the Cycle
 - Hawaii recession likely to linger
 - California our Achilles heel
- State Forecast Update
 - External conditions are dismal
 - Milder than Mainland is good but...
 - When will tourism carnage end

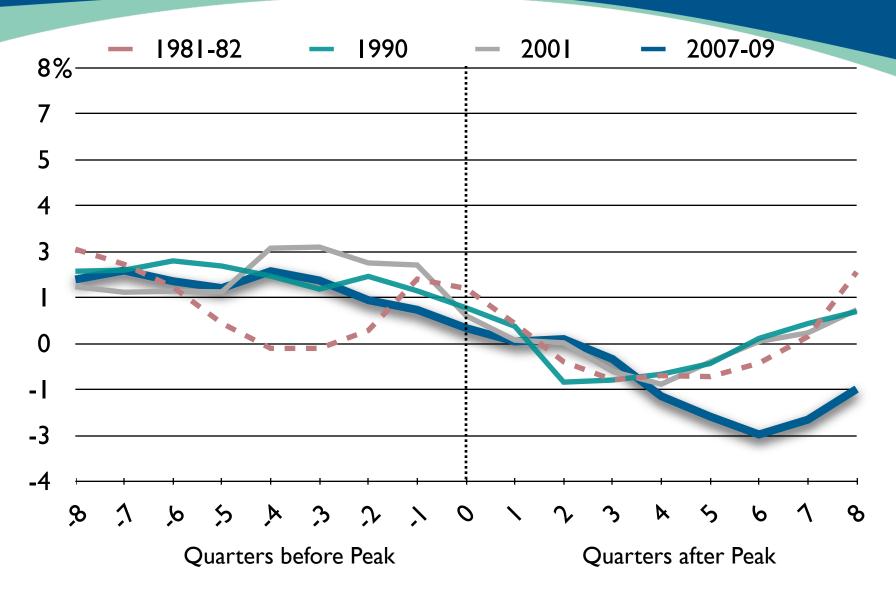
US business cycle revisited



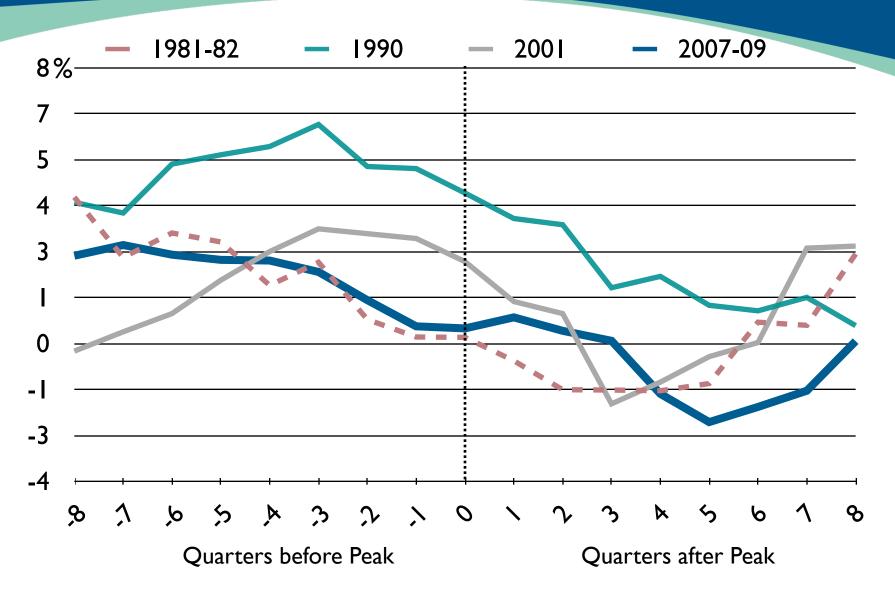
Hawai'i business cycle revisited



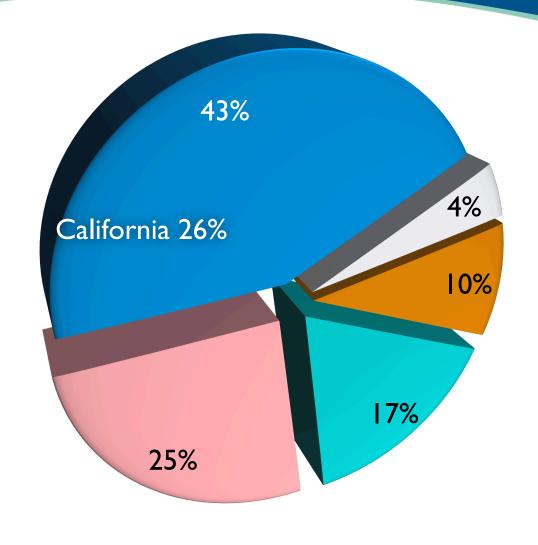
US employment growth in past cycles



Hawaii job growth in US recessions



Overweighted in domestic visitors





Others



Japan

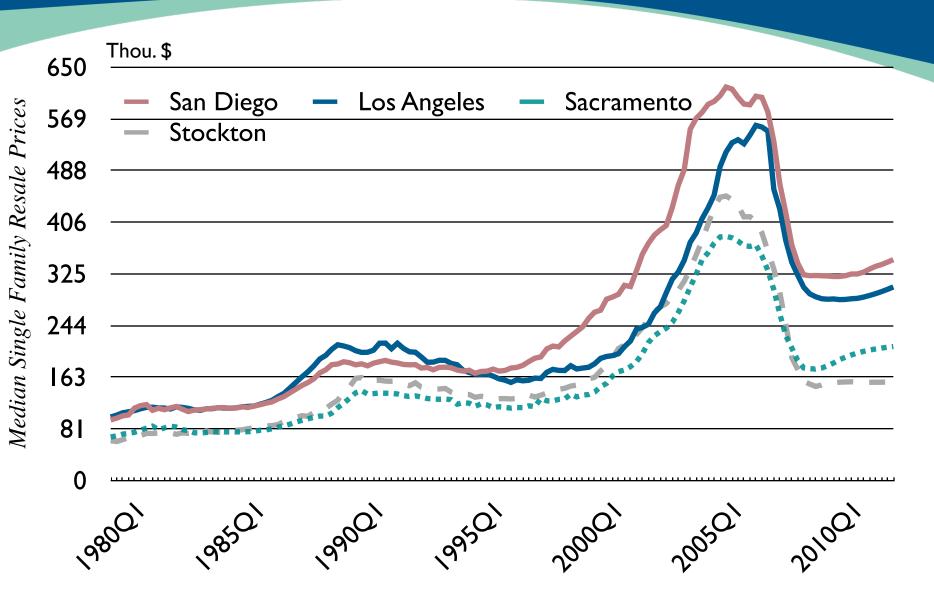


US East

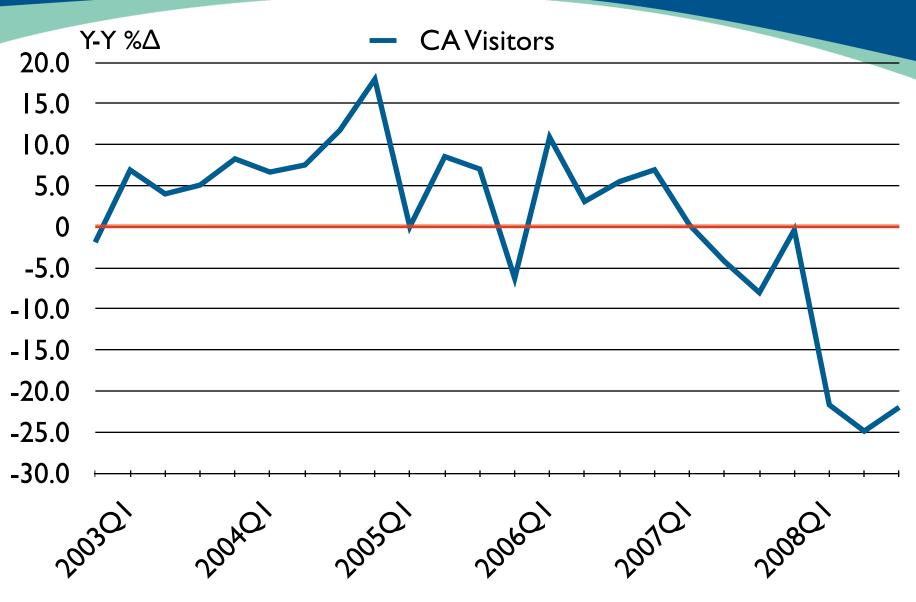


US West

