Testimony

of

Paul H. Brewbaker, Ph.D., Principal, TZ Economics
Chair, Hawaii Council on Revenues

before a joint informational briefing of the
Hawaii State House Finance Committee
and the
Hawaii State Senate Ways and Means Committee

Monday, January 3, 2011

Good morning and thank you once again for this opportunity to present to you some information regarding the Council on Revenue's forecasts for the current and coming fiscal years. My name is Paul Brewbaker and I am the current Council Chair. My testimony will attempt to reflect the views of the Council but any opinions expressed are my own. I will have some brief written comments to make and then will turn to a slideshow to illustrate key points.

As is customary at these annual informational briefings I will also make available to the committees a narrative prepared by the staff of the Tax Research and Planning Office of the Hawaii Department of Taxation for this hearing, under Council on Revenues' letterhead as it provides additional background information and other pertinent details. While I shall not read that narrative at this briefing I will be happy to follow up with answers to questions that members may have about it.

Although the Council on Revenues has recently met and deliberated, its decision has not yet been communicated to the Governor, Senate President or Speaker of the House, as it will be by the statutory reporting date next week. You may have heard that at its meeting last week members adopted a slight revision to the forecast from 2% to 3% nominal revenue growth in the current fiscal year. Among several economic factors influencing the Council's revision the strong rise in total visitor arrivals during the current fiscal year was the predominant qualitative change from the Council's recent prior forecasts. Quantitatively, however, some members' economic forecast assumptions were indicating, when used in econometric models, that the revenue growth outcome would be even more robust than previously was forecast, if only modestly. Together these qualitative and quantitative considerations, among other factors, contributed to the upward revision.

Council members chose to retain previously forecast estimates of revenue growth in fiscal years 2012-2017, but not without extensive discussion of both cyclical and trend aspects of Hawaii's likely economic performance during the 20-teens. While the Council's view regarding the out-year forecast was *not* altered from recent meetings, the questions raised about durability of economic expansion implied by the longer-term forecasts should be taken seriously. At issue is the question of whether the trend pattern of economic growth in Hawaii since the 1970s, with a compound annualized real, inflation-adjusted rate of increase of only 1.5% will, in conjunction with a trend inflation assumption, suffice to support the Council's current forecast of 6% annual nominal General Fund Revenue growth from FY 2013-2017.[1]

Some Council members cautioned that the performance of Hawaii's economy since the 1970s has been punctuated by external shocks—geopolitical, meteorological and biological, not to mention financial crises—that should temper the Council's longer-term expectations. Though the probability of such events in any *given* year is relatively low, the unconditional probability of such an economic disturbance is essentially one (1)—such events are almost certain to occur *eventually*. Moreover, between 1980 and 2010 two of the worst U.S. recessions in the last century occurred, drawing Hawaii into a global recession vortex. Granted, recessions were less frequent events during the last three decades than prior to the 1980s, but two of the last four have been the most intense since the Great Depression. The point is that even in a macroeconomic environment where the average duration of economic expansion has lengthened, the impact of large, unpredictable, external economic shocks can impair long-term average growth by punctuating economic expansions with abrupt, catastrophic declines or sudden stops.

A contrasting view advanced by other Council members is that the years 2013-2017, from a cyclical standpoint, stand a better than even chance of being "above trend" years for Hawaii economic performance. Such episodes during the last several decades—2003-2007 and 1985-1990, for example—have yielded State revenue growth higher than long-term trend statistics would imply. Even the period 1997-2001 produced revenue growth, although its magnitude was diminished by the phase-in of multi-year income tax rate reductions. Similarly, revenue growth during the early-2000s would have been even higher were it not for subsidies to so-called high-tech investors. According to this view, a slight bias upward to support the 6% revenue growth forecast in the out-years is reasonable, given the history of such periods in the recent past, when economic activity in cyclical sectors like real estate and construction was especially heightened. If such patterns of economic expansion are more probable for the period than economic stagnation or decline, *including* the effects of external shocks to the economy, then slightly above average growth—say 6% instead of 4.5%—could be possible, even likely.

