



Responding to a Pandemic

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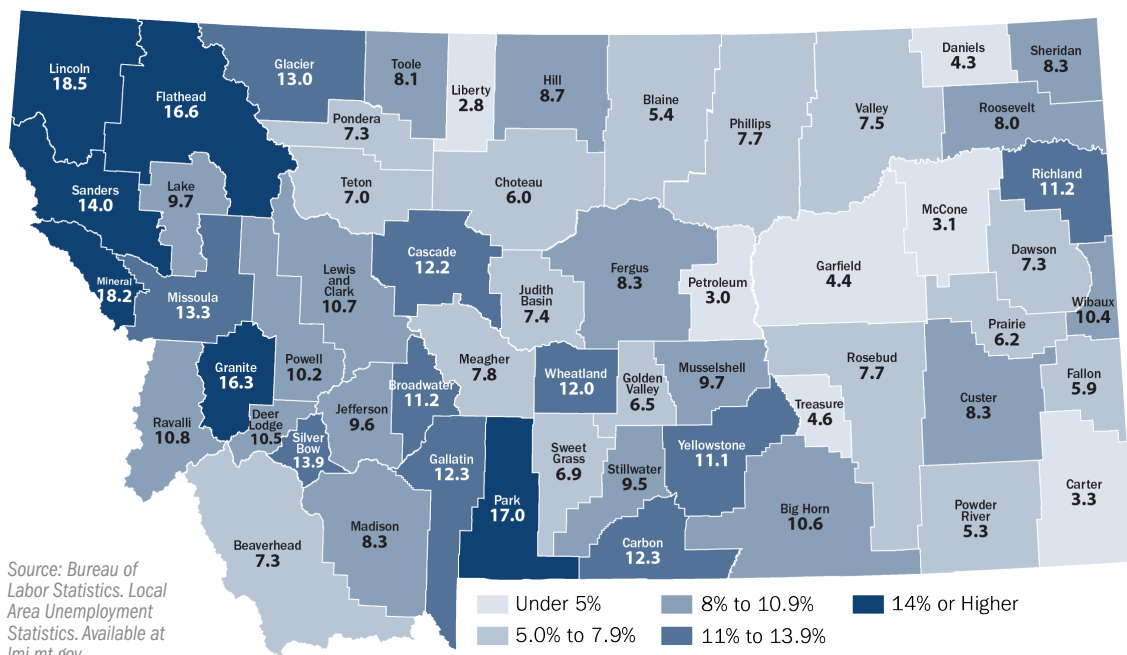
The COVID-19 pandemic and subsequent government response caused a rapid change to Montana's economy. Shelter-in-place orders were enacted across the U.S. to slow the spread of the virus. These necessary precautions had negative economic consequences. Businesses were closed, workers were laid off or had their hours reduced, wages were lost, and expectations of an economic downturn led to uncertainty and stress for many.

Many state governments, including Montana, mandated the closure of nonessential businesses, suspending the ability to exchange certain goods. This market closure led to new policies to limit the economic consequences until it was safe for the market to return to normal. To help understand the changes seen in response to COVID-19, this Economy at a Glance publication looks at the big picture of the public health crisis and explores the macroeconomic explanations behind the economy's events.

COVID-19 - A Shock to the Economy

Montana's shelter-in-place order went into effect on March 28, with the phased reopening beginning April 26. More economic data from the peak of this public health crisis is now becoming available. Gross domestic product (GDP), a measure of the goods and services produced in a country, fell across the U.S. by 5% in the first quarter of 2020, with larger decreases expected during the second quarter.¹ The number of people

FIGURE 1:
Montana Unemployment Rates by County - April 2020



filing for unemployment benefits in Montana rose from 11,550 at the beginning of March, to over 77,000 for the week ending April 18, a 571% increase. Montana's unemployment rate increased from 3.5% in February 2020 to 11.9% in April 2020. April's unemployment rates for Montana counties are shown in **Figure 1**. The highest unemployment rates tend to be in the more urban and tourism-based areas. Recent data suggests the economy has improved since the April peak.