California is our Achilles heel

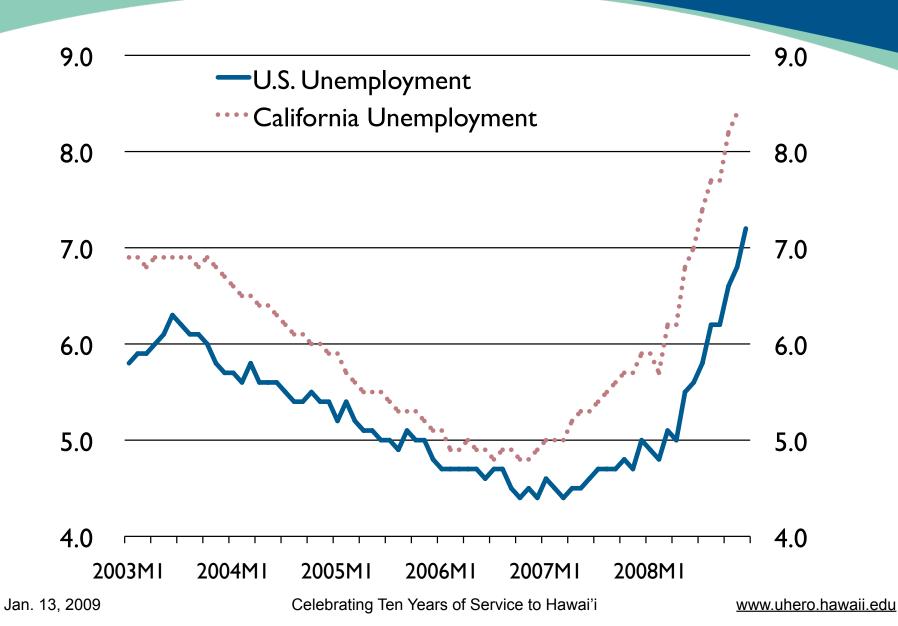


California is our Achilles heel

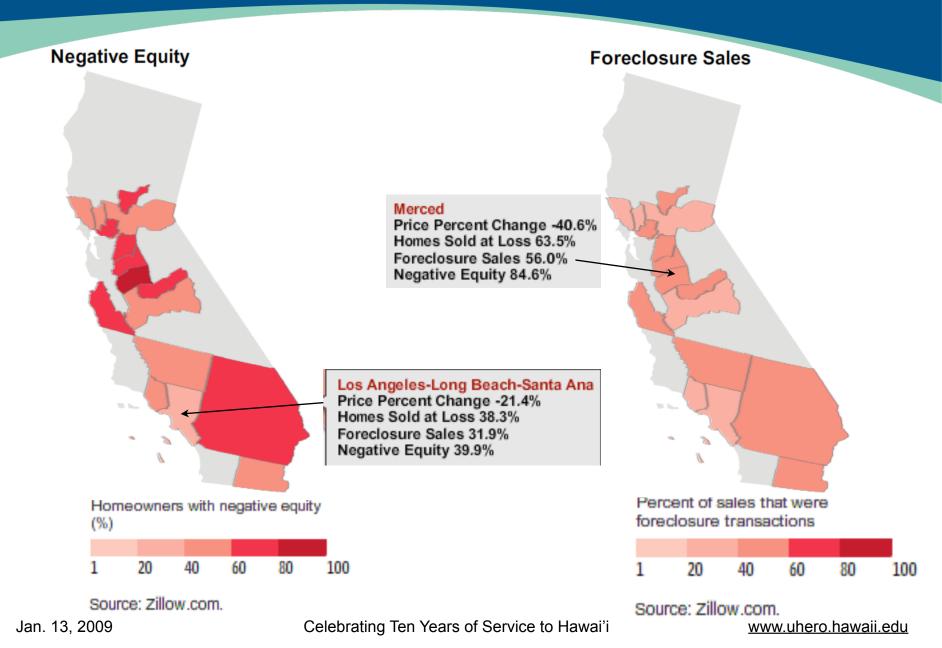


Jan. 13, 2009

California leading nation in decline



California leading nation in decline

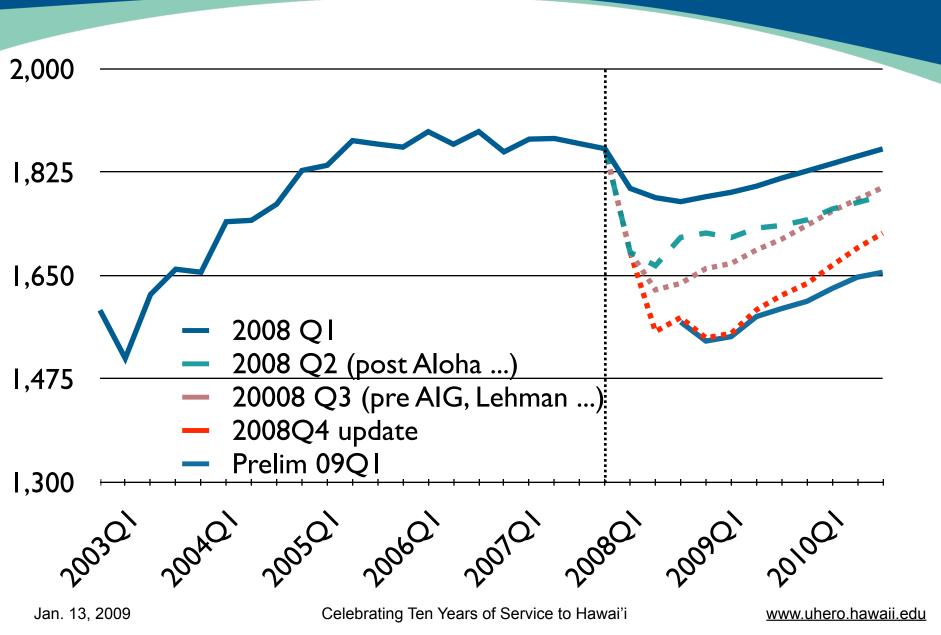


Tourism carnage nearing end?

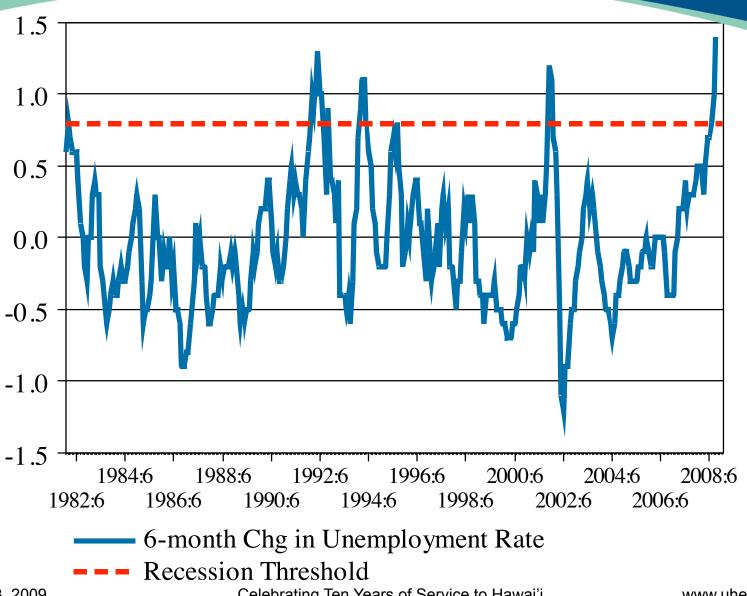
- 2/3 of cruise capacity gone by May
- At least 600,000 "effective" airline seats gone with bankruptcies
- Oil price surge shocked both supply and demand
- ➤ Housing/stock market busts —> unprecedented negative wealth effect in Hawaii's largest market
- 2.6 million jobs lost and counting...



