

Industry Snapshots

Arrow denotes 12-month moving total/average direction.

	RETAIL SALES	
	WHOLESALE TRADE	
	AUTO PRODUCTION	
	MANUFACTURING	
	ROTARY RIG	
	CAPITAL GOODS	
	NONRESIDENTIAL CONSTRUCTION	
	RESIDENTIAL CONSTRUCTION	

Steep Rise
 Mild Rise
 Flat
 Mild Decline
 Steep Decline

Macroeconomic Outlook

The spread of COVID-19 across the globe has had a dramatic impact on the economy, financial markets, and general sentiment as leaders attempt to slow the spread of the virus via a variety of restrictions. The human impact is sobering, and our thoughts and prayers are with the suffering. Nevertheless, our job is to assess the impact to businesses, industries, and the economy, so that you can make calm, informed business decisions during these difficult times.

COVID-19 is impacting a wide swath of industries — airlines, restaurants, cruise ships, entertainment venues, and more. What has been underreported, in our view, is the second black swan event: the oil price war between Saudi Arabia and Russia following the two countries' failure to agree on the scope of production cuts. Oil prices plunged from the low \$40s to the low \$30s per barrel as the market digested nearly simultaneous demand and supply shocks via COVID-19 and increased oil production, respectively. As of this writing, Prices had fallen into the teens.

We have seen this movie before (think 2015-2016). The oil and gas industry is now a key part to the US economy; it uses products from other sectors and drives local economies in several areas of the country. A significant portion of our industrial client base here at ITR experienced the fallout of low oil prices in 2015-2016 and is again poised for that. Keep an especially close eye on your cash position and ensure access to liquidity in the coming quarters.

"While the swans have increased the probability that recovery will be delayed until later in 2020 or into 2021, demand will nevertheless return."

Prior to the arrival of these black swans, several global and US leading indicators were rising in support of what was then our outlook: a second-half-of-2020 recovery in US Industrial Production. While the swans have increased the probability that recovery will be delayed until later in 2020 or into 2021, demand will nevertheless return, and your business will need to be ready to meet it. This is not only our view, but also that of Federal Reserve Chairman Jerome Powell: "I don't think anybody knows how long [the COVID-19 economic impact] will be. I do know the US economy is strong and we will get to the other side of this."

So, as words such as "unprecedented," "historic," and "once in a lifetime" color the headlines, remember that the US economy has endured and subsequently recovered from other unprecedented black swan developments. The 1987 stock market crash, the September 11 terrorist attacks, and the sovereign debt crisis of 2011 come to mind. Avoid letting the fear of the moment color your business decisions. Take into account the probability of a weaker 2020, but do not lose sight of preparing for a busier US economy in 2021.

Make Your Move

COVID-19–related shutdowns and the Saudi Arabia–Russia oil price war will likely delay the onset of recovery in US Industrial Production to 2021. However, leaders should remain calm and confident, as this is not the first time the economy has faced black swans.

Investor Update

The stock market declined sharply in response to the spread of COVID-19 and the Saudi Arabia–Russia oil price war. The end of the current downturn will present a great buying opportunity.

ITR Economics Long-Term View

2020

DECLINE

2021

RECOVERY AND RISE

2022

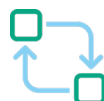
DECLINE IN SECOND HALF

Industry Analysis



RETAIL SALES

- US Total Retail Sales in the 12 months through February were up 4.2% from the year-ago level
- We downgraded our outlook for Retail Sales due to social distancing's impact on discretionary spending and low oil prices' deflationary impact on spending at gas stations
- Online retailers and bulk warehouse stores like Costco may benefit from social distancing at the expense of traditional stores



WHOLESALE TRADE

- Annual US Total Wholesale Trade through January was relatively even with the year-ago level
- A steep decline in oil prices will put downward pressure on Nondurable Wholesale Trade
- Expect potential downside pressure on consumer-related Wholesale Trade in at least the near term as social distancing and quarantine measures take effect



AUTO PRODUCTION

- Annual North America Light Vehicle Production through January was down 4.1% year over year
- In addition to already-underway supply chain disruptions, a potential drop in consumer demand will likely impact the industry during the next few quarters
- Potential widespread shutdowns of US factories, as in Europe, are another challenge facing the industry



