COUNCIL ON REVENUES

Princess Ruth Keelikolani Building
830 Punchbowl Street
Third Floor, Rooms 310 and 313
Honolulu, HI 96813

Wednesday, June 25, 2009
2:00 P.M.

PRESENT:

Council Members:
Paul Brewbaker (Chair), Jack Suyderhoud (Vice Chair), Pearl Imada Iboshi, and Richard F. Kahle, Jr.

Staff Members:
Department of Taxation: Tu Duc Pham, Yvonne Chow, Hamid Jahanmir, and Cathleen Tokishi
Department of Budget and Finance: Karen Matsunaga, and Terri Ohta

Others:
Roderick Becker, Senate Committee on Ways and Means
Reid Gushiken, Central Pacific Financial
Randy Hiyoto, House Committee on Finance
Lowell Kalapa, Tax Foundation of Hawaii
Nandana Kalupahana, House Committee on Finance
Kurt Kawafuchi, Department of Taxation
Yang-Seon Kim, Department of Business, Economic Development and Tourism
David Morimoto, Central Pacific Financial
Ainoa Naniole, Office of Senator Russell Kokubun
Jerry Nickelsburg, UCLA Anderson Forecast
Stacy Ogimi, Senate Committee on Ways and Means
Marcus Oshiro, House Committee on Finance
Titin Sakata, Department of Taxation
Stacey Tagawa, House Committee on Finance
Eugene Tian, Department of Business, Economic Development & Tourism
Ross Tsukenjo, Senate Committee on Ways and Means
Tony Valdez, Senate Committee on Ways and Means

ABSENT:

Council Members:
Carl Bonham, Dean Hirata, and Albert Yamada

CALL TO ORDER:

The Vice Chair called the meeting to order at 2:07 P.M. In the event that attendees were more interested in the current economic outlook than in the new model, he asked if those in attendance would like the Council to switch the order of the presentations; they did not and no changes were made to the agenda.

REPORT ON THE TAX REVENUE FORECASTING MODEL:

Dr. Jerry Nickelsburg, Senior Economist with UCLA Anderson Forecast, gave the presentation on the forecasting model developed as part of Phase I of the project to analyze the State's tax revenue forecasting model and develop a new forecasting model to improve the accuracy of forecasts used to inform the work of the Council on Revenues.

A copy of Dr. Nickelsburg's handout of the presentation slides is appended to, and made a part of, these minutes.

For the structural models used to forecast general excise tax, personal (i.e., individual) income tax, transient accommodations tax, and corporate income tax, the strategy was to convert the available data from nominal to real terms, which removed the effect of inflation and left only the behavioral effects.

There is a secondary benefit to this strategy. The models' forecasts are in real terms to which the effects of inflation must be added back to obtain the forecasts in nominal terms. Therefore, the Council will be able to assess how much of a change in revenue is due to actual economic activity and how much is inflation-based. For example, if a forecast shows an increase in personal income tax revenue, the Council will be able to determine how much of the increase is only because of inflation and how much of the increase is due to actual economic activity.

The time series models used for eight "minor" taxes are much more statistically-based, not behavioral. Because these taxes generally move together, they used a simultaneous equations model.

Dr. Nickelsburg then went through the various models.

Regarding the principal determinants of variation for the general excise tax model, Dr. Nickelsburg noted the following. Visitor arrivals reflect tourism activity; construction employment is a proxy for the purchase of building materials; and U.S. recessions (as defined by the National Bureau of Economic Research) interact with real personal income with resulting behavior changes (e.g., travel behavior). Though states don't have recessions (only nations), California is Hawaii's biggest market, and recession-like conditions in California (defined as an

annual California unemployment rate that is 2% above the national average) have a significant effect on Hawaii even when the national economy is growing.

Regarding the principal determinants of variation for the personal income tax model, Dr. Nickelsburg noted the following. Construction completions affect income more than construction employment, possibly because profits are determined at completion; real construction completions are deflated by the Turner Construction Cost Index. Total real U.S. defense spending, not Hawaii-specific defense spending doesn't change very much, but they did find that changes in U.S. defense spending, in terms of the U.S. budget, affect Hawaii income two years later, such that this variable does not have to be forecast.

Regarding the principal determinants of variation for the transient accommodations tax model, Dr. Nickelsburg noted that this is the only tax for which exchange rates, in this case the yen/dollar exchange rate, is a principal determinant.

Regarding the principal determinants of variation for the corporate income tax model, Dr. Nickelsburg noted that the impact of U.S. recessions was reflected in visitor arrivals.