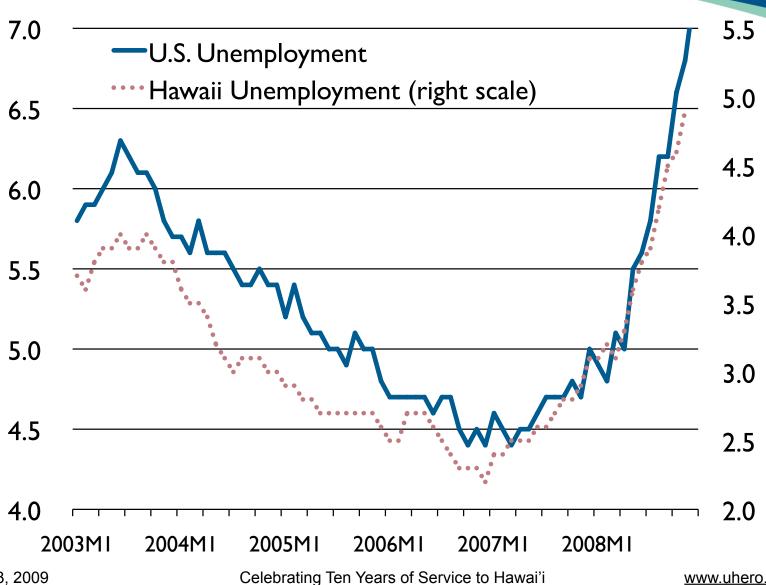
Uncertainty rules visitor forecast



But Hawai'i recession is certain



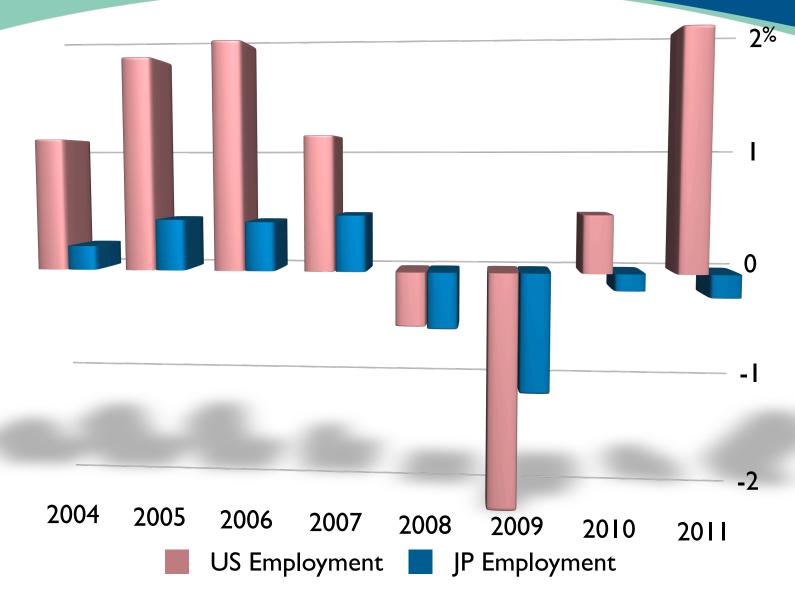
Not as bad as mainland?



Global recession implies worst still to come

- > U.S. economy in long and deep recession
 - Q3 consumers spending fell by 3.1%, biggest drop in 20 years
 - Retail sales continue to decline.
 - Home price declines, foreclosures, bankruptcies continue.
 - Recession will linger well into 2009.
 - Housing prices continue to fall destroying wealth and families.
 - Consumer sentiment at record lows and spending follows.
 - Job losses continue to mount.
- Rest of world--
 - Japan is in recession
 - » Real GDP fell by 3.7% in 2008Q2 and 0.4% in Q3.

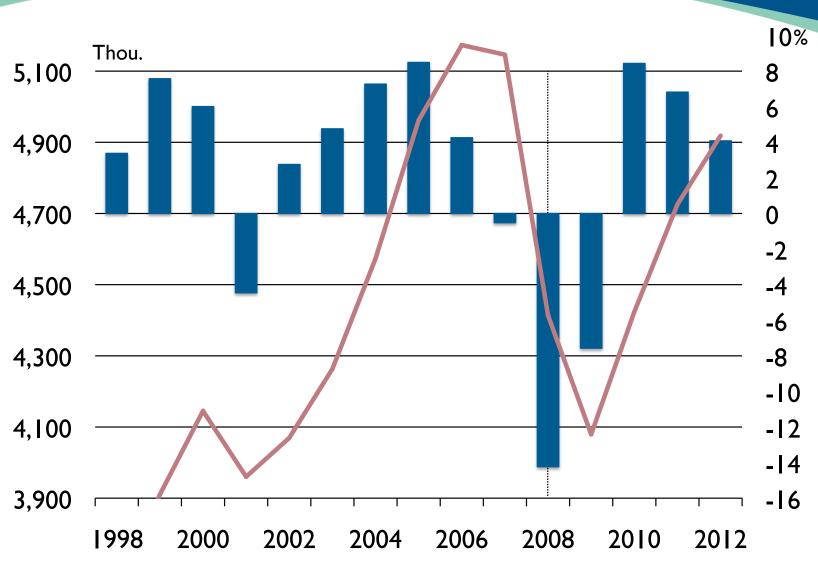
Job losses continue in major visitor markets



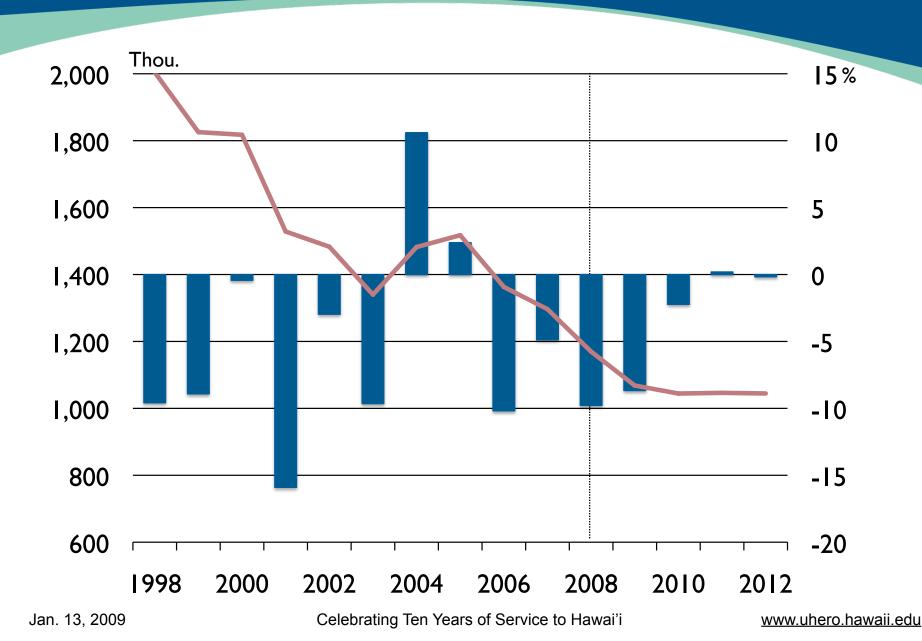
State Forecast Update

- Hawaii construction sector no longer adding jobs
- > Tourism malaise
 - Global recession in 2009
 - Consumer behavior to change long term?
 - But lower prices and visa agreements will help
- ➤ Job growth and real income growth will turn sharply negative in 2009.
- ➤ Moderate growth not likely until 2010 and beyond.

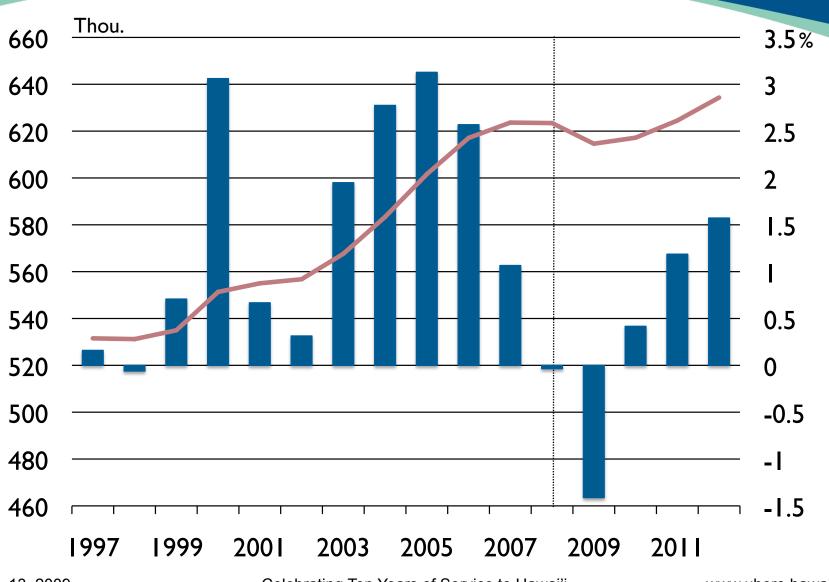
Visitor forecast: U.S. arrivals collapse



