Second Quarter 2020 Economic Summary and Outlook

The U. S. economy shrank 31.7% in the second quarter after a 4.96% decline in the first quarter, according to revised Bureau of Economic Analysis estimates. Almost all the damage occurred during March and April with a recovery beginning in May as the economy slowly began to open up. The unemployment rate reached 14.7% in April with over twenty million jobs lost. The most recent August report has the unemployment down to 8.4%, well below expectations. About half of the jobs lost in March and April have been recovered by August. The COVID recession has been the shortest and most severe in history.

While the recovery shows promising signs for the third quarter, there are potential stumbling blocks to include a potential resurgence of the virus in the fall. So far, the recovery has been aided by over a trillion dollars in fiscal stimulus to supplement unemployed workers. The stimulus will continue at a lower level in the third and fourth quarters unless there is a political deal for a higher level of spending. At some point, the private sector must be able to grow without artificial government support, but this is not likely until the shutdown is fully eliminated. Prospects for a vaccine by the end of the year are not clear but progress is being made on ways to cope with the severity and duration of the illness once contracted.

Monetary policy, both in the U.S. and globally, has been extremely accommodating. Interest rates are barely positive in most advanced economies. Pent up demand along with low interest rates and fiscal income supplements have stimulated housing and durable good purchases going into the third quarter. Debt burdens are growing at both the federal, state, and household levels due to borrowing needs to finance virus related costs and the enticement of using debt in the low interest rate environment. In the long run the economy must recover to service the higher debt levels and wean the markets off the combination of easy money and fiscal deficit spending.

Fears of deflation are easing somewhat but prices are growing well below the 2% target set by the Fed. Excess capacity, low demand, and low inflation all work to keep prices lower. The Fed has ample room for monetary easing without fears of approaching the 2% interest rate target. Banks tend to be flush with cash and government foreclosure policies have prevented the mortgage default rates seen in the last recession. In the long run, low interest rates need to stimulate investment in real assets and infrastructure to generate capital formation and growth.

Going into the third quarter, continued progress toward a recovery is expected with positive GDP growth of about 5% as the economy bounces off low levels of performance. Controlling the COVID virus is only one of many issues that could derail the recovery. Economic performance in 2021 also depends on potential changes in taxes, fiscal priorities, law enforcement reforms, global population migration, free but fair trade practices, a reversal of globalization, political polarization, and productive infrastructure investments.

Single or Double Dip Recession?

The National Bureau of Economic Research (NBER) is the official authority on measuring and defining recessions. The NBER does not have a definition of a double-dip recession but the general view is that a double-dip occurs when a recession is followed by a brief recovery that is then followed by another recession. The double-dip is often referred to as a "W" recession rather than the traditional "V" recession. The official measure of a recession requires two successive quarters of negative GDP growth, which took place in the first two quarters of 2020. The 2020 recession is unique in many respects, since it is due to self-imposed shutdowns in response to a pandemic. The science of the COVID-19 virus remains murky and little is known about the resilience of the virus and the extent to which the contagion can be either moderated or eliminated. While the U.S. economy looks to be posting a recovery in the third quarter, the nature of the virus and the potential for a second spike in cases raises the possibility of a double-dip recession in 2020.

Double-dip recessions are very rare with the last one in the U.S. occurring in the early 1980s. The unique nature of the 2020 recession raises the possibility of another contraction later in the year or early in 2021. In an August survey by the National Association for Business Economics, 80% of the economists responding to the survey gave a one-in-four chance for a double-dip recession as the economy goes into 2021. Economists are likely to be less concerned about the ability of the economy to rebound when businesses are open than the unknown science behind COVID-19. All forecasts in the post COVID environment will have high degrees of uncertainty, given the added unknown factors linked to the virus and policy responses to the virus.

The current conditions in the economy do not yet suggest a W shaped recession. Job losses were unprecedented in March and April, but the unemployment rate has recovered to 8.4% in August. Incomes have held up in the aggregate thanks to fiscal stimulus spending to support increased unemployment insurance payments and stimulus checks. The rapid recovery in the stock market maintained consumer wealth in the second quarter and the combination of low interest rates and pent up demand boosted housing and durable good segments of the economy. Lower interest rates stimulated mortgage refinancing and supplemented consumer disposable income. Finally, lower oil prices allowed consumers to stretch household budgets.

The Fed is Responding to COVID

The new Fed policy allows more leeway for monetary expansion. The Fed now targets an average 2% inflation rate, which means the rate can exceed 2% for a period of time as long as the moving average is on target. Short bouts of monthly price inflation will not push the Fed away from expansion. In past recessions the changes in Fed policy often exacerbated the normal recovery phase of a recovery. While this seems like a small change in Fed policy, the implication is that in a recovery the Fed can delay the tightening policy longer, allowing for relatively higher growth. This is an important boost to growth if the economy is sensitive to lower interest rates. The key concern is that rates are now close to the zero bound where added rate decreases tend not to have much influence on borrowing. Figure 1 shows the unprecedented decline in interest rates since 2019 overall and especially in 2020.

