Estimating the Impact of Pandemic Stimulus Measures on the Economy and State Revenues

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Breaking Down the Pandemic’s Impact

**“No Pandemic” Scenario**
Construct a “No Pandemic” scenario for the Arkansas economy using the Scenario Studio forecasting platform.

**“No Stimulus” Scenario**
Construct a “No Stimulus” scenario, starting with the U.S. level, then adjusting at the Arkansas level.

**Revenue Modeling**
Build models for sales & use and personal income tax revenue and import them into Scenario Studio.

**Revenue Forecasts**
Use Scenario Studio to solve for tax revenues across both scenarios for the six quarters from early 2020 through mid-2021.

**Conclusions**
Compare revenues for each scenario to actual collections since the start of the pandemic.
Constructing a No Pandemic Scenario

Maintaining Pre-pandemic Trends:

- Employment
- Incomes
- Unemployment
- Labor force
- Gross state product
No Stimulus Scenario: Starting With the U.S.

Adjusting Key Series:

- State & local nontax receipts
- Federal nondefense consumption expenditures
- Federal transfer payments for social benefits
- Spending on healthcare
- Proprietors’ income
- Private sector employment
- Corporate profits
Getting into the Details

COVID-19 response funds committed/disbursed to Arkansas, $ bil

- Direct payments
- Loan and grant programs
- State & local funding
- Income support
- Health spending
- Other spending
- Federal tax policy

Sources: Committee for a Responsible Federal Budget, Moody’s Analytics
Putting It All Together

Arkansas payroll employment, mil

Sources: BLS, Moody’s Analytics
Gauging the Revenue Impact

**Combined Sales & Income Tax Revenues**

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**Series List**

**Frequency**

- **Quarterly**

**Date Range**

- **2019Q1 - 2021Q2**
Stimulus Made a Big Difference

Arkansas combined sales and individual income tax collections, $ bil

No-stimulus scenario
Actual collections
No pandemic scenario

Cumulative sales and personal income tax revenues from January 2020 to June 2021.
$9.1 Billion

Cumulative gain in sales and personal income tax revenues in the no pandemic scenario relative to actual collections.
$108 Million

Cumulative loss in sales and personal income tax revenues in the no stimulus scenario relative to actual collections.
-$1.09 Billion

Sources: DFA, Moody’s Analytics
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