MEETING PROJECT NAME: Education Advocates Meeting with County and District Superintendents  
DATE OF MEETING: August 18, 2020  
TIME: 10:30 AM – 11:00 AM  
Zoom Meeting

TOPIC & PRESENTER INFO  
Economics of School Reopening - Dr. Patrick Barkey, Director of the Bureau of Business and Economic Research

• Materials Follow

Thank you for your patience and Putting Montana Students First during this uncertain time.

Full Education Advocates meeting can be listened to at this link
Montana’s Economy at Midyear

Patrick M. Barkey, Director
Bureau of Business and Economic Research
University of Montana
August 2020
A Different Year with Different Questions

Where are we now and what’s next?

- Evaluation of Forecast
- Statewide Growth Patterns
- Risks to Growth
- Inflation and Interest Rates
- Federal Reserve
- The Election
Riding the Rollercoaster of New Covid-19 Infection Rates

New Cases per 100,000 population, Jan 22 through Aug 17, 2020

Johns Hopkins University
Second Quarter 2020 GDP Among the Worst Ever Recorded

Percent Change, Real GDP, Annual Rate, Selected Quarters

-42.3% -38.2% -37.0% -35.4% -32.9% -31.6% -29.7% -24.2% -22.9% -21.4%
United States: Economic activity hammered by COVID-19
Real GDP, percentage change from previous peak

Quarters from peak

NBF Economics and Strategy (data via Refinitiv)

Posted on WSJ: The Daily Shot
31-Jul-2020
@SoberLook
Consumer Spending is What Fell Apart
Contribution to Growth in Real Gross Domestic Product, Percent

![Graph showing contribution to growth in real GDP from various components like Consumption, NonRes, Housing, Inventories, Trade, and Government from 2015 to 2020. The graph indicates a significant decline in consumer spending.]
GDP Report Takeaways

• Consumer spending cratered – mostly services affected
• Consumer income rose strongly – Federal transfers and Unemployment Insurance payments are why
• Savings rate spiked up to 25 percent
• Inflation was negative
• International trade collapsed
GDP Report Takeaways

• Declines were huge, but almost all of it occurred in April, the first month of the quarter.
• Bounce back in jobs, consumer spending since then has also been impressive.
• Current forecasts call for 17 percent growth in GDP in this third quarter.
• Deficits are enormous, but the quick action of Congress has been important.
## Fed Policy Support During COVID-19

<table>
<thead>
<tr>
<th>Program/Facility</th>
<th>Targeted Sector</th>
<th>P, DL, or SPV *</th>
<th>Treasury Support ($, Bil.)</th>
<th>Capacity ($, Bil.)</th>
<th>Date(s)</th>
<th>Current Balance ($, Bil.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPFF</td>
<td>Commercial Paper</td>
<td>SPV</td>
<td>$10</td>
<td>NA</td>
<td>03/17</td>
<td>$12</td>
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<tr>
<td>PDCF</td>
<td>Primary Dealers/Liquidity</td>
<td>DL</td>
<td>$0</td>
<td>NA</td>
<td>03/17</td>
<td>$7</td>
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<tr>
<td>MMLF</td>
<td>Money Market Mutual Funds</td>
<td>SPV</td>
<td>$10</td>
<td>NA</td>
<td>03/18</td>
<td>$33</td>
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<td>TALF</td>
<td>Asset-Backed Securities</td>
<td>SPV</td>
<td>$10</td>
<td>≤ $100</td>
<td>03/23</td>
<td>-</td>
</tr>
<tr>
<td>PMCCF, SMCCF</td>
<td>Corporate Debt</td>
<td>SPV</td>
<td>$75</td>
<td>≤ $750</td>
<td>03/23</td>
<td>-</td>
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<tr>
<td>MSELF, MSNLF</td>
<td>Small &amp; Mid-Sized Businesses</td>
<td>SPV</td>
<td>$75</td>
<td>≤ $600</td>
<td>03/23, 04/9</td>
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<tr>
<td>PPPLF</td>
<td>Small Business Bank Loan - PPP</td>
<td>DL</td>
<td>$0</td>
<td>NA</td>
<td>04/6</td>
<td>$49</td>
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<tr>
<td>MLF</td>
<td>Municipal Debt</td>
<td>SPV</td>
<td>$35</td>
<td>≤ $500</td>
<td>04/9</td>
<td>-</td>
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<tr>
<td>Discount Window</td>
<td>Banks</td>
<td>DL</td>
<td>$0</td>
<td>NA</td>
<td>03/15</td>
<td>$18</td>
</tr>
<tr>
<td>CB Swap Lines</td>
<td>Central Banks/Dollar Liquidity</td>
<td>DL</td>
<td>$0</td>
<td>NA</td>
<td>03/15, 03/19</td>
<td>$449</td>
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<tr>
<td>FIMA REPO Facility</td>
<td>Foreign Monet./Treasury Liquidity</td>
<td>DL</td>
<td>$0</td>
<td>NA</td>
<td>03/31</td>
<td>-</td>
</tr>
<tr>
<td>Asset Purchases</td>
<td>Treasuries, Agency MBS</td>
<td>P</td>
<td>$0</td>
<td>NA</td>
<td>Several</td>
<td>$2,099</td>
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<tr>
<td>REPO Agreements</td>
<td>s/t Loans to Finance Intermediary</td>
<td>DL</td>
<td>$0</td>
<td>NA</td>
<td>Several</td>
<td>$181</td>
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<tr>
<td><strong>TOTALS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$2,848</strong></td>
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</tbody>
</table>