Economists refer to events such as COVID-19 as an economic shock, which is an unexpected and unpredictable event that alters the economy, such as natural disasters and political disruptions. More specifically, COVID-19 is a negative shock causing an overall decrease in the nation's economic output. Nationally, GDP estimates for the second quarter suggest this negative economic shock is larger than other historical examples, such as the 1980s oil price shocks, the 2001 dot-com bubble collapse, or the financial market collapse in 2008—2009. Although total GDP has fallen overall, not all people and businesses were negatively impacted by COVID-19. For example, companies producing hand sanitizer, toilet paper, baby wipes, household cleaners, home office equipment, and video conferencing services experienced positive increases in the demand for their products.

Economic shocks are usually characterized as a supply shock, which affects the production of goods or services, or a demand shock, which affect consumer behavior and overall spending in the economy. While there's some debate if COVID-19 is an example of a supply shock or demand shock, most economists agree it shows signs of both.²

On the supply side, the initial shutdown of China's economy disrupted global supply chains and caused concern for widespread production declines. The supply shock became more localized during the U.S. temporary closure of nonessential businesses, as well as reduced production for many essential businesses

² Federal Reserve Bank of St. Louis. "Is the COVID-19 Pandemic a Supply or a Demand Shock?" Available at <https://research.stlouisfed.org/publications/economic-synopses/2020/05/20/is-the-COVID-19-pandemic-a-supply-or-a-demand-shock>.

NEGATIVE SUPPLY SHOCK

Decreases the production of goods and services. Aggregate supply decreases.

Leads to: ↓ GDP ↑ Prices

NEGATIVE DEMAND SHOCK

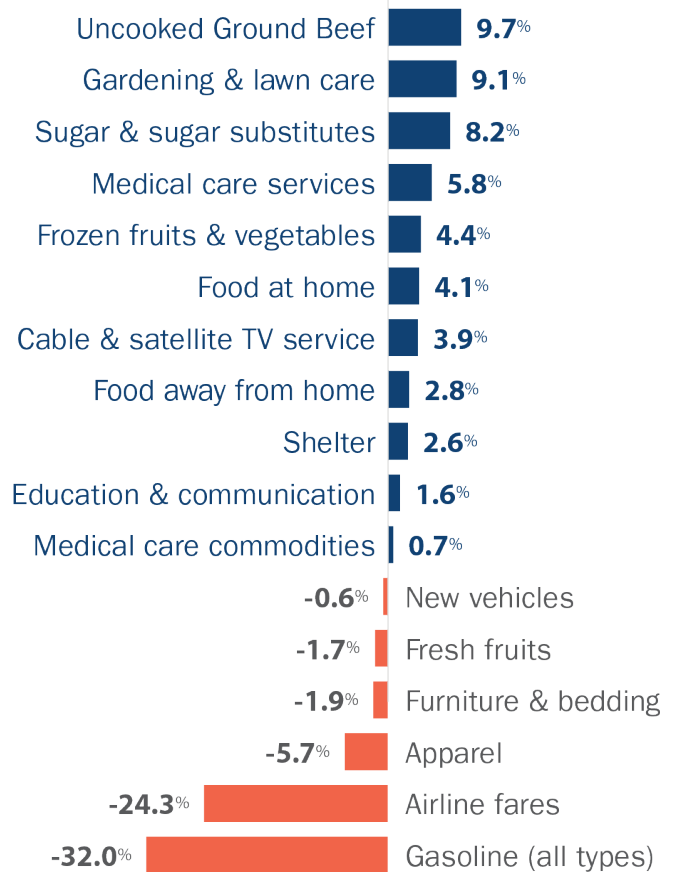
Decreases the consumption of goods and services. Aggregate demand decreases.

Leads to: ↓ GDP ↓ Prices

due to sick workers or as social distancing measures required fewer employees working per shift. Because these negative supply shocks decrease the aggregate (total) supply of goods and services in the economy, scarcity (or the expectation of scarcity) drives prices higher.

