June Meeting

Date	June 15, 2020
Attendees	The following people attended the meeting via WebEx or on the phone:

Technical Advisory Group
Katie Baird
Doug Conrad
Lucy Dadayan
Hart Hodges
Patrick Jones
Sharon Kioko
Ashley Kittrell
Darcy Kooiker
Jeff Mitchell
Andy Nicholas
Pete Parcells
Rick Peterson
Jim Schmidt
Grant Shaver
Kriss Sjoblom
Nick Turner

Department of Revenue
Kris Bitney
Preston Brashers
Laura Chartoff
Sara del Moral
Ian Doyle
Braden Fraser
Melissa Howes
Steven Lee
Kathy Oline
Valerie Torres

State Property Tax Model, and Integrated Property Tax Models

Presenter: Mark Studer

Question:
What is meant by Part 1 and Part 2 within the model?

Answer:
Part 1 has been around since Property Tax started; Part 2 started for taxes due in 2018 and was part of the *McCleary* decision conclusion. It is an additional levy starting with taxes due in 2018.

Question:
How does rate based and budget based connect to this?

Answer:
Part 1 was budget based through taxes due in 2017. Starting with taxes due in 2018, both Part 1 and Part 2 were made rate based. Under current law, beginning with taxes due in 2022, both go back to being budget based.

State Property Tax Model, and Integrated Property Tax Models, *continued*

Question:
At what point might it be relevant for our Technical Advisory Group to discuss the merits of Rate-Base v Budget-based property tax models? I'm thinking of adequacy and stability of resulting tax revenues over time? Is this a settled issue?

Answer:
Different states have different systems. Under budget based, revenues are more assured. The growth in values or declines in values can affect the revenues with a fixed rate. Think back to when values fell in 2008 – under a budget based system the revenues were stable, but the rates increased.

Comment:
Thank you, I am curious how this raises the burden on various groups and the complexity of passing the budgets.

Household Burden Model – Property Tax Matching

Presenter: Kris Bitney

Question:
Is tax as share of income calculated as total taxes in decile divided by total income by decile?

Answer:
The average tax is divided by the average income in each decile to create the values shown.

Question:
And yet low income pay 156 on cig tax while rich only pay 119. A very different percent. Maybe misleading

Answer:
We use consumption related to income, so there are different level of consumption that lead the different averages across income deciles.

Question:
You talked about the mismatch in years within the data. Which year is being used for this analysis?

Answer:
We are attempting to model 2017, so we are using the income tax returns for 2017 income earned which is filed on the 2018 tax return. The property taxes paid in 2017 are paid on the assessed values determined for 2016.

Household Burden Model – Property Tax Matching, *continued*

Question:
With a match of 56%, Does this create a good enough sample to do this analysis?

Answer:
The 56% is not the full match rate, because we are looking only at matching homeowners, not all taxpayers.

Question:
How do you account for households that own more than one home, say a vacation home?

Answer:
We don't really because these are not easily identifiable within our data from the County Assessors.

Comment:
I understand the difficulties in distinguishing vacation from year-around homes. However, for certain counties, e.g. Chelan, San Juan, my hunch is that a result without adjusting for this phenomenon could be misleading about the burden on year-around residents.

Response:
Agreed. We will look into how this could be affecting our model.

Question:
I presume we'll get to how rentals are treated in terms of property tax incidence?

Answer:
We only look at initial tax incidence. We are just looking at what the state is asking households to pay. If taxes are shifted by market forces we are ignoring that for now.

Question:
So tax incidence on renters is zero?

Answer:
Yes, currently because we are looking at initial tax incidence; however, we have an upcoming meeting to discuss how to model/explain the tax shift of property taxes to renters. The Legislature specifically asked us to look at this.

Suggestions:
For the treatment of rental property – as not paying property taxes, you may want to look at the ITAP model. The ITAP model been around for several decades, closely scrutinize and this may be a good place to look at how these are modeled.

Household Burden Model – Property Tax Matching, *continued*

Here is a hyperlink to work on the property tax incidence on rental housing:

Notes on the Incidence of the Property Tax
PAI 735/ECN 635 State and Local Government Finance Professor Yinger
https://www.maxwell.syr.edu/uploadedFiles/cpr/efap/Notes%20on%20the%20Incidence%20of%20the%20Property%20Tax.pdf

Question:
Your Current Approach: We assume a household owns their home if their predicted probability of home ownership is at least 80%, leading to an estimated home ownership rate of about 57.5% in the IRS Individual Income Tax data.
My question: Instead of using a greater than 80% predicted probability of ownership as a cut point for definitely assigning a household unit to home ownership, did you consider using the predicted probability of ownership to weight the tax base before applying the tax rate to estimate property tax revenue that would be collected at the given tax rate? I ask this realizing that your existing approach (the cut point) achieves excellent accuracy. Did you consider an alternative of building up the base on the predicted probability – once you hit 80% we make you a homeowner.