### Notes:
- **P** denotes primary market and **SPV** denotes Special Purpose Vehicle.
- **DL** denotes dealer market.
- **$** denotes billion.
- **NA** denotes not applicable.
- Dates are provided in the format **MM/DD/YYYY**.
Evolving US Forecast

• More optimism about 2020, but trends in infections lowering expectations for 2021 and 2022.
• Very low interest rates for at least two years.
• Forecasters calling for very low inflation, markets aren’t as certain.
• A weaker dollar.
• After a strong bounceback, effects of this recession will persist.
Sorting Out Montana’s Economic Performance

• 2020 Q1 was good for Montana, but more recent data are fragmentary and inconclusive.

• BBER analysis conducted in May suggested that state would see job losses and income declines twice as large as the Great Recession.

• Unemployment claims data agree with that assessment, but state tax data do not (yet).

• New, private-sector data sources on state economic activity indicate state business activity stabilizing
Montana Employment: Bad, But Better than U.S.
Seasonally Adjusted Establishment Employment, Montana and U.S., Index
Construction Employment Less Affected
Seasonally Adjusted Establishment Employment, Montana and U.S., Index
Montana Unemployment Claims Have Exploded
Continuing Claims for Unemployment Insurance, Montana, 2015Q1 – 2020Q2
Current Unemployment Claims per 100 People*

In Montana, as of August 01 2020, there were 0.35 initial unemployment claims per 100 people in the labor force.

*Number of unemployment benefit claims filed with state unemployment offices per 100 people in the labor force. This series is based on data published by the Department of Labor.

last updated: August 14, 2020    next update expected: August 21, 2020
BBER Analysis of Covid-19 Impacts

• Compare two forecasts:
  - December 2019, pre-Covid
  - May 2020 (updated in July)

• “Moving target”

• Purpose of the analysis is to give insight on magnitude of Covid-19 impacts

• Clear conclusion – Montana will not be spared the pain of this downturn
Dec-2019 vs. Apr-2020 and Jul-2020 Forecast Comparisons
Real GDP, U.S., Billions

Source: IHS Markit
Dec-2019 vs. Apr-2020 and Jul-2020 Forecast Comparisons
Total Employment, Montana, Thousands

Graph showing employment trends from 2006 to 2022.
Dec-2019 vs. Apr-2020 and Jul-2020 Forecast Comparisons
Personal Income, Montana, $ Billions
Dec-2019 vs. Jul-2020 Forecast Comparison
2020 Employment Difference by Region, Thousands
### Stability in State Revenues is Encouraging