MANUFACTURING

- Annual US Total Manufacturing Production is below the year-ago level
- While the US ISM PMI is suggesting upward momentum in Manufacturing in the second half of 2020, the recent black swan events are likely to delay that momentum until 2021
- Manufacturing tied to consumer staples may fare better during the next one to two quarters than that tied to discretionary purchases or industrial markets



ROTARY RIG

- The US Rotary Rig Count averaged 795 rigs during the three months through February, down 25.3% from the same three months a year ago
- Steep decline in crude oil prices will impact margins. Heavily leveraged companies may in turn engage in layoffs, sell out, or file for bankruptcy
- Exploration spending may take a back seat as companies respond to market changes, further impacting the Rig Count



CAPITAL GOODS NEW ORDERS

- Annual US Nondefense Capital Goods New Orders (excluding aircraft) through January were 0.6% above last year
- The leading indicators signal the probability of sharper decline in annual New Orders during at least a portion of this year
- The coming quarters may present opportunities to purchase capital equipment at both low prices and low fixed interest rates



TOTAL NONRESIDENTIAL CONSTRUCTION




- US Total Nonresidential Construction accelerated in recent months; the annual total was 3.2% above the year-ago level
- Growth in annual US Public Nonresidential Construction is accelerating; spending during the 12 months through January was 7.8% above last year
- Annual US Private Nonresidential Construction is expected to decline through at least the remainder of 2020



TOTAL RESIDENTIAL CONSTRUCTION

- US Total Residential Construction during the three months through January was up 7.2% from last year
- Both US Single-Unit and Multi-Unit Housing Starts are accelerating in their ascent
- A spike in mortgage applications due to low rates poses an upside risk to our Starts outlook

Leading Indicator Snapshot

	1Q2020	2Q2020	3Q2020
ITR Leading Indicator™			
ITR Retail Sales Leading Indicator™			
The Conference Board's US Leading Indicator			
US ISM PMI (Purchasing Managers Index)			
US Total Industry Capacity Utilization Rate			

 Denotes that the indicator signals cyclical rise for the economy in the given quarter.

 Denotes that the indicator signals cyclical decline for the economy in the given quarter.

 N/A

KEY TAKEAWAYS

- Normal business cycle activity and the leading indicators were suggesting that US Industrial Production would be rising in the second half of 2020
- Two black swan events – COVID-19 and the Saudi Arabia-Russia oil dispute – suggest that many leading indicators will “lose” previously established lows
- The ITR Leading Indicator™ and the US ISM PMI 1/12 will likely keep their lows, but current events will impact these indicators’ lead time to the industrial economy
- Overall, expect a weaker second half of 2020 than we had previously anticipated, with rise returning in 2021

A Closer Look: Current Events

Black Swans and Fragile Solutions

BY: CONNOR LOKAR

What you need to know: Ultimately, black swan events awaken us to the vulnerabilities of fragile solutions, whether it be single-source supply chains at the company level or insufficient contingency plans at the government level.

As economists, and especially as ITR economists, we work to detach ourselves from the emotion of the business cycle. That is precisely what many of our clients most value about us: our objective, data-driven perspective. When times are calm and prosperous, we are looking ahead to what can go wrong in the next phase of the business cycle. Not surprisingly, we are less popular during those times. On the flip side, when conditions deteriorate, we cannot help but peer through the rubble for hints of light and opportunity. It is at this point in the economic cycle that we get more popular. Incidentally, my immediate and extended family have taken great interest in what I do for a living over the last several weeks. Funny how that works.

On to black swans: Neither the human nor the economic toll of COVID-19 is to be trivialized. We at ITR are thinking of the individuals, families, and businesses impacted by the worst of the outbreak. That being said, we are here to tell you that even this black swan reveals some opportunities.