FIGURE 2:
Year-over-Year Percent Change in Prices

April 2020



Source: BLS. CPI, April 2020. Not seasonally adjusted.

One specific example is the slowdown of some of the larger meat processing plants. As COVID-19 cases began to spread across this industry, some plants closed while others reduced production for worker safety. The lower production and negative expectations of the impact resulted in increased prices for processed meat. **Figure 2** shows the change in prices for select items in April 2020 from one year prior. Uncooked ground beef prices increased by 9.7% during this time.

As concerns of the virus emerged and shelter-in-place orders were enacted, demand shocks occurred as well. Stay-at-home orders to reduce the spread of COVID-19 changed consumer behavior away from spending on restaurants, hair salons, travel, gasoline, and movie theaters, shifting some of this spending to groceries and other items used within the home. Overall, consumer spending decreased, both due to the lack of ability to spend on many products and because of lost wages or lost wealth after stock market declines. Demand also is influenced by consumer expectations of future income streams, so the possibilities of a recession and uncertainty about the future ability to earn and spend income also resulted in people spending less money. These changes in consumer behavior led to lower aggregate demand across the economy, resulting in downward pressure on the overall price level.

Figure 2 shows several examples of items with falling prices that are the result of decreased demand. For example, shelter-in-place orders make traveling nearly nonexistent, leading to significantly decreased prices for this industry. Airline fares dropped 24.3% in April. Overall, price levels fell substantially, led by decreases in fuel prices. The fall in the aggregate price level suggests that the demand shock with its downward pressure on prices outweighed the inflationary supply shock.

Policy Response—The Federal Government

COVID-19 is a public health issue that reduced buyers' ability to conduct transactions with sellers and has resulted in both supply and demand shocks to the economy. Monetary and fiscal policy refers to actions



by the Federal Reserve and government systems (respectively) to moderate economic cycles, aiming for a smooth and steady growth path for the economy. Both the federal government and the Federal Reserve enacted policies to minimize the supply and demand shocks, encouraging the economy to return to normal once public health is ensured.

When a government changes its spending or taxes in response to economic conditions, it is called fiscal policy. The Coronavirus Aid, Relief, and Economic Security (CARES) Act is an example of recent fiscal policy. This act used government funds to stimulate aggregate demand through forgivable loans to small businesses, stimulus checks to the public, and the expansion of unemployment insurance benefits.

Increased government spending or decreased taxes in response to an economic downturn is known as expansionary fiscal policy. Increased government spending makes up for the loss in private consumption. Reduced tax burdens encourage private consumption. Both provide a short-term boost to the economy and help increase aggregate demand, counteracting the negative demand shock explained earlier. For example, as people spend less money due to decreased incomes or changing lifestyles, government assistance from the CARES Act is intended to offset that loss and incentivize consumers to continue paying their rent or mortgage, groceries, and other items.

EXPANSIONARY FISCAL POLICY

is the federal government's policy response to decreased aggregate demand, with the intention of increasing aggregate demand.

Either  Government spending
Or  Taxes

The COVID-19 shock is unique from some other economic downturns because of the simultaneous shock to supply and demand. Both shocks lower GDP, but supply shocks usually lead to increased prices and demand shocks typically lead to decreased prices.

Therefore, policies must react to two conflicting price scenarios. Fiscal policies that increase government spending, or reduce taxes, are intended to correct the demand shock, offsetting falling prices. As fiscal policy improves aggregate demand levels, prices will stabilize and start to increase. One worry about providing too much stimulus is unexpected inflation. Therefore, price changes are closely monitored and evaluated. The most commonly used price index, the consumer price index (CPI), suggests inflation is not currently an issue. The CPI indicated an overall decline in the price level of 0.8% in April from one month prior, meaning average prices fell across the U.S. over the last month. The core index, which excludes volatile items like food and energy, fell 0.4% from one month prior.

