On Local Government

The COVID19 Recession and Indiana Government Revenues

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May 19-20, 2020
The COVID-19 Recession
Unemployment Rates, U3 and U6 (Headline and marginal/part time)

U6: unemployed, discouraged, involuntary part-time

U3: headline

Feb: 3.5%, 7.0%

Apr: 14.7%, 22.8%

Shaded areas indicate U.S. recessions
Real GDP Growth, Quarterly, Annual Rate

Monthly Guess:
- Jan: 2.0%
- Feb: 2.0%
- Mar: -19.0%

Source: U.S. Bureau of Economic Analysis
Real Investment Spending, Quarterly, Annual Rate

4Q: -6.2%
1Q: -5.8%

Source: U.S. Bureau of Economic Analysis

shaded areas indicate U.S. recessions
Real Consumer Spending, Quarterly, Annual Rate

4Q: +1.8%

1Q: -7.9%
Retail Sales, April 2020, Percent Change from April 2019

- Nonstore retailers: 22%
- Food & beverage stores: 12%
- Building/garden materials: 0%
- Health & personal care stores: -10%
- General merchandise stores: -15%
- Miscellaneous store retailers: -31%
- Motor vehicle & parts: -33%
- Gasoline stations: -43%
- Food services & drinking places: -49%
- Sporting goods, musical, books: -49%
- Electronics & appliance stores: -65%
- Furniture & home: -67%
- Clothing & accessories: -89%
- Total Retail: -22%

% Change from: -100% -80% -60% -40% -20% 0% 20% 40%
CPI Inflation, Core (less food and energy), Annual Rate

Feb: 2.7%
Mar: -1.2%
Apr: -5.2%
Federal Budget Balance, Percent of GDP, 1929–2020 (est.)

CBO estimate of 2020 deficit: $3.7 trillion (April 2020)

Est. 2020: -18%
10-Year Treasury Bond Interest Rates, 2019–2020

Feb. 19: 1.56
March 9: 0.54
May 14: 0.63

Shaded areas indicate U.S. recessions
Source: Board of Governors of the Federal Reserve System (US)
fred.stlouisfed.org
Federal Funds Interest Rate, 2006–2020

March 3, 2020: Half point reduction
March 15, 2020: Full point reduction
From 1.75% to 0.25% in two weeks

Shaded areas indicate U.S. recessions  Source: Board of Governors of the Federal Reserve System (US)  fred.stlouisfed.org
AAA and BAA Corporate Bond Interest Rates, 2019–2020

Shaded areas indicate U.S. recessions

Source: Moody’s

fred.stlouisfed.org
BAA – AAA Corporate Bond Yield Spread, daily, 2019–2020

Feb 24: 0.79

April 7: 1.99

May 11: 1.53

Feb 24: 0.79

Source: Moody’s

Shaded areas indicate U.S. recessions

fred.stlouisfed.org
BAA – AAA Corporate Bond Yield Spread, 2006–2020

Dec. 1, 2008: 3.49

April 7, 2020: 1.99

Shaded areas indicate U.S. recessions

Source: Moody’s

fred.stlouisfed.org
Index, Exchange Value of the Dollar, 2006–2020

*FRED* — Trade Weighted U.S. Dollar Index: Broad, Goods and Services

Shaded areas indicate U.S. recessions

Source: Board of Governors of the Federal Reserve System (US) — fred.stlouisfed.org
Index, Exchange Value of the Dollar

Mar 3: 117
Mar 23: 126
May 8: 123

+8.5%
+5.4%
Recovery Depends on Consumer Spending
Index of Consumer Confidence, United States (OECD)

Shaded areas indicate U.S. recessions
Source: Organization for Economic Co-operation and Development
fred.stlouisfed.org
Most Americans to avoid sports, other live events before coronavirus vaccine: Reuters/Ipsos

Fewer than half of Americans plan to go to sports events, concerts, movies and amusement parks when they reopen to the public until there is a proven coronavirus vaccine, according to a Reuters/Ipsos opinion poll released on Tuesday.

Only about four in 10 who follow sports avidly and go to arts and entertainment venues and amusement parks said they would do so again if they reopened before a vaccine was available, the poll found.
Why did consumer spending fall?