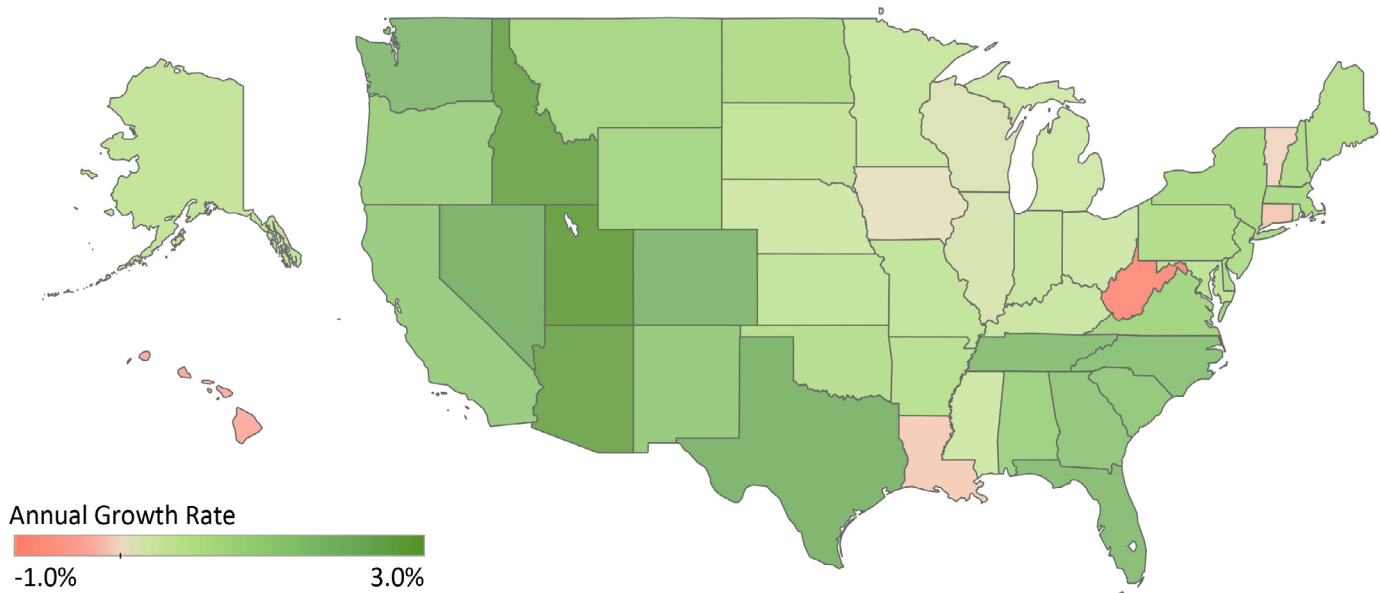
Amid all the fear of the moment, opportunities may not seem possible. The volatility we have witnessed in financial markets this March is without precedent. The CBOE Volatility Index – essentially Wall Street's fear index – closed at an all-time high March 16, surpassing even the Great Recession peak. This is occurring as global governments adopt drastic measures to mitigate the outbreak. While we applaud the effort to protect human life, we as economists must also note the noticeable impact to consumer and industrial activity. While there will be pain, and very real human and economic costs, pain highlights lessons to be learned and areas for improvement.

Even when it was largely confined to China, the COVID-19 outbreak brutally exposed the fragility of just-in-time inventory management when coupled with transnational supply chains, especially for those that put all their eggs in the China basket. Several of our clients are in the painful process of absorbing this lesson and are taking steps to address the vulnerability in their supply chains. In the longer run, and layered on top of tariffs and politics, this crisis will hasten the shift away from relying on China as a lone supply source. Accordingly, many businesses will have more resilient supply chains, and this is good!

Our reflection goes beyond vulnerable supply chains. It is becoming painfully clear that our current infrastructure is fragile and ill-prepared to handle pandemics. Italy is the most notable case to this point; there is much to be learned from that country's tragic experience. More positively, South Korea's aggressive and coordinated early action has seemingly proven effective and staved off the need for the most extreme and economically disruptive mitigation measures. There is an old saying: "You do not need insurance until you need insurance." The same would apply to planning for a pandemic. Each nation will have successes and failures in dealing with COVID-19, and the world as a whole will be better prepared for the next crisis as a result.

Ultimately, black swan events awaken us to the vulnerabilities of fragile solutions, whether it be single-source supply chains at the company level or insufficient contingency plans at the government level. In your business, you and your team must identify the imperfect systems and inefficiencies that, thanks to our long run of economic expansion following the Great Recession, have been allowed to persist. Maybe you already know what they are, or maybe they will become apparent in the difficult months ahead. Your task is to look at your business, find your vulnerabilities, and address them.