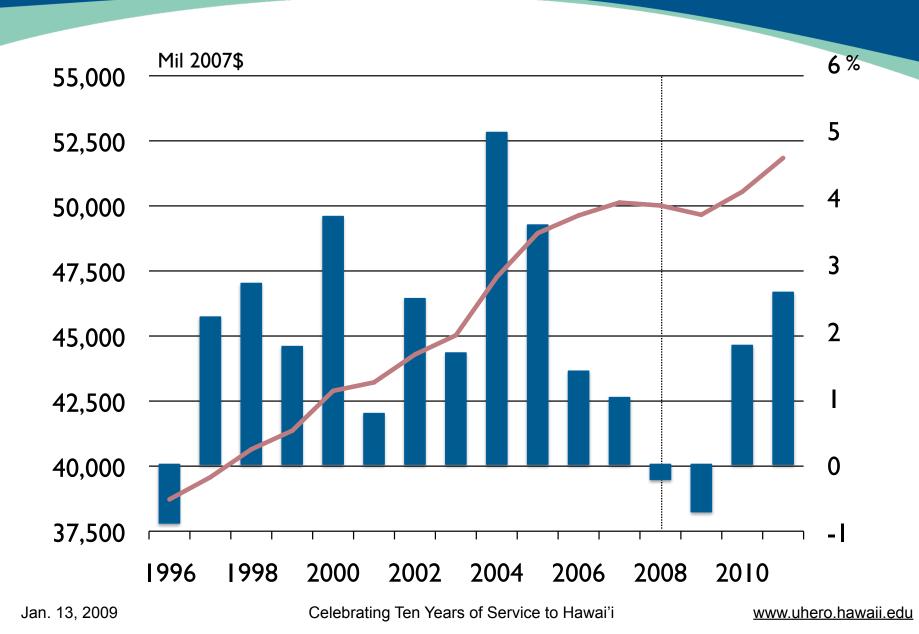
Japanese arrivals continue their slide



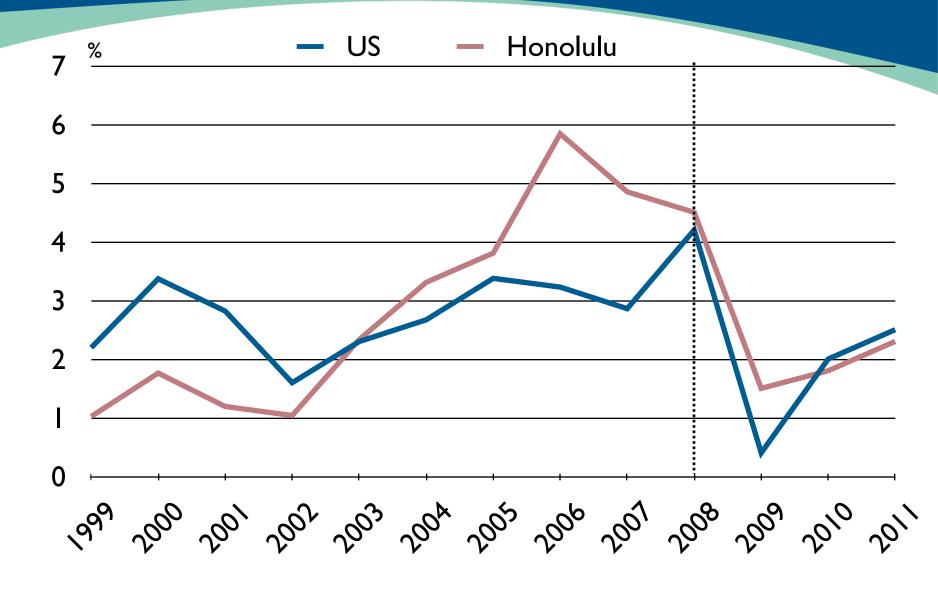
Job Growth—Recession



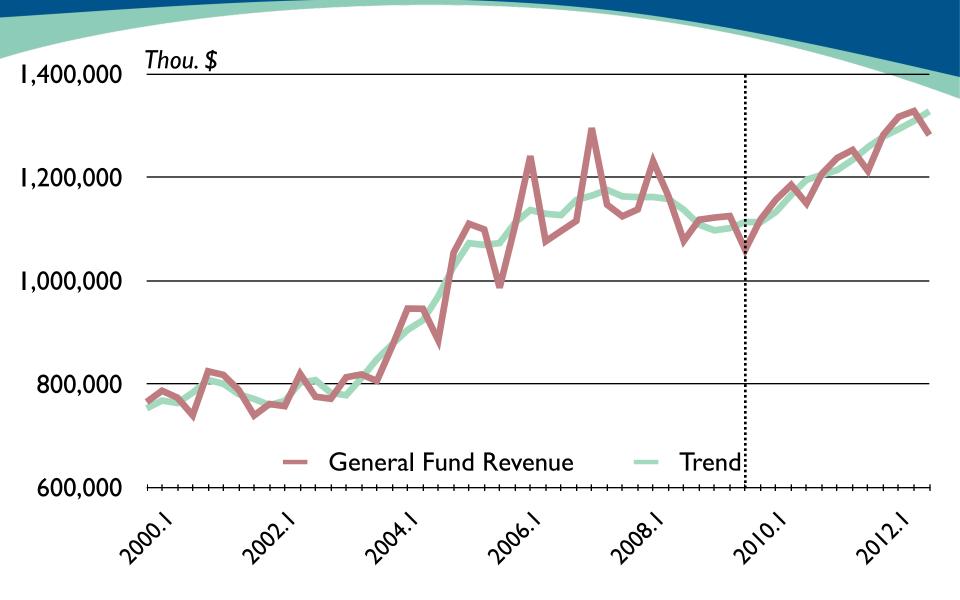
Real Income—Recession



With deep recession inflation is gone



General fund revenue forecast



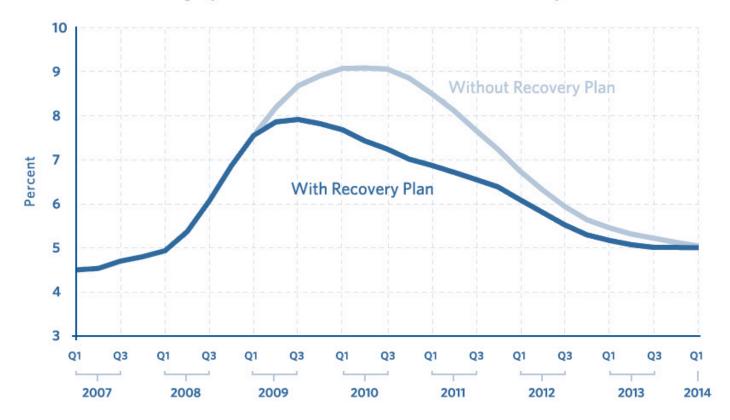
Risks

- Vicious Circle as consumers retrench
 - » the global economy is weakened further,
 - » retailers, auto, travel sector lay off more workers
 - » contributing to ongoing foreclosures and bankruptcies
 - » which lead to continuing decline in home prices ...
 - » and more consumer retrenchment
- Additional failures in transportation
 - Falling travel demand and price cuts
- Upside Risks?
 - Falling air fare, energy cost, cheaper housing
 - Korean & Chinese Tourism agreements

Upside Risks

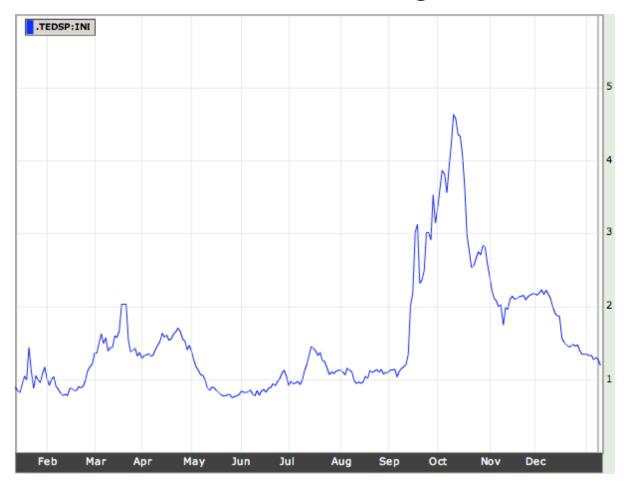
Fiscal Stimulus and easing credit conditions