Answer:
We did not.

Comment:
It might just be a good way to check accuracy of results.

Response:
Agreed – we will look into this more.

Question:
Are all the variables statistically significant?

Answer:
Not all are statistically significant. However, we leave them all in because we have far more degrees of freedom available in the model, suggesting overfitting is not as big of a concern as computation time in this situation. By computation time, what we ran into was the cross-validation in SAS was not finishing even after running it overnight, so it was difficult to work with and iterate on. We will look at adding the cross-validation piece back in before the final model run. Cross-validation was orders of magnitude less important for this model than for the consumption estimates, in terms of how it can impact results.

Question:
Have you considered other covariates?

Yes, but we didn't complete the analysis of other variables that were available in the FTI and ACS data. Do you have suggestions?

Household Burden Model – Property Tax Matching, *continued*	Suggestions: Population density would be useful. Regional variation in the cost of living – if you have a reliable source. Response: We did not consider adding in other data, but this is definitely something we can look into incorporating and we appreciate these suggestions. Question: Are you using 1-year ACS estimates or 5-year moving averages in your average burden calculations? If you take this analysis to the county level, there are enough counties in WA with populations < 65,000 that you will necessarily need to use a five-year average vs. a 1-year IRS average. In some slides we used the 1-year estimates but the model uses the 5-year estimates. And the model also uses the estimated inflation factors within the ACS to adjust to the current year (2017). Comment: ITAP splits taxes 50 50 resident and owner One thought, you might think about to handle rental properties – can you put the rental properties into the model now – so you don’t have to go back and put them in the model later. Have you looked at the properties that matched and the properties you were not able to match? Looks at any summary statistics to compare these groups? So, are statistically similar? Do you see any systemic issues? Answer: No, we have not looked at this, but this is a great idea. We will look into this and get back to you with our analysis.
Corporate Income/ Net Receipts Tax – Changes to U.S. Tax Structure	Presenter: Preston Brashers Question: Is there available information to start the analysis as to different countries and the incentive weights for the countries that would be general – or specifically for our state? Answer: Yes, it’s pretty complicated because this can go back to the changes from the 1986 Tax Reform. There is some information about what those tax rates are. I have seen some information in my searches about the amount of money repatriated to the U.S. after TCJA.

Corporate Income/ Net Receipts Tax – Changes to U.S. Tax Structure, *continued*	Answer: *(continued)* If there is any data out there that breaks this down by country, this could help come up with a good estimate. This is not something I have dug into yet, but I would be open looking into those sources as we go forward. Question: This tax rules are for a limited time. Is this being thought about in the model? Answer: Yes. The current model focuses on the 2017 to 2019 period. However, the JCT estimates do go out to 2027, and going forward more data, including microdata should become available to look at the longer run impacts. Question: Are you going to factor in the impact of COVID on corporate income tax, particularly in terms of NOL provisions under the CARES act? Answer: For the 2017-2019 biennium, we would not, but as we look forward, we will need to adjust the model to account for those. Question: Are any other states' analysts addressing this type of estimation challenge, so you could compare methods across modelers? Answer: Good question, but perhaps we can reach out to other folks about how to model these. Hart will look at Brookings who may have information on this topic. As a means of validation, we do plan to try the model out on alternative states, and see how accurate it is in predicting the corporate income tax collections of those state.
Next Meeting	July Meeting: July 14, 2020 1 – 4 pm Currently, for July we have only one topic on the agenda – for the Personal Income Tax, a presentation on the Out of State Credit. Are there other topics you would like to take up at that meeting? Will work with Lucy to present on the current status of tax revenues across the nation and revenue forecasts.

Additional updates	We are well on our way to having the consultant on board to help with the Tax Structure Workgroup meetings and the creation of the report. We received one response for Interagency Agreement #2 and are working on approvals and finalization of that agreement. We have not received any responses for Interagency Agreement #1 and are continuing to explore avenues of completing that work. If you have ideas or would like to help, please contact me. Currently, we've had some timing changes to our meeting schedule. You can find this on the website and I will send a link after the meeting.