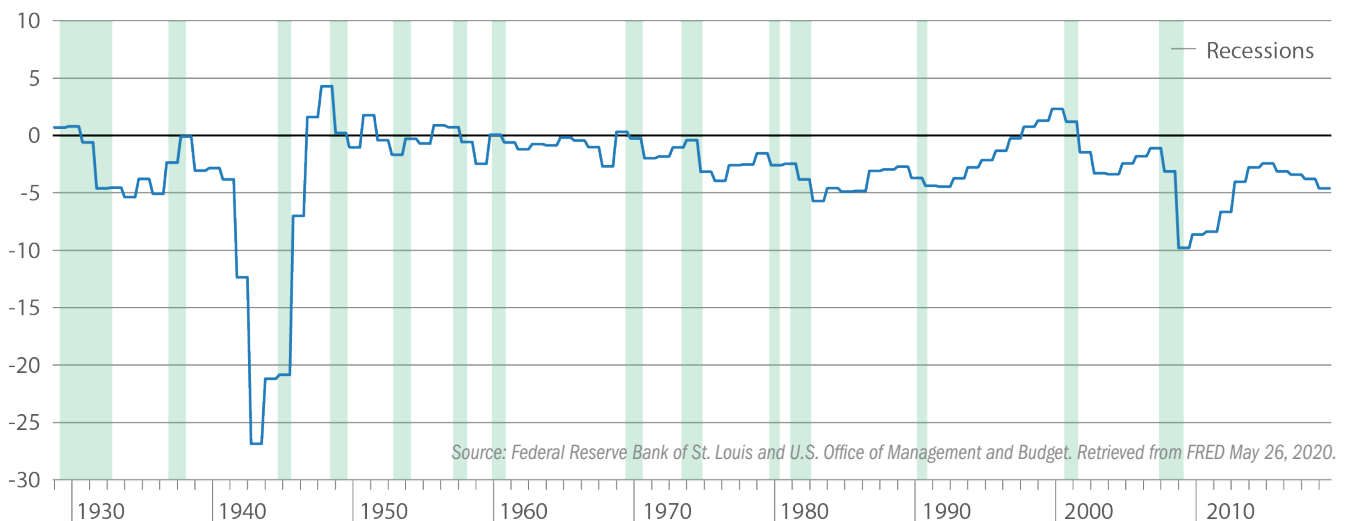
One common critique of increased government spending and decreased taxes during an economic downturn is its effect on the nation's overall debt. When a country spends more money than it brings in, that country runs a deficit and increases total debt. However, the economic downturn is only half of the story – or one part of the business cycle. A business cycle consists of ups and downs, and when the economy is strong, macroeconomic theory suggests the federal government should switch to contractionary fiscal policy. This policy typically lowers government spending and/or raises taxes to run a surplus and lower debt. Contractionary fiscal policy also slows economic growth, which can help keep the economy from overheating. The goal of fiscal policy is to smooth business cycles, both reducing the severity of downturns and slowing excessive growth, resulting in smooth, stable, and consistent economic growth. However, given the political

Multipliers: Why Targeting Stimulus to Lower Income Groups is Beneficial

A small amount of government spending can have a big effect. As money is spent, business profits increase and wages rise as businesses hire more workers. These workers and businesses then spend their increased earnings, adding to the initial demand created by the government spending. The additional demand from the workers and business owners leads to more wages and earnings for other workers and business owners. More money is spent, and business profits and wages continue to rise. And so the cycle continues. This concept that government spending can increase demand by more than the initial injection of spending is known as the multiplier effect.

Therefore, the multiplier effect is larger when fiscal policy is targeted to low- to middle-income households that are likely to spend the money on necessities, rather than high-income households that may have their basic needs met and choose to save additional money. This multiplier effect helps explain why the expansion of unemployment benefits and the stimulus checks to low- and middle-income households are two of the primary approaches to recent expansionary fiscal policy.

FIGURE 3:
Federal Deficit or Surplus as a Percent of GDP



popularity to lower taxes and maintain or increase government spending, governments have a harder time passing contractionary policy, resulting in growing U.S. national debt. **Figure 3** illustrates that the federal deficit has been increasing since 2017 despite strong economic conditions.