Figure 1
Unemployment Rate With and Without the Recovery Plan



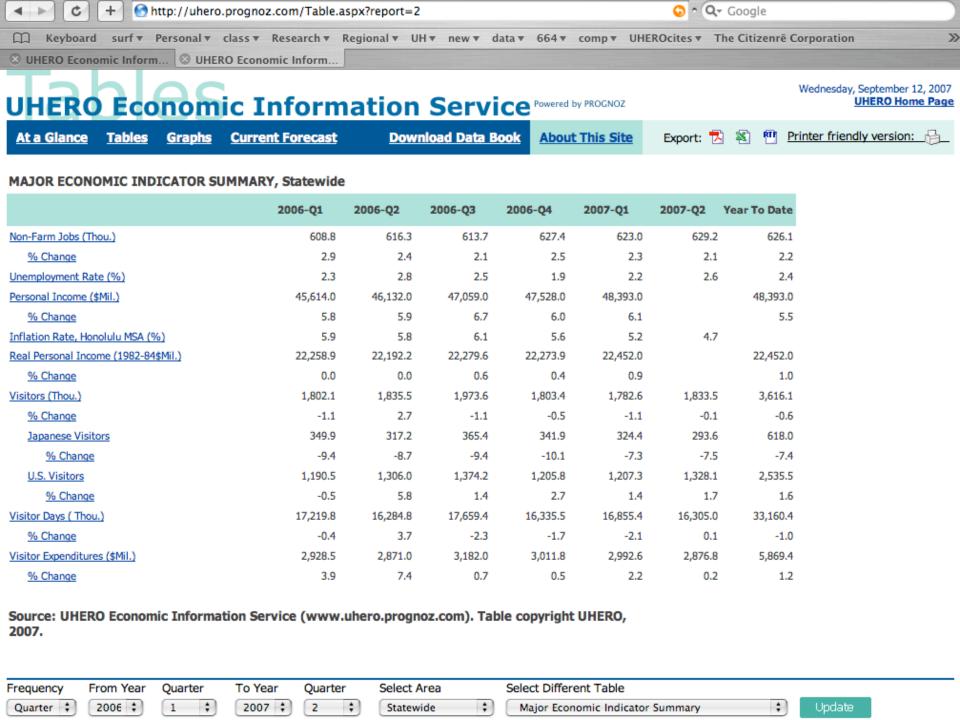
Upside Risks

Fiscal Stimulus and easing credit conditions



UHERO Economic Information Service Powered by PROGNOZ







Current Hawaii Economic Conditions

Presented by

Pearl Imada Iboshi Department of Business, Economic Development & Tourism to the

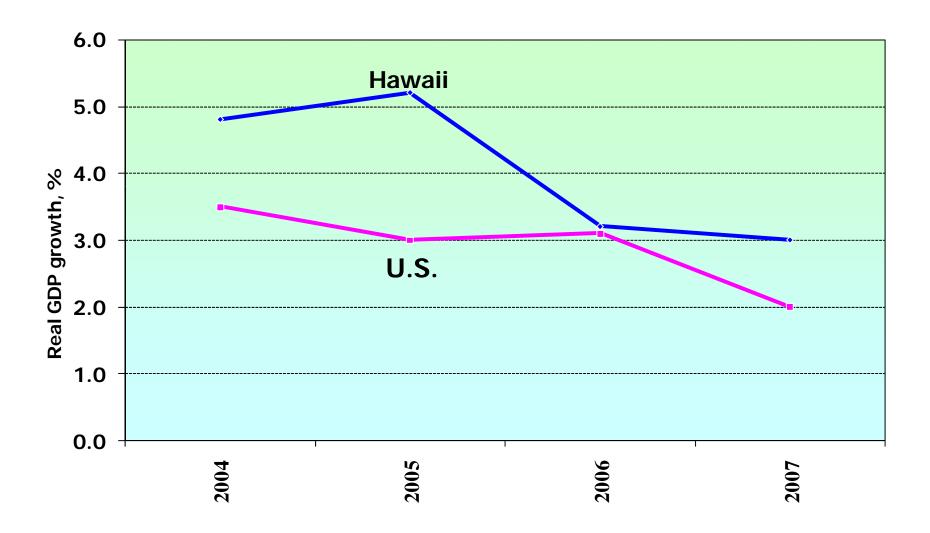
Committee on Ways and Means and Committee on Finance

Informational Briefing

January 13, 2008

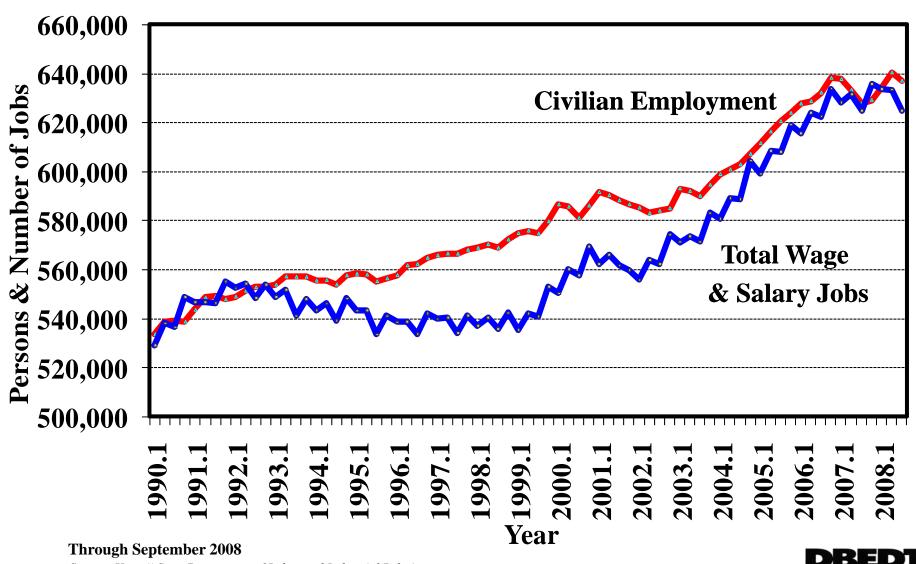


Hawaii's economic growth rates have been higher than the nation since 2003, and ranked the 9th among 50 states in 2007



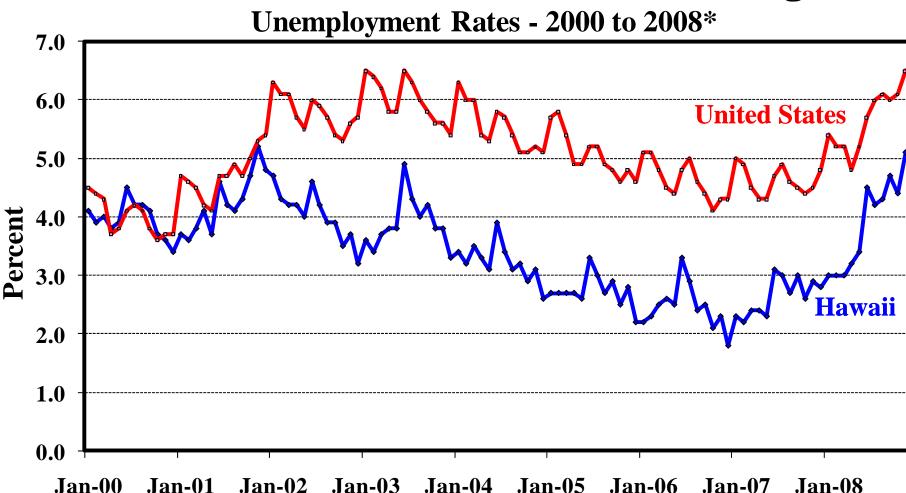


Civilian Employment and Total Wage & Salary Jobs



Source: Hawaii State Department of Labor and Industrial Relations

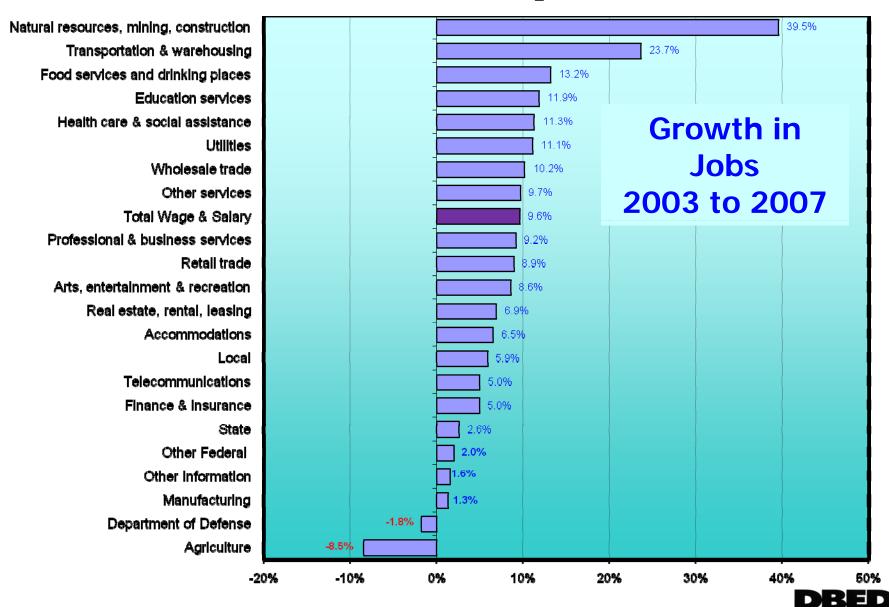
Since December 2001, Hawaii's Unemployment Rate Has Been Below the U.S. Average



THE DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

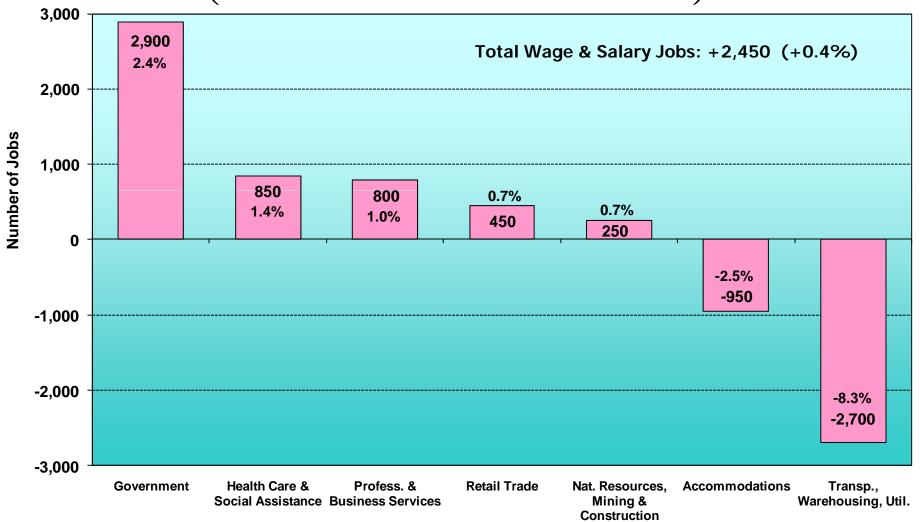
^{*} Though November 2008, Not seasonally adjusted.