In response to a question, Dr. Nickelsburg stated that the Department currently does not have an explicit model for the transient accommodations tax, but that there were models for the general excise, personal income, and corporate income taxes. In general, the AR(1) models currently in use have an "echo effect" (i.e., a mistake made in one period is caught up with in the next) that is not present in the new models.

Regarding the eight "minor" tax models, the Chair asked if the separate VAR models were superior to aggregating the eight taxes and running a regular AR time series model; he did recognize, however, that doing the individual VARs informs on the individual taxes as a function of each other. Dr. Nickelsburg didn't know but could find out. The Chair then asked if there was some benefit to having separate models, and Dr. Pham stated that it could be useful in determining the effect of tax law changes.

Dr. Nickelsburg then discussed the implementation of the model under the current contract, and additional projects and refinements that could be conducted should the contract be extended, as is currently provided for if funding is made available. In response to various questions, Dr. Nickelsburg stated that the model, which will be owned by the Department, resides in eViews and will generate forecasts of the log differences of the variables. Those forecasts go into an Excel spreadsheet, which will convert them into nominal levels and provide various charts and tables.

Dr. Suyderhoud asked if Dr. Pham anticipated using both the old and the new models the next time they forecast General Fund revenues; Dr. Pham answered in the affirmative. Dr. Suyderhoud then asked if the Department could run the March and May numbers through the new model so that they could compare those results to what they actually had at the time;

Dr. Pham again answered in the affirmative. Dr. Nickelsburg added that it would be a good idea to run both models in parallel for a while.

A BRIEF UPDATE OF THE ECONOMIC OUTLOOK FOR THE U.S. AND CALIFORNIA

Dr. Nickelsburg gave a presentation of UCLA Anderson Forecast's economic outlook for the U.S., with some comments regarding California's economic outlook. A copy of Dr. Nickelsburg's handout of the presentation slides is appended to, and made a part of, these minutes.

With two exceptions (1951—build-up to the Korean War, and 1967 and 1968—Vietnam), downturns in the housing market are coincident with recessions. This time, the downturn in the housing market occurred two years prior to the recession. Two points of note: (1) recessions are about adjustments to sectors that are out of alignment; housing was out of alignment in 2005, but corrections had occurred during the two-year period preceding the recession and didn't need a recession to correct; (2) this is unprecedented, so there is a great deal of uncertainty.

The Chair noted that there was legitimate debate in the summer of 2008 about whether there was a recession. Dr. Nickelsburg concurred. He noted that the California economy—which did undergo a massive housing correction that, if responsible for a recession would have resulted in a recession in 2006—had been growing and had generated net job increases from manufacturing, trade, and agriculture for California.

Retail sales through August 2008 were not indicative of a recession. The significant event occurred on September 18, 2008, when then Secretary of the Treasury Henry Paulson, Jr., went to Congress to ask for an immediate $700 billion to buy toxic assets because, although Treasury didn't know if it would work, they had tried everything else and, if they didn't try this, the next Great Depression could result. Consumer consumption crashed, money was pulled out of the stock market, etc., and a bad U.S. recession ensued.

Neither the key players nor the rhetoric changed much after the inauguration of President Obama. In April, however, former President Clinton told President Obama that, while his policies were correct, his rhetoric was too negative. The President's tone subsequently changed; the administration acknowledges that times are difficult, but they know what they are doing and will to solve the problem. Consumer confidence has been slowly growing since then. The last shoe to be dropped may have been the bank stress test.

Regarding "The Obama Trifecta," Dr. Nickelsburg noted the following. The auto bailout was the previous Republican administration handing the matter to the incoming Democratic administration, which correctly saw that the companies' forecasts were unrealistic and put them into Chapter 11 bankruptcy proceedings. Stimulus II is not really an economic stimulus program, but, like previous administrations, a way to leverage the current crisis to pass long talked about policy initiatives such as energy policy, infrastructure, and medical technology. While some money will be spent immediately, most of the funding contracted for within the 180-day window

will actually be spent in subsequent years after the recession is over. The tax portion of the stimulus will more likely result in higher savings by consumers rather than increased spending. Regarding the financial alphabet soup, Troubled Asset Relief Fund (TARP) did put a floor under the financial system, but banks are now trying to give the money back as quickly as possible because government remunerations are less than in the private sector. It has also caused businesses in other industries that initially wanted government assistance to reverse their positions. The Term Asset-Backed Securities Loan Facility (TALF) has worked well, with two of the programs working so well that they are now no longer necessary. The Public–Private Investment Program (PPIP) is not going anywhere because there are no willing sellers.