State-by-State: Employment



- We expect general rise in US Private Sector Employment to persist through at least 2022, indicating a relatively tight labor market during that time
- Employment is growing at the highest rates in the West and Southeast regions, and in Texas
- Weekly national unemployment claims spiked for the week ending March 14 as many businesses impacted by social distancing requirements laid off workers

Reader's Forum

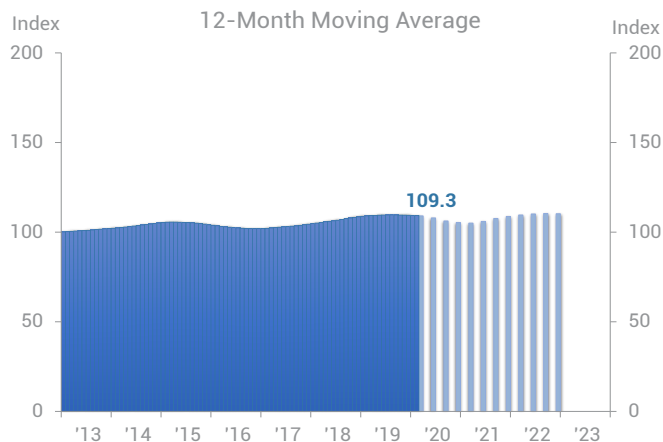
Should I consider refinancing my fixed-rate loans in response to interest rate cuts?

Lauren Stockli, Economist at ITR Economics™, answers:

Thank you for the question. This is a good thought, as rates are currently very low. However, a fair number of people have had similar thoughts. A 79% spike in refinancing applications last week, as well a spike in traditional mortgage applications, is deterring banks from lowering their rates. In some cases, banks are even raising rates to stem demand. Run the numbers. If the rate you are offered is not significantly lower than the rate you have, then paying the application and processing fees – not to mention resetting the amortization schedule – may not be worth it.

US Industrial Production Index

Index, 2012=100, NSA



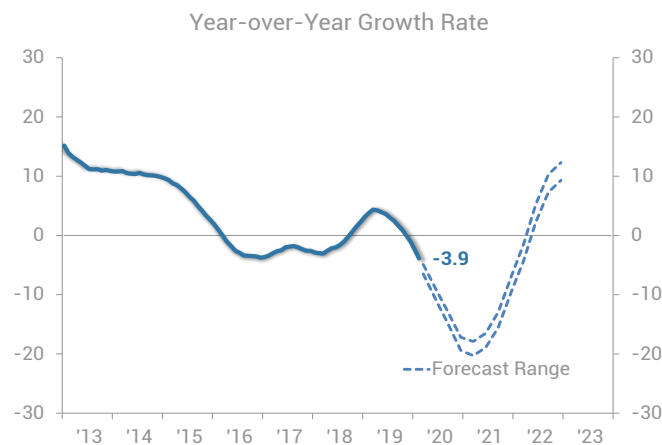
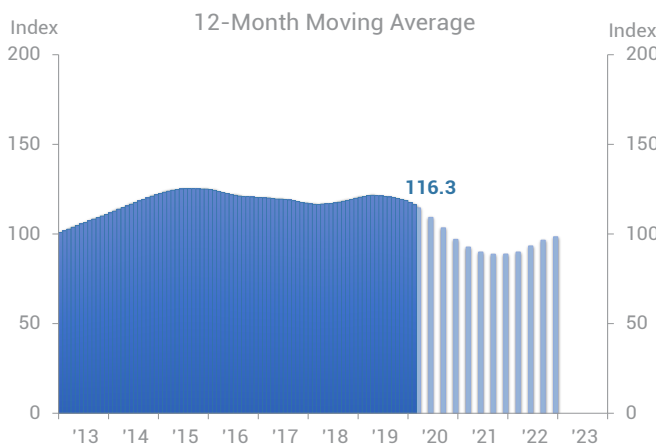
FORECAST	Y-o-Y Growth Rate
2020:	-3.7%
2021:	3.2%
2022:	1.4%

We determined that a revised forecast was necessary to account for the forward-looking probabilities following back-to-back black swan events (COVID-19 and Russia-Saudi Arabia oil price war). Production in the 12 months through December 2019 came in 1.1% above the median of our prior forecast, which had been in place for six quarters.

