**F609: Public Finance and Budgeting**

Spring 2022

Assignment #1: **Revenue Forecasting**

For this assignment, your “client” is the Indiana State Budget Committee. Your forecast will be used as the revenue baseline by the governor in preparing his budget and by the General Assembly in making its appropriations. Write your response as a memo to the state budget committee.

**Task:**

Your task is to forecast the revenue collected by Indiana from the retail sales tax and the individual income tax. You will forecast each of the last two quarters of fiscal year 2022 (i.e., the first two quarters of the calendar year 2022) plus fiscal year 2023 (July 2022 through June 2023). **Please report your forecasts using the template in Table 1 below**.

Quarterly collection data for the two taxes are posted on Canvas. These are quarters of the calendar year. The data have not been adjusted for changes in rate, structure, or anything else; historic rate data are presented below.

Much information on the official Indiana revenue forecast are available at the Office of Management and Budget website: <https://www.in.gov/sba/2363.htm> and here: <https://www.in.gov/sba/2760.htm>. You will find the methodology currently used, data used in driving the forecast (GDP, inflation, personal income, etc.), and the current forecast. The forecasts for the economic data were prepared by IHS Global Insight. The state paid them a handsome price for these forecasts, so feel free to use them in your forecasting. Note that quarterly forecasts in the table are at annual rates. In other words, if the economy continued at the pace in the quarter, the annual total would be whatever. This is done to remove the impact of seasonal variation. You will find various economic data that might be useful from the Bureau of Economic Analysis of the U. S. Department of Commerce ([www.bea.gov](http://www.bea.gov)).

**Deliverable:**

Your report, limited to two pages, will include your forecasts and a short explanation of your method. You should make sure that any intelligent reader (or a newspaper reporter or a legislator) can replicate what you have done from that explanation. You absolutely must make clear your forecast for each **quarter** and for each **fiscal year** and you must give only one number for each period and each tax – no ranges or speculations. You can’t hide. The Budget Committee needs **a** number to use in building the budget.

Table 1: Indiana Revenue Forecasts

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Fiscal Year | Quarter | PIT | RST | Total |
| 21/22 | 3 |  |  |  |
| 21/22 | 4 |  |  |  |
| Total |  |  |  |  |
| 22/23 | 1 |  |  |  |
| 22/23 | 2 |  |  |  |
| 22/23 | 3 |  |  |  |
| 22/23 | 4 |  |  |  |
| Total |  |  |  |  |

**Grading:**

Your grade on this exercise will be in two parts.

1. 75% will be based on the quality of the presentation of your forecast – does it include what a legislator, the budget director, and the governor would want to know? Transparency of explanation is your objective – no “black boxes.” Remember – your forecast will be wrong, so your method needs a potential story line to explain why. And no extraneous details. You should not go through a discussion of the various approaches you tried and rejected or why you picked the approach you finally selected. There is one and only one reason for picking the approach: you think it will give the best forecast so you don’t need to include that discussion in the presentation.
2. The remaining 25% will be determined by how close your forecast for combined sales and income tax revenue comes to actual revenue for the first calendar quarter of 2022, as reported in the first few days of April.

**Additional information**

Here is some history of changes in individual income and retail sales tax rates in Indiana:

|  |  |  |
| --- | --- | --- |
| Indiana Individual Income Tax | | |
| Year | Rate |  |
| 1964\* - 1978 | 2% |  |
| 1979 | 2% | \*\* |
| 1980 - 1982 | 1.90% |  |
| 1983 - 1986 | 3% |  |
| 1987 | 3.20% | \*\*\* |
| 1988 to 12-31-2014 | 3.40% |  |
| 1-1-15 | 3.30% |  |
| 1-1-17 | 3.23% |  |
| Indiana Retail Sales Tax | | |
| Year |  |  |
| 1964 – 1973 | 2 % |  |
| 1974 – 1982 | 4 % |  |
| 1983 – 2002 | 5 % |  |
| 2003 – 2007 | 6% |  |
| 2008 --- | 7% |  |

**Notes:** \* 1964 first year for adjusted gross income tax for individuals. Prior to that, individuals were subject to gross income tax. \*\* The tax rate was 2%; however, after reducing the tax by a special 15% credit, the effective rate was 1.7%. \*\*\* The 3.4% went into effect for half of 1987. This rate is the average of 3% and 3.4%.