After contemplating an out-year revenue forecast revision to 5.5% at its meeting last week, the Council held to 6% forecast previously estimated in its earlier 2010 meetings. However, the issues raised by this debate remain pertinent. A lot depends on whether, when, and by how much, a revival of private investment occurs during the 20-teens. Even conceding that the pace of economic recovery will remain moderate in fiscal years 2011 and 2012, and that its pattern will remain uneven across sectors, a sharp rebound in private investment—construction and real estate investment—would not be unusual for Hawaii's business cycle as it enters the 20-teens. Indeed, it would be unusual for such an investment renaissance *not* to occur.

[1] A nominal revenue growth estimate can be approximated by the sum of real personal income growth and inflation, multiplied by an elasticity of 1.1 that, as a rule of thumb, maps nominal income growth to nominal State revenue growth. For example, the historical 1.5% real income growth rate, plus 2.5% inflation, times 1.1, yields a crude nominal revenue growth estimate of only (1.5 + 2.5) x 1.1 = 4.4%. Accepting either the Federal Reserve's longer-term inflation forecasts of 1.7-2.0% annual inflation, or financial markets' implied estimate of inflation of 2.0-2.5%, taken from the pricing of U.S. Treasury securities at 5-10 year maturities, could yield nominal revenue growth around 4%.

Two other comments should be made in this briefing before turning to an examination of recent Hawaii economic data. First, Council members have grown increasingly concerned about the *mis*-use of its revenue forecast estimates, sometimes unintentionally attributing to the Council detailed, "line-item" revenue estimates. The Council devotes considerable effort, employing members' own econometric models and those of the Tax Research and Planning office, in arriving at estimates of General Fund Revenues, the roughly 45% of the State of Hawaii's revenues that comprise *most* of the pro-cyclical movement of State government revenues. The Council does *not*, however, produce forecasts of individual *components* of the General or any other Special or Other Funds. It does not produce a forecast estimate of the Transient Accommodation Tax. It does not produce a forecast estimate of the General Excise Tax. It does not produce a forecast estimate of federal funds intended for Medicaid reimbursement or magnitudes of Corporate Net Income Tax Refunds. Instead a vast army of individuals in public service throughout State government—including extremely able staff of the Departments of Taxation and of Budget and Finance—provide estimates of these tax and other revenue details based on the Council on Revenue's "top-down" forecasts for the General Fund *as well as* a wide variety of other inputs, including economic data and forecasts (some of which Council members produce, independently). Line-item details *do not* originate in the Council's deliberations but are *based on* the Council's deliberations (in many cases), and are *part of* the Council's deliberations (in all cases, as they are reviewed by the Council). Forthcoming changes in the reporting of the Council's forecasts should help make obvious these distinctions.

Second, although I remind committee members that the opinions expressed here are my own and may not reflect the views of the Council of Revenues, the minor revenue forecast revisions that have recently occurred, and even more substantial revisions that occurred during fiscal year 2010, do *not* reflect material changes to Hawaii's economic trajectory that the Council on Revenues has been forecasting *for nearly 18 months*. Put differently, since the conclusion of the Great Recession in June 2009—and, yes, now would be a good time just to accept that the recession ended about a year-and-a-half ago[2]—Hawaii's economic recovery has not materially deviated from what was anticipated.

It is true that in a period (FY 2010) of greater economic uncertainty than is now extant, the Council revised its FY 2011 General Fund Revenue growth forecasts downward beginning about a year ago, triggering tactical responses to defer State tax refunds as a precautionary "savings" mechanism. The unfortunate consequence of this tactical response was a shifting of roughly 4 percentage points of annual revenue growth out of the current fiscal year into the next. Adjusted for these changes the growth rates *now* being forecast are *essentially the same* as one year ago at this time. Nothing has changed: that is, the forecast of gradual economic recovery transitioning to sustainable economic expansion forecast *was basically correct*. The 7.6% revenue forecast for FY 2011 from December 2009 is *essentially* what you get if you take the Council's current 3% revenue growth forecast and add the 4 percentage points of revenue growth that *would have* occurred without the change in refund timing last year. The Council's current 10% revenue growth forecast for FY 2012—is essentially the 6% revenue growth forecast from December 2009 after subtracting the 4 percentage points of revenue growth attributable to the change in

[2] I'm not talking about how it "feels," whatever that is supposed to mean. I'm talking about what the Dating Committee of the National Bureau of Economic Research decided were the facts of the matter. See http://www.nber.org/cycles/cyclesmain.html, if you must.