Production in the 12 months through February was virtually even with the year-ago level. Expect annual Production to decline into early 2021. Production will then rise through the remainder of 2021 and into late 2022. We think the downside risks to our forecast are more numerous than the upside risks. Downside risks include government intervention to “flatten the curve” for COVID-19, such as quarantines and mandated stay-at-home protocols. Also, HR 6201 will likely increase businesses’ short-term expenses as they pay for paid leave and other employee benefits in exchange for tax breaks; companies will pay now to recoup later. Both risks could result in even higher layoffs.

US Civilian Aircraft Equipment Production Index

Index, 2012 =100, NSA



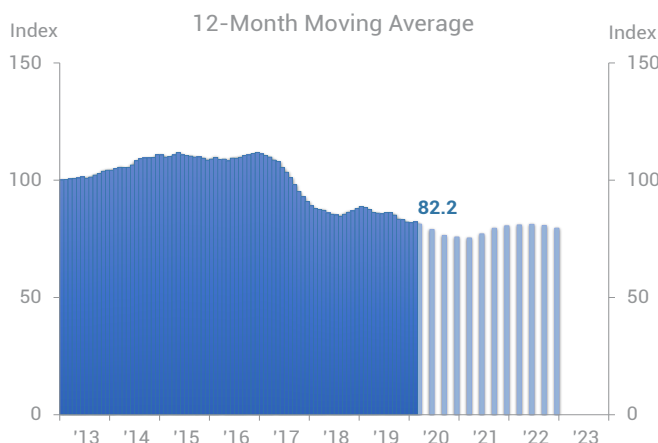
FORECAST	Y-o-Y Growth Rate
2020:	-18.3%
2021:	-8.4%
2022:	10.8%

US Civilian Aircraft Equipment Production during the 12 months through February came in 3.9% below the year-ago level. The industry has been struggling as a result of the grounding of the 737 Max. The spread of COVID-19 and consequent reduced air travel will drive this declining trend down further. We expect Production to decline into the second half of 2021. Subsequent rise will extend through at least 2022, but Production will not reach current levels though at least 2022.

Our outlook is informed by our outlooks for US Industrial Production and US Nondefense Capital Goods New Orders (excluding aircraft). Furthermore, low commodity prices are a sign that macroeconomic demand is limited at this time. Declining Oil Prices also increase the incentive to repair older, less fuel-efficient aircraft instead of replacing them. These factors together will likely contribute to limited Equipment Production. Annual New Orders in this industry have been nearly cut in half over the last 12 months and, with recent developments, will likely take an additional hit as airlines delay purchases due to cashflow issues. The repair of existing aircraft may offer relatively better opportunities.

US Automobile Production Index

Index, 2012 =100, NSA



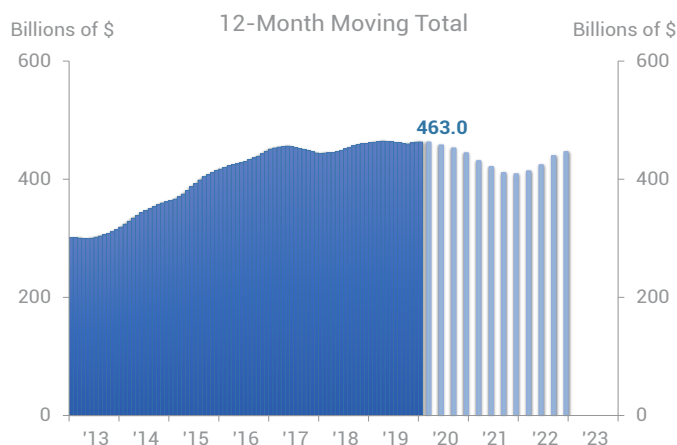
FORECAST	Y-o-Y Growth Rate
2020:	-7.8%
2021:	6.3%
2022:	-1.3%

The US Automobile Production Index in the 12 months through February was down 7.0% from one year ago. The Production annual average will decline into early 2021, and subsequent mild rise will give way to recession in late 2022. We expect the automotive industry will be hit harder than the overall industrial sector, due to dependence on parts from COVID-19-affected areas, just-in-time inventory strategy, labor requirements, and challenges related to the extension of subprime and long-term credit in prior years.