Over the last four years, the strongest growth has been in construction and transportation



State of Hawaii Job Growth 2008

(2007 to 2008 Year to data Job Growth)



Through November 2008

Source: Hawaii State Department of Labor and Industrial Relations



Job Growth











2007

2008*

2009*

Total Wage and Salary Jobs

1.0%

0.0% -0.2%

*Forecast







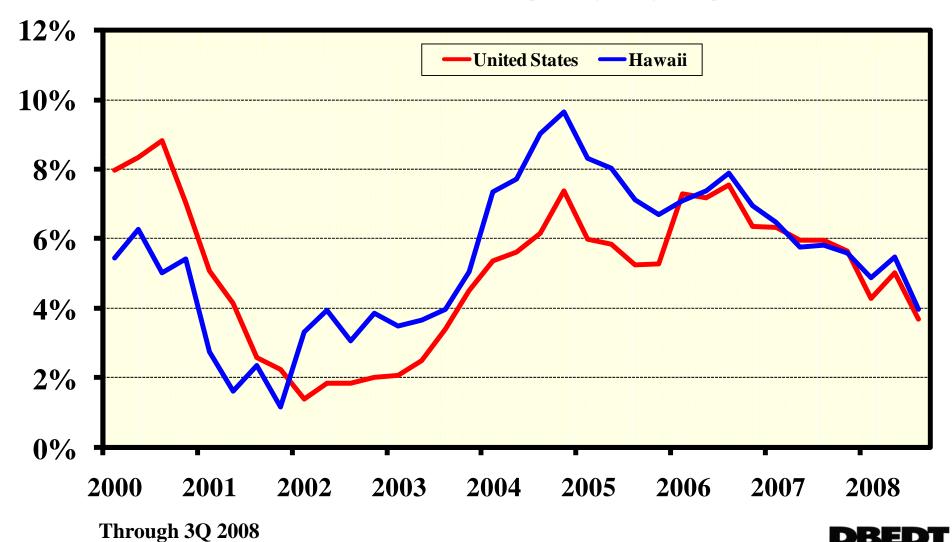




Personal Income

Hawaii Continues to Outpace the Nation in Personal Income Growth

Quarterly Personal Income Growth - 2000 to 2008 (percentage change from previous year)



Source: U.S. Department of Commerce, Bureau of Economic Analysis

Personal Income Growth











2007

2008*

2009*

Nominal Total Personal Income 5.9%

4.0% 2.2%

*Forecast





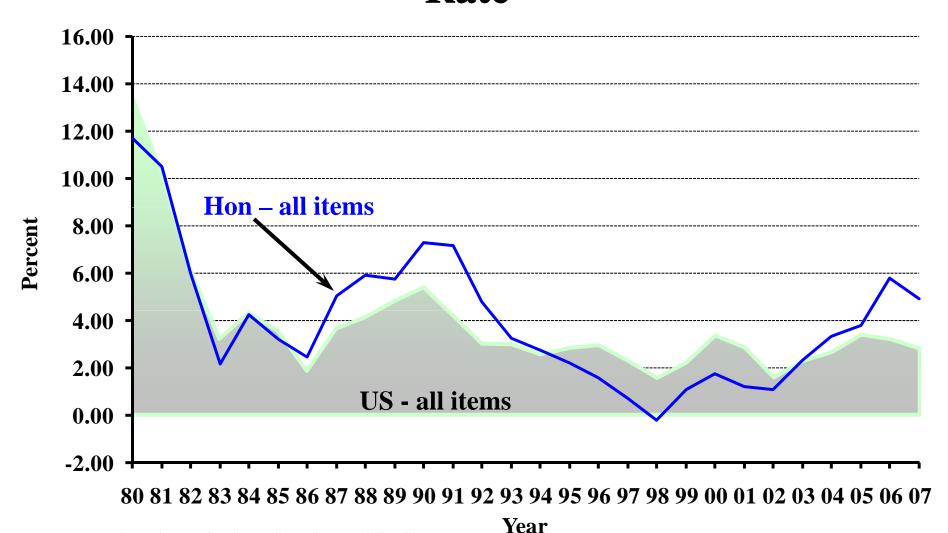








Selected Honolulu and US Consumer Inflation Rate*



* % change in the U.S. and Honolulu CPI for All Urban Consumers (1982-1984=100)



Forecast: Slowing Increase in Prices







2007 2008* 2009*

Percent change in Honolulu CPI-U

4.9% 4.2% 2.6%

*Forecast

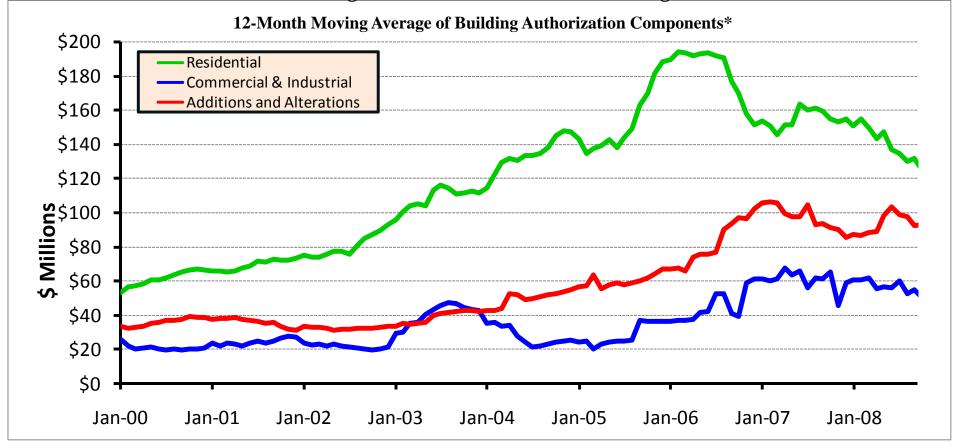






Construction & Housing

Building Permit Authorizations Remain High



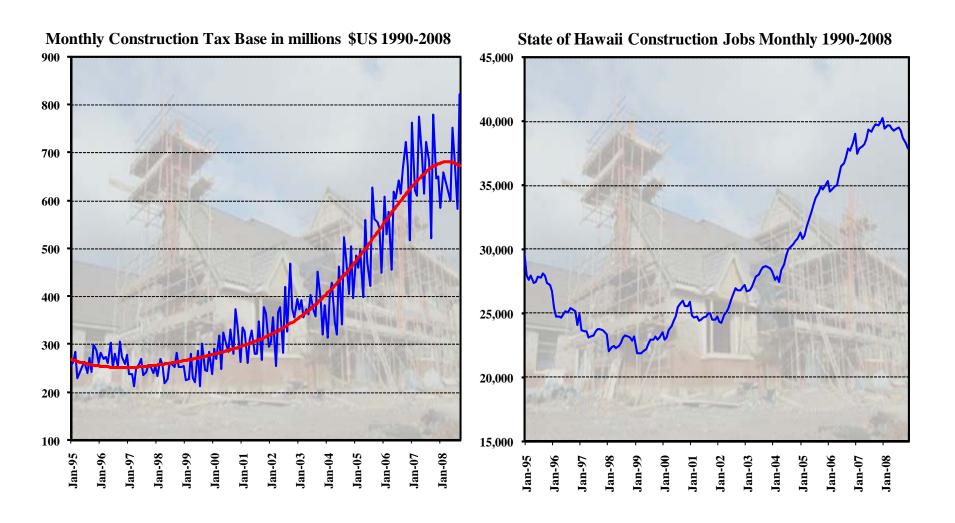
- Federal expenditures will continue to increase as planned military housing privatization is substantial at \$3.0 billion over the next ten years
 - 17,000 units planned (approx. 1500 completed by end of CY2007, and 1400 planned for each of the next few years.)



^{*} Additions and Alterations and Commercial & Industrial data do not include Kauai. All data through November 2008 Source: County building departments.

Construction & Housing – Contd.

Construction Put-in-Place and Jobs Level Out

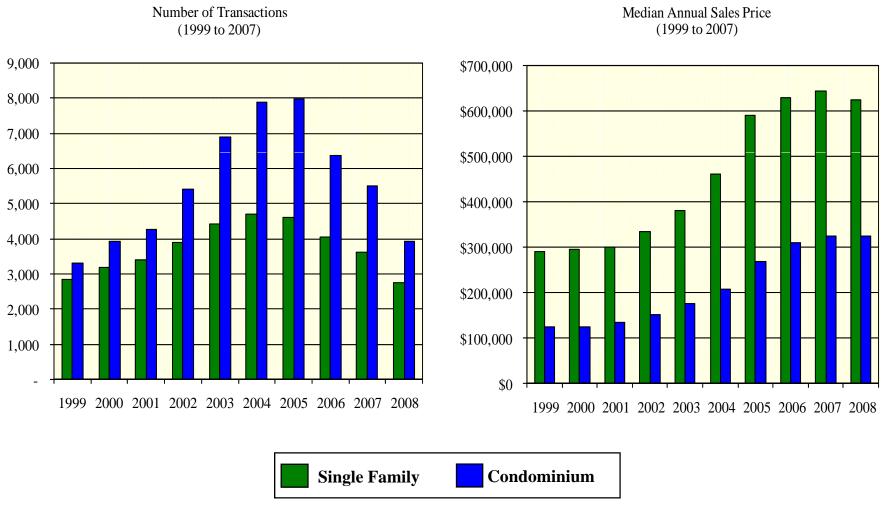


Through September 2008 Through November 2008



Construction & Housing – Contd.