Hopeful signs are inventory adjustments, including adjustments by Asian trading partners, such that exports (though not high value items) and orders for durable goods are increasing. Housing markets have largely been corrected; in California, so little housing was built following the housing crash that all the excess inventory is now gone and current construction is not keeping up with replacement and population growth.

A number of indicators, as shown on various spaghetti charts, indicate that the recession may be coming to an end.

Regarding the forecast, housing is bottoming and although consumers had been borrowing money to pay for their consumption, savings rates jumped to a bit over 5.0% in September 2008 due to the drop in consumer confidence, and we are now moving towards more normal 6.0%+ savings rates. If consumers are fearful of losing their jobs, savings rates may suddenly get to 6.0%, in which case the recession could be extended. However, if consumers have some confidence in their jobs and income, they may decide to save more, but not so much that they give up everything else; in this scenario, they expect savings to rise to 3%, and then gradually increase to 6.0% over the next few years.

There are a number of concerns. Dr. Nickelsburg thinks that protectionism (e.g., buy U.S./buy local drives) and trade wars are risks; European tendency is protectionism. He is also concerned about inflation, Federal Reserve policies, and the deficit. The Federal Reserve has more than doubled its balance sheet and will have to absorb that liquidity as the country emerges from the recession; if not, the recession will be extended. Dr. Nickelsburg thinks that the Federal Reserve will start to raise interest rates too late because of concerns about chocking off the recovery, but other economists think otherwise. Another concern is about government intervention; though currently in vogue, government intervention has never been a contributor to economic growth, and Dr. Nickelsburg thinks it also won't be this time. Finally, he is concerned about geopolitical risks.

The last slide presents an analysis of income variation and income tax structure. With respect to Hawaii, there is a high correlation amongst Hawaii taxes that, as noted in Phase I of the modeling project, is expected given the importance of visitor arrivals and construction as principal determinants of variation. What this chart indicates is that changing the tax producing the revenue stream will not make that much difference.

The Chair asked Dr. Nickelsburg a question regarding dynamic scoring analyses with respect to tax revenue forecasts. Industry advocates of Hawaii's high technology business investment tax credit say that the credit helps to overcome information asymmetry that prevents venture capitalists from recognizing the potential of Hawaii technology businesses. In response, the Chair did a dynamic scoring analysis. His question was whether, in modeling state tax revenues, any of these dynamic effects were of interest. Dr. Nickelsburg said that it was not. He had presented a full analysis of his last slide to the Committee on the 21st Century Economy, a tax reform committee in California, and said that, if the California income tax rates were mashed by 40%, then it may not be revenue neutral because incentives for growth may be created, which economic literature says is important. The Chair added that economic literature also indicates that the effects are so small as to preclude achieving Arthur Laffer's results even if fully deployed, though it may nonetheless be worthwhile.

Dr. Suyderhoud asked if Dr. Nickelsburg had done an analysis of changing California's sales tax rate. Dr. Nickelsburg had not, but the most relevant of existing literature on the stability of various taxes, concluded that the effect of changing California sales tax would be swamped by the reverse impact of the California income tax.

Director Kawafuchi asked what Dr. Nickelsburg thought that the impact of increasing the Hawaii general excise tax would be. Dr. Nickelsburg first noted the pyramiding effect of the general excise tax, which, unlike the California sales tax, taxes services and a range of gross income from many different activities, and the incidence of the tax. The Chair noted that the literature says that (1) the spending multipliers are larger than the tax multipliers such that using spending cuts as the sole budget-balancing tool may be more burdensome to the economy, and (2) with respect to the inefficiencies of pyramiding, if households increase their saving propensities by six percentage points on their own, they may not notice an additional forced savings of one or two percentage points, adding that the paradox of thrift make it difficult to overcome the hump.

Given Hawaii's current economic structure, Dr. Nickelsburg, returning to his notion about the incidence of the tax, stated that raising the general excise tax would have one impact on residents, but may potentially have a greater elasticity on visitors (less retail). Director Kawafuchi asked if the sales tax equivalent of the general excise tax was 8%, but the Council members said that it was about 6.5%, largely due to the broadness of the tax base.

The Chair thanked Dr. Nickelsburg, and expressed his hope that the State could find some funds to continue work on this model.

ADJOURNMENT:

The workshop adjourned at 4:20 P.M.