Figure 1. 10-Year Treasury Yields

Source: FRED, Federal Reserve Bank of St. Louis

Figure 2 below illustrates the dramatic Fed purchasing of Treasury debt to expand bank reserves. The Fed has been buying U. S. Treasuries and other forms of debt at unprecedented levels to support the economy during the COVID recession.

Figure 2. Federal Reserve Bank Holdings of U.S. Treasury Securities

Source: Board of Governors / FRED data

Summary of Recent Economic Data

***Gross Domestic Product** – A recession began in March of 2020, when virus driven shutdowns and restrictions strangled economic activity. The recession ended in May as the economy slowly started to reopen, but the damage took a dramatic toll. This recession is the shortest in history but it is also the most severe in its depth. The second quarter decline of 31.7% in GDP is more than three times the next most severe quarterly decline that took place in 1958.*

- The worst economic performance from the virus lockdown occurred in March and April with lingering effects throughout the second quarter of 2020. Second quarter real GDP fell 31.7% at an annual rate, according to the second revision by the Bureau of Economic Analysis. First quarter GDP growth fell 4.96% in the latest revision. Technically, the first two quarters of negative growth represents an official recession. The historic decline occurred across all components of GDP except government and net exports.

- Consumer spending contributed 4.75% to the first quarter's GDP decline and 24.8% to the second quarter collapse. Most of the decline came from lower spending on services, where quarantines and social distancing posed the greatest restriction.

- Lower inventory spending subtracted 3.5% from second quarter growth and 1.3% from first quarter growth. Fixed investment led to a 5.5% reduction in second quarter growth.

- Second quarter exports fell less than imports, offering a modest 0.9% boost to GDP growth. Government spending at the federal level offset declines in state and local spending, offering a net 0.82% increase in GDP growth in the second quarter.

- Table 1 below provides the quarterly annualized growth rates in GDP and its components since the fourth quarter of 2018.

Table 1. Real GDP and GDP Components (Annualized Percentage Change)

	2020 Q2	2020 Q1	2019 Q4	2019 Q3	2019 Q2	2019 Q1	2018 Q4
Real Annualized GDP	**-31.70**	**-4.96**	2.37	2.57	1.49	2.93	1.32
Consumption	**-24.76**	**-4.75**	1.07	1.83	2.47	1.28	1.05
Fixed Investment	**-5.20**	**-0.23**	**0.17**	.042	**-0.07**	0.50	0.46
Residential	**-1.72**	0.68	0.22	0.17	**-0.08**	**-0.06**	**-0.21**
Non-residential	**-3.48**	**-1.34**	**-0.04**	0.25	0.01	0.56	0.66
Inventories	**-3.46**	**-1.34**	**-0.82**	**-0.09**	**-0.97**	0.21	0.23
Net Exports	0.90	1.13	1.52	0.04	**-.79**	0.55	**-0.27**
Government	0.82	0.22	0.42	0.37	0.86	0.43	**-0.16**

Source Bureau of Economic Analysis, Second Estimate (8/27/2020)

- Corporate after-tax profits fell 11.72% in the second quarter of 2020 following a decline of 13.08% in the first quarter. After-tax quarterly profits are volatile as Table 2 illustrates. A better picture emerges when profits are viewed over many quarters. Past profits do not support high equity valuations, but historically low interest rates and prospects for improved profitability later in 2020 appears to be driving equity prices.

Table 2. U. S. Corporate After-Tax Profit by Quarter (Annualized Percentage Change)

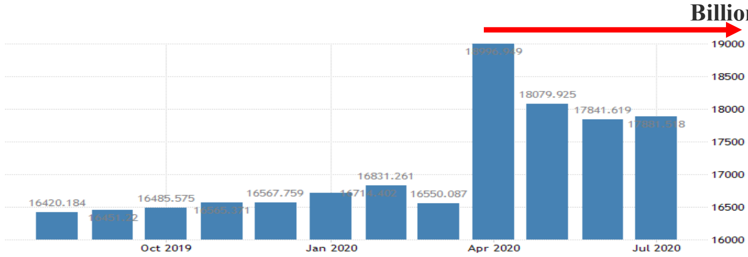
	2020 Q2	2020 Q1	2019 Q4	2019 Q3	2019 Q2	2019 Q1
After Tax Corporate Profits (% Change)	**-11.72**	**-13.08**	4.19	**-0.96**	2.35	**-0.27**

Source: Bureau of Economic Analysis

- Nominal personal income grew 0.4% in July following a revised 1% decline in June. Almost all components of Personal Income improved in July. The improvement from June was mostly due to government transfers but employee compensation also increased 1.3%. The figure below illustrates the impact of the fiscal stimulus that started in April.

Figure 3. Monthly Disposable Income (Pre and Post Stimulus)

Billions of Dollars



Source: Bureau of Economic Analysis

- Nominal disposable income inched up by 0.2% in July following a 1.3% drop in June. The personal saving rate dropped from 19.2% to 17.8% as the economy slowly began to open in July and consumer spending picked up. Table 3 below provides the monthly and year-ago changes in disposable income and the saving rate.