Oahu Housing Trends

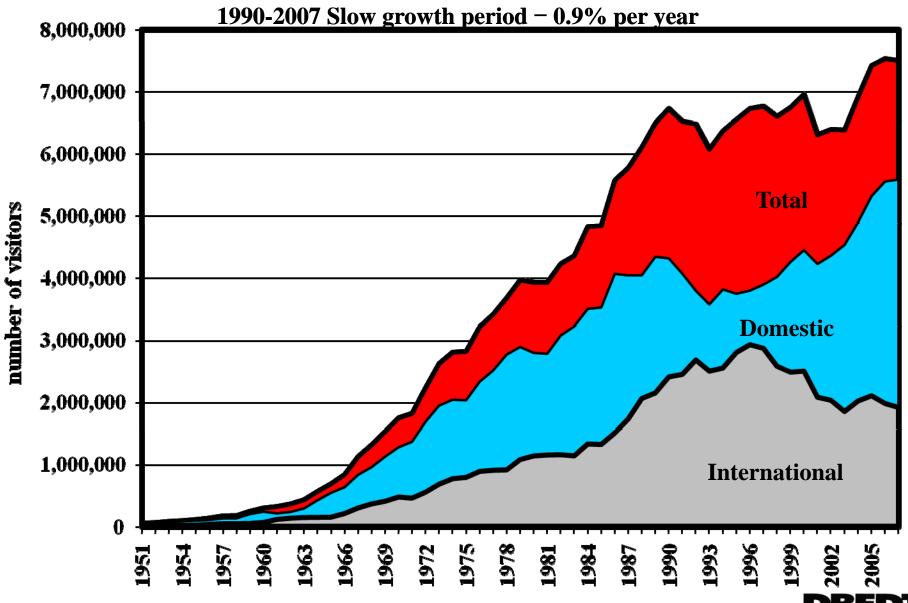


Source: Honolulu Board of Realtors, Research Department

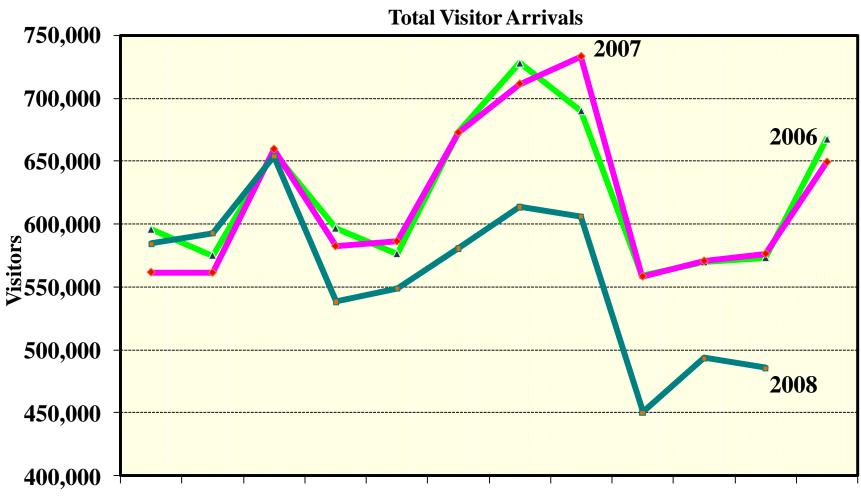


Visitor Arrivals to Hawaii: 1951 to 2007

1960-1990: Fast growth period = 11% per year 1990-2007 Slow growth period = 0.9% per year



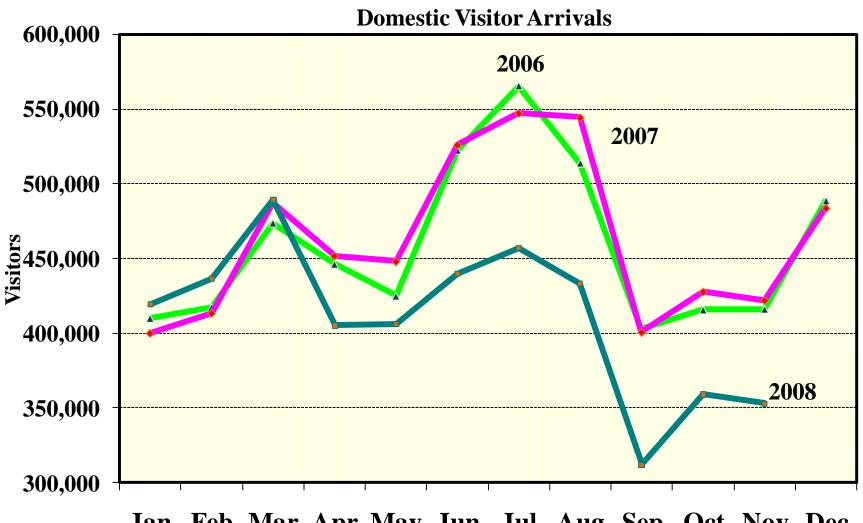
State of Hawaii Monthly Visitor Arrivals by Air 2006 to 2008

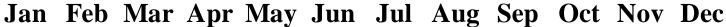


Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec



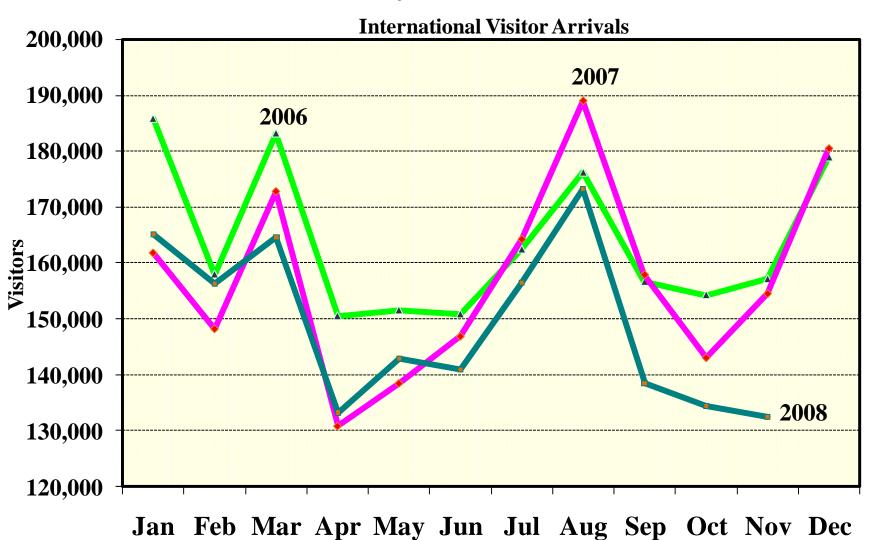
State of Hawaii Domestic Visitor Arrivals by Air 2006 to 2008







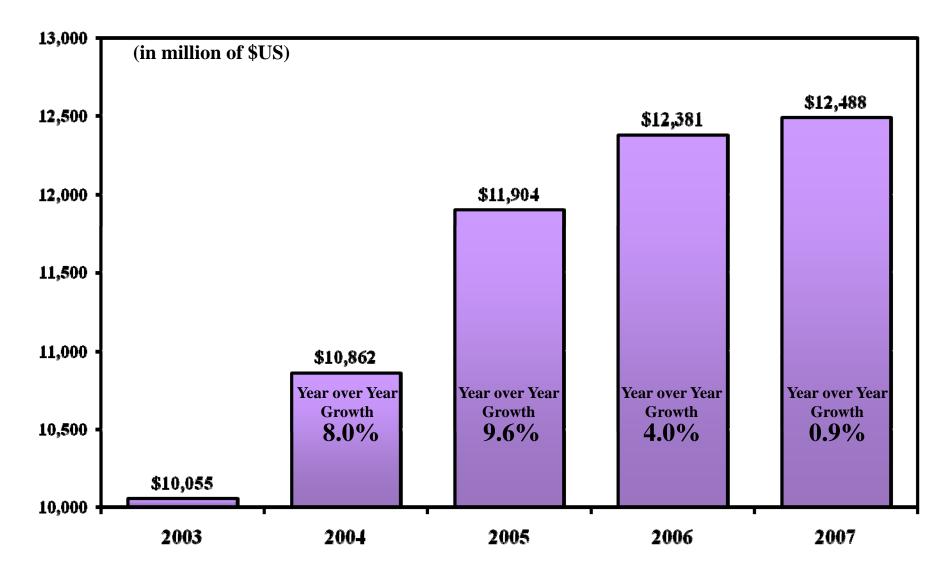
State of Hawaii International Visitor Arrivals by Air 2006 to 2008