The automotive industry will likely suffer from already underway chain disruptions as well as a potential drop in consumer demand. Consumers may delay large-dollar purchases due to employment disruptions or fear surrounding COVID-19. Furthermore, if social distancing measures extend into the latter half of this year, consumers may be unable to access dealerships to make purchases, placing higher-than-expected downside pressure on Production. Consider reviewing the services you receive; try to secure short-term discounts in order to save on costs.

US Private Nonresidential Construction

Measured in Billions of Dollars, NSA



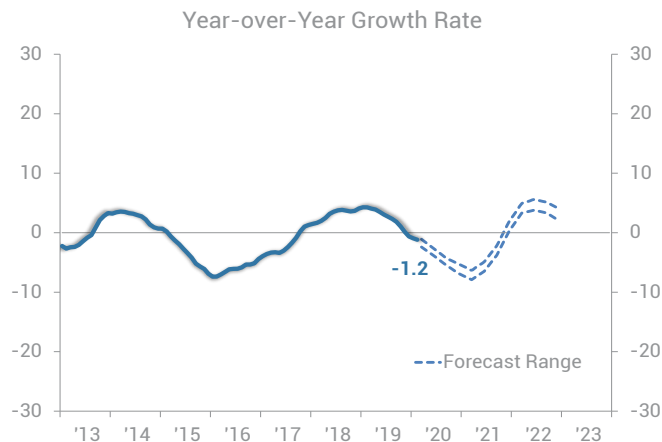
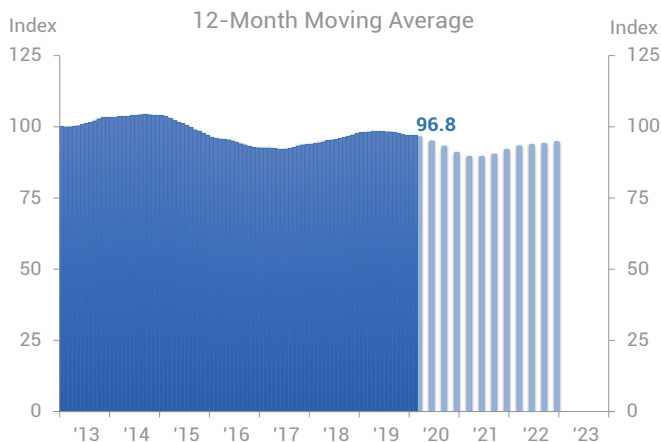
FORECAST	Y-o-Y Growth Rate
2020:	-3.9%
2021:	-8.0%
2022:	9.2%

US Private Nonresidential Construction through December came in 0.03% above our forecast median. However, we lowered the forecast as a result of COVID-19, the Saudi-Russia oil dispute, and the likely adverse impact of these black swan events on the US economy and nonresidential construction industry. Some municipalities are considering or have ordered the closure of construction sites. This will result in more pronounced near-term weakness than previously expected.

Annual Construction spending in the 12 months through January was virtually even with the year-ago level. Annual spending will decline into the second half of 2021. Ultimately, we expect the US economy to recover and rise in 2021. This will primarily benefit Construction in 2022 given the typical lead time between the economy and Construction. If the COVID-19 shutdowns bleed into the second half of 2020, our macroeconomic and Nonresidential Construction outlooks will likely prove too optimistic. Manage your accounts receivable closely as this market declines into the second half of 2021, but take care not to jeopardize your business relationships.

Primary Metals Production Index

Index, 2012 =100, NSA



FORECAST	Y-o-Y Growth Rate
2020:	-6.1%
2021:	1.1%
2022:	3.0%

Primary Metals Production in the 12 months through February was down 1.2% from the same time last year. Annual Production will decline throughout this year and into the first half of 2021. Our expectation for subsequent Production rise throughout the remainder of 2021 and through at least 2022 is informed by our new outlook for US Industrial Production. Expect annual Primary Metals Production to remain below the current level through the length of this forecast.

The US Dow Jones Precious Metals Index annual growth rate is rising, suggesting potential upside risks to our near-term expectations for Production. Concurrently, ongoing lockdowns and shutdowns related to COVID-19 could hamper Production more than we currently expect. We are closely watching these situations. Watch your cash flow closely, as cash is king during the back side of the business cycle. If you run a small business, consider applying for small business loans to support your activity through this year.