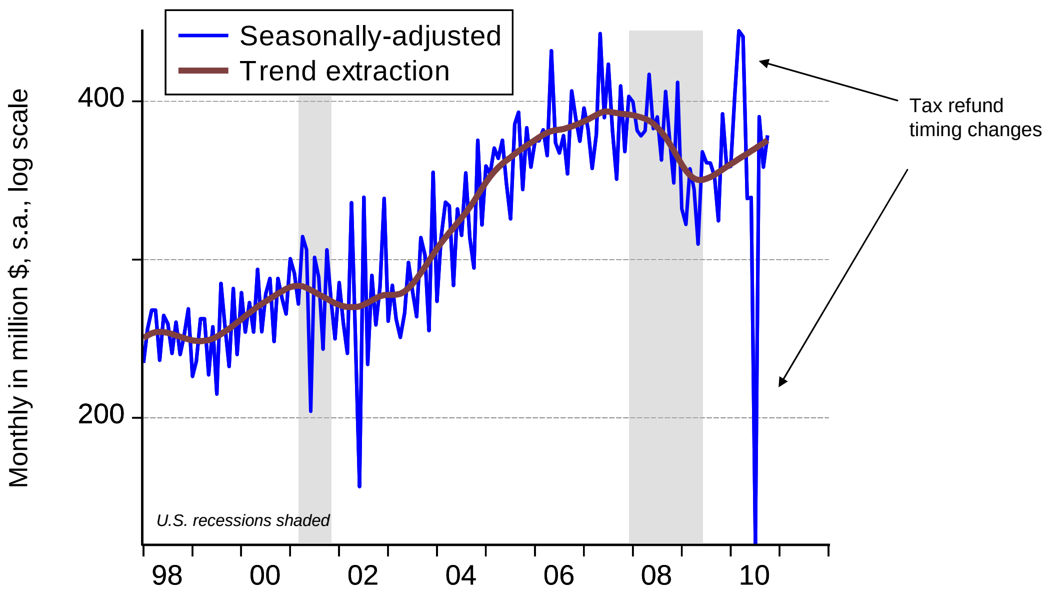
refund timing last year. A quick check will reveal that the Council's General Fund Revenue forecast for FY2012 from its December 2010 forecast, $4.945 billion,[3] is immaterially different from its forecast for FY 2012 from its January 2009 forecast, $4.956 billion, less than four months after the collapse of Lehman Brothers and the financial panic of fall 2008.[4] Recovery proceeded essentially as expected for most of last two years. Prudence recommends healthy respect for the risks to any economic forecast, but the economic expansion Hawaii enters this year should be no more remarkable than the economic recovery that preceded it—up to the usual list of shocks lurking around every corner, all of the time.[5]

Sincerely,

Paul H Brewbaker

Paul H. Brewbaker, Ph.D.

Hawaii general fund tax revenue



Source: Hawaii Department of Taxation; Hawaii DBEDT; seasonal adjustment and trend extraction by TZ Economics

[3] To be reported on the statutory reporting date in January 2011.

[4] See http://www.state.hi.us/tax/cor/2009gf01-09_with0112_Rpt2Gov.pdf and, for contrast, consider the $4.953 billion General Fund Revenue estimate for FY 2012 from the Council's December 2009 meeting roughly one year later, at http://www.state.hi.us/tax/cor/2009gf12-17_with0111_Rpt2Gov.pdf.

[5] Technically: with stochastic arrival times and stochastic intensities.