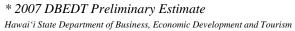






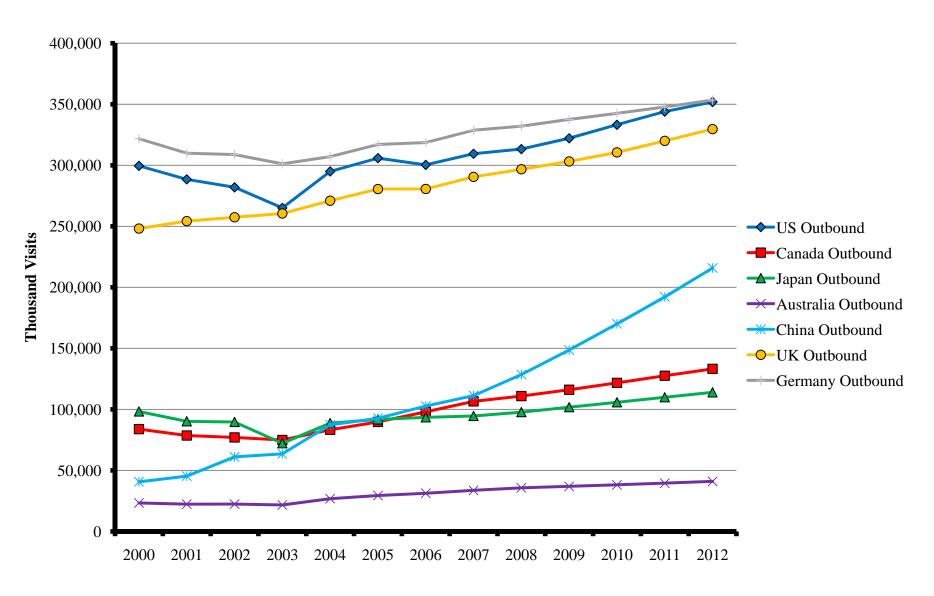
Total Annual Visitor Expenditure: 2003 to 2007







International Outbound Travel

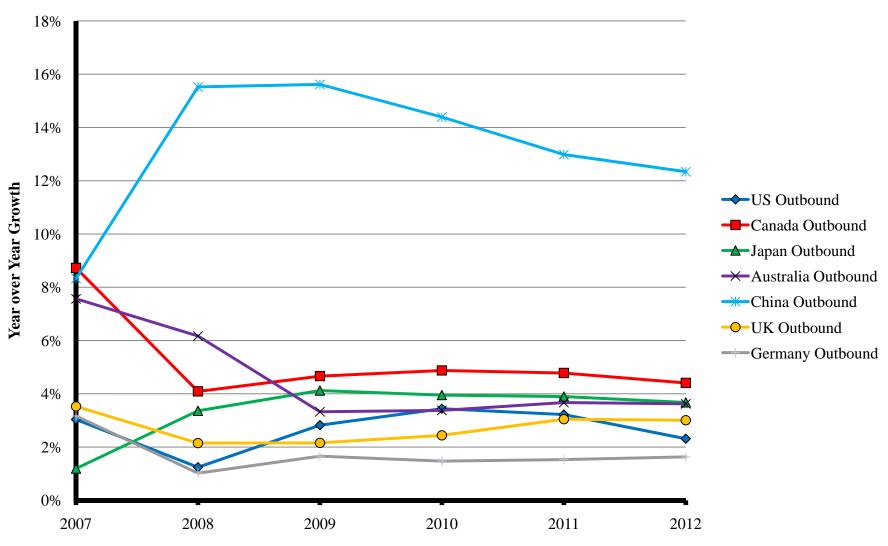


 $Source: \ Global\ In sight-Global\ Tour is m\ Report\ 2008\ Is sue\ 2$



International Outbound Growth



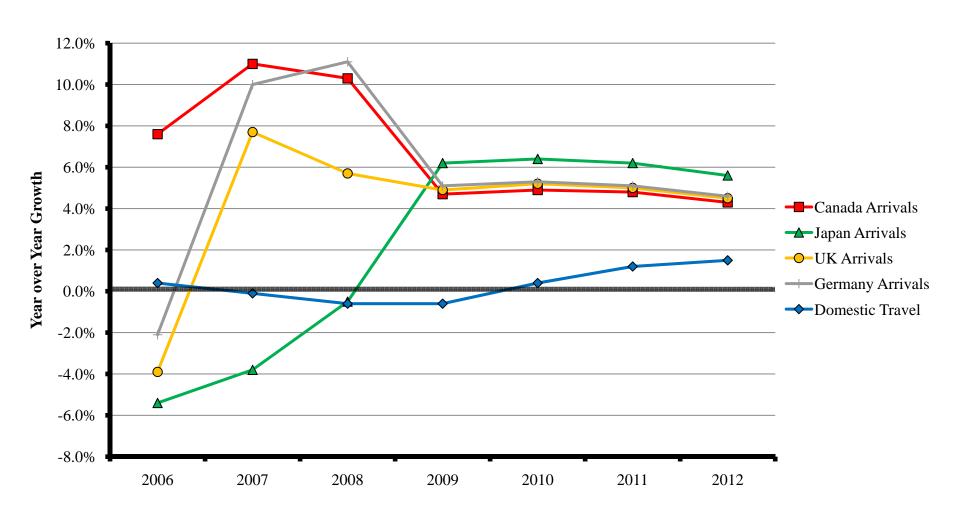


 $Source: \ Global\ In sight-Global\ Tour is m\ Report\ 2008\ Is sue\ 2$



Forecasted International Arrivals to U.S. & U.S. Domestic Travel

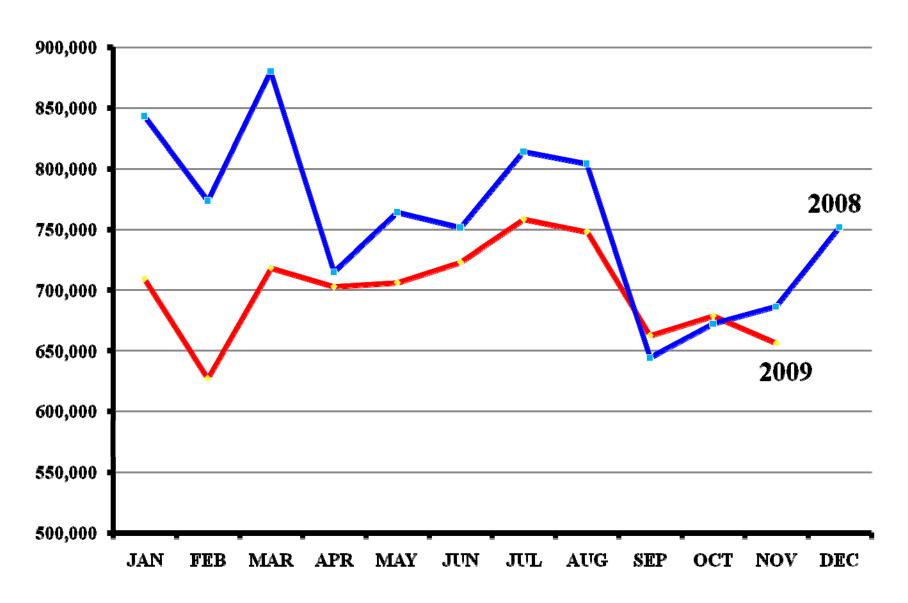
International Arrivals & U.S. Domestic Travel



 $Source: D.K.\ Shifflet\ \&\ Assoc,\ OTTI,\ Global\ Insight-U.S.\ Travel\ Insight\ October\ 2008$



Scheduled Airseats 2008 & 2009



Source: ADI Global Airport Industry Database / OAG Schedule Detail



Visitor Forecast







2007

2008*

2009*

Visitor Arrivals

0.0% -10.1% -1.9%

Visitor Expenditures 2.6% -9.5%

0.7%

*Forecast













External Conditions

Blue Chip Forecast for U.S. and Japan Real GDP Growth

	<u>2008</u>	<u>2009</u>	<u>2010</u>
United States	1.3	-1.6	2.4

	<u>2008</u>	<u>2009</u>	<u>2010</u>
Japan	0.4	-1.4	1.2

Source: Blue Chip Forecast, December 2008 for 2008 and November 2008 for 2008 & 2009



Summary of Actual and Forecasted Key Economic Indicators for Hawaii: CY 2007 to 2009 (Annual % Change)

	Actual CY 2007	Forecasted CY 2008	Forecasted CY 2009
Total Population	0.4%	0.7%	0.8%
Visitor Arrivals	0.0%	-10.1%	-1.9%
Visitor Expenditures	2.6%	-9.5%	0.7%
Honolulu CPI-U	4.9%	4.2%	2.6%
Personal Income	5.9%	4.0%	2.2%
Real Personal Income	1.0%	-0.2%	-0.4%
Total Wage and Salary Jobs	1.0%	0.0%	-0.2%