- If it was lack of income due to lost jobs, spending recovers when people go back to work—if businesses survived.
- If it was stay-at-home orders, spending recovers when stay-at-home orders are lifted—unless household savings are depleted or households are in debt.
- If it was fear of getting sick, spending recovers when confidence returns—when the virus threat is lessened and fear subsides.
Recession and Recovery

- Recession is the period that economic activity is falling.
- Recovery is the period that it’s rising, even if economic activity is below normal.
- Growth in economic activity soon (unless COVID resurges), but the level of economic activity remains below normal.
- That is, positive real GDP growth with high unemployment to 2021 and after.
- Check ✔–shaped?
The Revenue Shortfall in Indiana’s State Budget
# State Monthly Revenue Report, April 2020

(millions of dollars)

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>Dec. Forecast, April 2020</th>
<th>Actual April 2020</th>
<th>Change from Forecast</th>
<th>Pct Chg from Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>710</td>
<td>606</td>
<td>(104)</td>
<td>-15%</td>
</tr>
<tr>
<td>Ind. Income</td>
<td>1,146</td>
<td>477</td>
<td>(669)</td>
<td>-58%</td>
</tr>
<tr>
<td>Corp. Income</td>
<td>209</td>
<td>74</td>
<td>(135)</td>
<td>-65%</td>
</tr>
<tr>
<td>Wagering</td>
<td>50</td>
<td>-</td>
<td>(50)</td>
<td>-100%</td>
</tr>
<tr>
<td>Other</td>
<td>83</td>
<td>77</td>
<td>(6)</td>
<td>-7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,198</strong></td>
<td><strong>1,234</strong></td>
<td><strong>(964)</strong></td>
<td><strong>-44%</strong></td>
</tr>
</tbody>
</table>
End of 2020:
$2.4 billion
13.9%

End of 2020 5%:
$850 million
How Long Might Balances Last?

- Suppose total revenue falls short of forecast by 15% per month.
- Revenue forecast for April-June: $4,264 million
- Shortfall during last quarter of FY2020: 15% of $4,264 million = $640 million
- Balances expected June 30 2020: $2,370 million
- Start FY 2021 with $2,370 - $640 = $1,730 million, which is $854 million above the 5% minimum
- Avg. monthly expected revenue for FY2021: $1,460
- 15% shortfall per month: $219 million
- Months before we’re down to 5% balances: 4

*Balances run short by the end of October*
2009-11:
3-year shortfall: $4.6 bil
11% per year
2009-11:
3-year shortfall: $4.6 bil
11% per year
Reversions: $2.0 bil (4.5% of Appro)
ARRA: $2.2 bil
Bal & Other: $0.4 bil
Property Tax Assessments and Levies
Average Annual Percent Change, Gross Assessed Value, 2010-13

Percent Change
- Less than 0%
- 0% to 1%
- 1% to 2%
- 2% to 3%
- 3% or More
Calculation of Property Tax Maximum Levy Growth Quotient
2002 - 2020 and 2021 estimate

Growth Quotient:
Six-year Average Growth, 2-year lag

2-year lag:
2020 Quotient based on 2013-2018 income growth

Annual Growth Rates, Indiana Non-Farm Personal Income (Statewide)
If 4% income growth resumes in 2021 and after, these are also the average MLGQs for 2022–27.
Average Change in Tax Cap Credits as Percent of Levy, by Change in District Tax Rate and Initial Rate, 2018-19

Change in Tax Rate, 2018-19, Cents per $100 AV

- +20¢ or More
- +15¢ to +20¢
- +10¢ to +15¢
- +5¢ to +10¢
- 0¢ to +5¢
- -5¢ to 0¢
- -10¢ to -5¢
- Less than -10¢

Change in Tax Cap Credits as Percent of Levy, 2018-19

-2.0% -1.5% -1.0% -0.5% 0.0% 0.5% 1.0% 1.5% 2.0% 2.5% 3.0%

2018 Tax Rate Less than $2
2018 Tax Rate $2 to $2.9999
2018 Tax Rate $3 or More
Local Income Tax Balances and Distributions after the Great Recession
2010 LOIT Balances, percent of 2012 Distributions Revised 4/5/2012

Balance Percent
- Less than -10.0%
- -10.0% to -2.0%
- -2.0% to 2.0%
- 2.0% to 10.0%
- 10.0% or More

LOIT Growth Rate
- Less than 1.0%
- 1.0% or More
Elkhart County, Local Income Tax Collections, Distributions and Balances, 2000-2020

- **Beginning Balance**
- **Tax Collections**
- **Certified Distributions**
- **Total Distributions (Including Special)**

**Y-Axis:** Millions of Dollars

**X-Axis:** Years (2000 to 2020)
Challenges for Indiana Local Government Revenues
Ten Threats to Local Government Revenues from the Corona-Recession

7. State Aid to Schools, Short Run (2020). ADM drop.
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