Policy Response—The Federal Reserve

Just when the virus was entering the U.S., and before Montana’s shelter-in-place policies took effect, the U.S. Federal Reserve cut their interest rate target nearly to zero. More specifically, they cut their target for the federal funds rate, which is the rate banks pay each other to borrow money overnight. The rate itself is set in the monetary market based on the interaction of supply and demand, with the money supply influenced by the Federal Reserve, not set directly. By cutting the federal fund rate target, other interest rates tend to fall, such as the interest rates for mortgages, auto loans, and home equity loans.

Decreasing the federal funds rate target is the Federal Reserve’s primary method of mitigating an economic downturn, and it is known as expansionary monetary policy. Low interest rates incentivize consumers to invest in larger purchases, stimulating aggregate demand to counteract the negative demand shock. For example, during an economic downturn, fewer people choose to invest in new houses, and businesses

EXPANSIONARY MONETARY POLICY

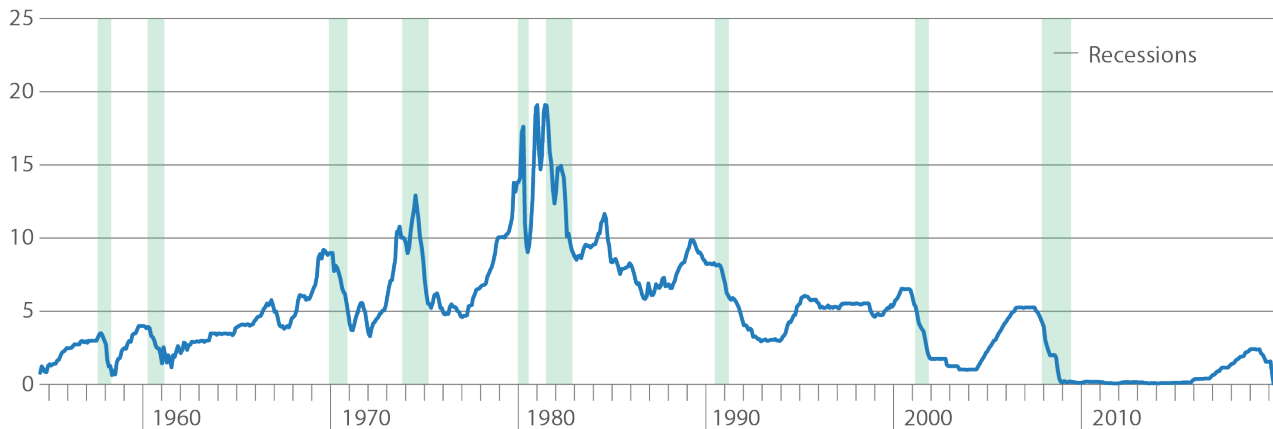
is the Federal Reserve’s policy response to decreased aggregate demand, with the intention of increasing aggregate demand.

Usually by **↓** the target for the federal funds rate.

tend to slow investment spending. This slowdown in investment is because of decreased income or expectations of possible economic distress. However, a low interest rate translates into significant savings for consumers over the long-run, which incentivizes consumers and businesses to invest in larger purchases sooner rather than later.

Because interest rates are close to zero, the Federal Reserve enacted several other policies to help mitigate the current situation. The most commonly known of these policies is quantitative easing, which the Federal Reserve first attempted during the 2009 recession after traditional methods of stabilizing financial markets proved to have insufficient impact. Quantitative easing refers to large-scale purchases of securities by the Federal Reserve, which increases the money supply and helps lower long-term interest rates. Another policy the Federal Reserve recently enacted is lending directly to securities firms and local governments. The goal of these policies is to help ease borrowing concerns as fewer people choose to invest.³

FIGURE 4:
Effective Federal Funds Rate



Source: Federal Reserve Bank of St. Louis and U.S. Office of Management and Budget. Retrieved from FRED May 26, 2020.

³ Brookings. “What’s the Fed doing in Response to the COVID-19 Crisis? What More Could it Do?” Available at www.brookings.edu/research/fed-response-to-COVID19.