<table>
<thead>
<tr>
<th>General Fund Revenue Sources ($ Millions)</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>FY 2020</th>
<th>FY19-20</th>
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</thead>
<tbody>
<tr>
<td><strong>Top Seven Sources</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual Income Tax</td>
<td>1,184.8</td>
<td>1,168.2</td>
<td>1,297.8</td>
<td>1,429.0</td>
<td>1,435.2</td>
<td>6.2</td>
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<tr>
<td>Property Tax</td>
<td>257.1</td>
<td>260.2</td>
<td>276.4</td>
<td>289.2</td>
<td>308.6</td>
<td>19.4</td>
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<tr>
<td>Corporation Income Tax</td>
<td>118.4</td>
<td>126.0</td>
<td>167.1</td>
<td>186.5</td>
<td>187.4</td>
<td>0.8</td>
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<tr>
<td>Vehicle Taxes &amp; Fees</td>
<td>108.5</td>
<td>109.2</td>
<td>109.5</td>
<td>109.5</td>
<td>108.5</td>
<td>-1.0</td>
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<tr>
<td>Oil &amp; Natural Gas Production Tax</td>
<td>39.1</td>
<td>46.3</td>
<td>54.5</td>
<td>54.2</td>
<td>38.4</td>
<td>-15.8</td>
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<tr>
<td>Insurance Tax &amp; License Fees</td>
<td>69.3</td>
<td>75.6</td>
<td>75.3</td>
<td>76.1</td>
<td>82.5</td>
<td>6.3</td>
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<tr>
<td>Video Gambling Tax</td>
<td>60.6</td>
<td>60.0</td>
<td>60.3</td>
<td>63.2</td>
<td>57.4</td>
<td>-5.8</td>
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<tr>
<td><strong>Other Selected Taxes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Lodging Taxes</td>
<td>49.4</td>
<td>51.2</td>
<td>56.9</td>
<td>63.0</td>
<td>61.2</td>
<td>-1.8</td>
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<tr>
<td>Railroad Car Tax</td>
<td>3.6</td>
<td>3.8</td>
<td>3.6</td>
<td>3.6</td>
<td>4.3</td>
<td>0.7</td>
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<tr>
<td>Rental Car Sales Tax</td>
<td>4.3</td>
<td>4.5</td>
<td>5.0</td>
<td>5.9</td>
<td>5.6</td>
<td>-0.3</td>
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<tr>
<td>Telecommunications Excise Tax</td>
<td>16.8</td>
<td>15.6</td>
<td>13.7</td>
<td>13.2</td>
<td>11.8</td>
<td>-1.4</td>
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<tr>
<td>Coal Severance Tax</td>
<td>14.2</td>
<td>13.8</td>
<td>14.1</td>
<td>14.1</td>
<td>10.9</td>
<td>-3.2</td>
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<tr>
<td>Metalliferous Mines Tax</td>
<td>4.2</td>
<td>4.8</td>
<td>6.3</td>
<td>6.9</td>
<td>8.7</td>
<td>1.8</td>
</tr>
<tr>
<td>US Mineral Royalty</td>
<td>16.8</td>
<td>17.3</td>
<td>20.1</td>
<td>21.6</td>
<td>18.5</td>
<td>-3.0</td>
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<tr>
<td>Wholesale Energy Tax</td>
<td>3.5</td>
<td>3.5</td>
<td>3.6</td>
<td>3.5</td>
<td>3.4</td>
<td>-0.1</td>
</tr>
<tr>
<td><strong>General Fund Total</strong></td>
<td>2,121.3</td>
<td>2,141.5</td>
<td>2,405.4</td>
<td>2,573.6</td>
<td>2,533.3</td>
<td>-40.3</td>
</tr>
</tbody>
</table>

Source: Montana Legislative Fiscal Division
Percent Change in All Consumer Spending*

In Montana, as of August 02 2020, total spending by all consumers decreased by 7.5% compared to January 2020.

*Change in average consumer credit and debit card spending, indexed to January 4-31, 2020 and seasonally adjusted. This series reflects daily data through July 5th, 2020 and weekly data after July 5th, 2020. This series is based on data from Affinity Solutions.

last updated: August 10, 2020      next update expected: August 18, 2020
Percent Change in All Consumer Spending*

In Montana, as of August 02 2020, grocery spending by all consumers increased by 8.3% compared to January 2020.

*Change in average consumer credit and debit card spending, indexed to January 4-31, 2020 and seasonally adjusted. This series reflects daily data through July 5th, 2020 and weekly data after July 5th, 2020. This series is based on data from Affinity Solutions.
Percent Change in All Consumer Spending*

In **Montana**, as of August 02 2020, restaurant and hotel spending by all consumers decreased by **46%** compared to January 2020.

*Change in average consumer credit and debit card spending, indexed to January 4-31, 2020 and seasonally adjusted. This series reflects daily data through July 5th, 2020 and weekly data after July 5th, 2020. This series is based on data from Affinity Solutions.

last updated: August 10, 2020   next update expected: August 18, 2020
Mobility of Montanans Has Been Stable the Past 30 Days
Federal Reserve Bank of Dallas Mobility and Engagement Index, Jan 3 – July 24, 2020

Montana Stay-at-Home Order Begins Ends

[Graph showing mobility trends for different regions of Montana from January 3 to July 24, 2020]
Private Sector Data Suggest that Montana Business Operations Are Returning to Early March Levels

Source: Homebase
Bakken Oil Production Sees Record Fall
Montana and North Dakota Monthly Crude Oil Production, Thousand Barrels

Source: U.S. Energy Information Administration
Housing Price Index, 2000Q1-2020Q1

Source: Federal Housing Finance Agency.
Assessing Montana’s Recovery Prospects (in progress)

Scoring Vulnerability by Industry

Links with risky or discretionary activities (travel, tourism, entertainment, large gatherings, person to person contact)

Financial buffers (free cash flow relative to earnings, coverage of interest and debt expenses)

Constraints from high leverage (e.g., financial leverage, operating leverage)