Just like expansionary fiscal policy, expansionary monetary policy has its downsides. One of the main arguments against having a central bank set interest rate targets is that artificially low rates can lead to overborrowing, possibly increasing economic growth and prices to abnormal levels (thus creating a “bubble”). However, similar to fiscal policy, the goal of monetary policy is to smooth the business cycle and lead the economy to steady and stable growth. The federal funds rate target usually decreases during an economic downturn to fight falling prices and build employment, but the target increases during an economic expansion to prevent inflation. These policy decisions support the Federal Reserve’s dual mandate to maintain maximum employment and price stability. **Figure 4** shows the effective federal funds rate since the mid-1950s.

What Happens Next?

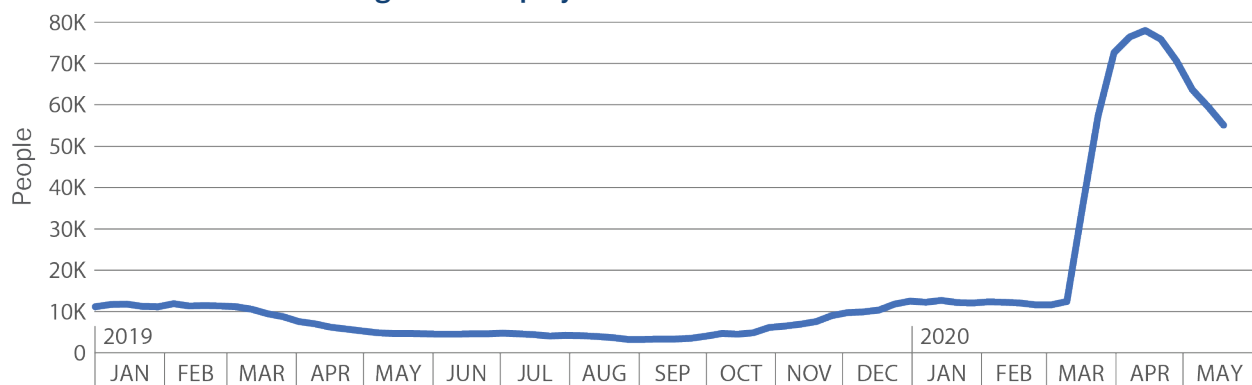
The temporary shelter-in-place policies and slowdown of the market have impacted many Montanans, but there is room for optimism. Montana has one of the lowest rates of COVID-19, paving the way for Montana’s shelter-in-place policy to ease, and for Montana’s economy to begin a phased reopening.⁴ Unemployment insurance claims indicate Montana is already on a path to recovery, as claims peaked in April and have been falling steadily since the phased reopening. Roughly 1/3 of claimants are now back

to work. **Figure 5** shows the number of people that applied for unemployment benefits since January 2019.

Unlike previous recessions, this temporary downturn was caused by a public health crisis, rather than an underlying economic issue. Most of the country, including Montana, was in a strong economic position before the COVID-19 pandemic. For example, the U.S. and Montana’s unemployment rates were at 3.5% in February, low by historical standards. Montana’s wage growth was strong, at 3.4% in 2019, compared with one year prior. Montana’s real GDP grew by 2.1% in 2019, suggesting steady economic growth throughout the last year. The previous growth levels suggest that the economy can quickly return to growth after the threat of COVID-19 lessens.

While Montana’s relatively few cases and strong underlying economy provide hope for the future, a quick and strong economic recovery ultimately depends on the future spread of the virus. Preventing the spread of the virus until a vaccine becomes available is necessary for public health, but also challenging for those whose livelihood is affected by the current situation. Therefore, providing this macroeconomic summary is important for understanding the big picture of this moment, and the goals of the different policy responses. For those looking for detailed and up-to-date analysis of Montana’s economy, the latest data is available at lmi.mt.gov/home/job-tracking.

FIGURE 5:
Number of Montanans Filing an Unemployment Insurance Claim



Source: MTDLI - Research and Analysis Bureau analysis of UI Claims.

⁴ Centers for Disease Control and Prevention. CDC COVID Data Tracker. Available at www.cdc.gov/COVID-data-tracker.