Table 3. Change in Monthly Disposable Income, Year-ago Changes, and Saving Rates

	July 2020	June 2020	May 2020	April 2020	Mar. 2020	Feb. 2020	Jan. 2020	Dec. 2019	Nov. 2019	Oct. 2019	Sept. 2019	Aug. 2019
Monthly % Change												
Nominal	0.2	**-1.3**	**-4.8**	14.8	**-1.7**	0.7	09	0.0	0.5	0.1	0.3	0.5
Real	**-0.1**	**-1.8**	**-4.9**	15.4	**-1.4**	0.6	0.7	**-0.2**	0.4	**-0.1**	0.3	0.5
Yr.-Ago % Change												
Nominal	9.5	9.5	11.3	17.0	2.0	3.9	3.4	2.5	4.4	4.1	4.4	4.1
Real	8.4	8.6	10.7	16.5	0.6	2.0	1.5	2.0	3.0	2.7	3.0	2.6
Saving Rate (%)	17.8	19.2	24.6	33.7	12.9	8.3	7.6	7.2	7.9	7.7	7.8	7.7

Source Bureau of Economic Analysis

- After a rapid decline in March and April, real consumer spending rebounded in May and June. The rebound continued in July, but at a slower pace of only 1.6%. Overall, about 75% of the decline in spending during March and April has been recovered.

- Spending on durable goods led the overall improvement in consumer spending since April. Spending on durable goods increased by 2.5% in July while spending on nondurable goods lagged with only a 1.2% increase. Service spending was up 1.6% in July. The saving rate fell to a still-remarkable 17.8% from an upwardly revised 19.2% in June as income grew only modestly with less support from fiscal stimulus.

- Table 4 provides the monthly changes in real personal consumption expenditures and expenditure components.

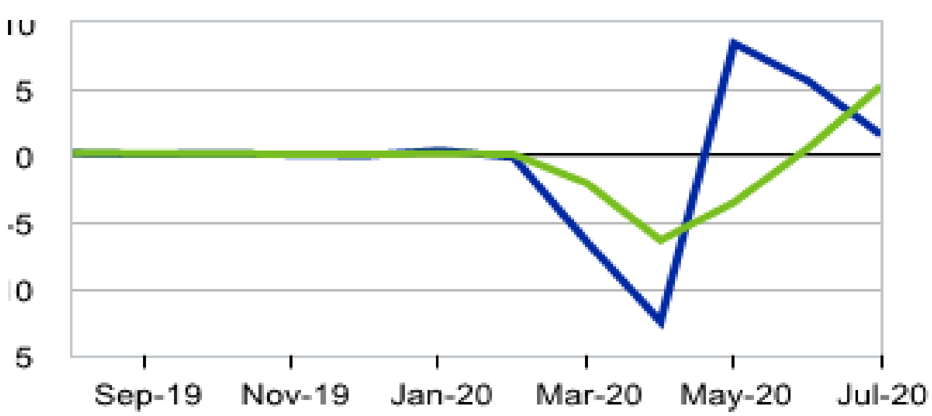
Table 4. Change in Monthly Real Personal Consumption Spending (% Change)

	July 2020	June 2020	May 2020	April 2020	Mar. 2020	Feb. 2020	Jan. 2020
Total	1.6	5.7	8.4	**-12.4**	**-6.5**	**-0.1**	0.4
Durable Goods	2.5	7.9	28.5	**-11.2**	**-11.4**	**-1.2**	0.8
Non-durable Goods	1.2	4.4	8.1	**-13.0**	4.9	0.0	0.4
Services	1.6	5.7	5.6	**-12.4**	**-9.0**	0.0	0.4

Source: Bureau of Economic Analysis

- Figure 4 illustrates the dramatic impact of the virus on consumer spending and the rebound linked to the large fiscal stimulus in April. Third quarter spending will depend on the strength of re-openings and continuation of government stimulus.

Figure 4 Real Personal Consumption Expenditure (% Change)



Monthly **3-month Moving Average**

Source: Bureau of economic Analysis

Employment and Labor Data - *The unemployment rate declined to only 8.4% in August following a 10.2% rate in July. Given the 14.7% unemployment rate in April due to the COVID lockdown and the slow reopening, the rebound in the labor market has been faster than expected. Even without a vaccine and with slow opening, the economy has recovered about half of the jobs lost with the shutdown. A complete recovery will require a full re-opening and much more progress on controlling the virus.*

- The full weight of the economic damage from the COVID-19 crisis occurred in the second quarter. The economy actually started to recover by May, as job growth surged in the second half of the quarter. The initial rebound was not nearly enough to outweigh the losses incurred in April. Most social-distancing requirements and mandated business closures went into effect in late March, with the harshest consequences taking hold in April. While many states began reopening their economies before the end of the second quarter, those efforts have been slowed by surging COVID-19 cases across much of the country.

- The economy added 1.371 million jobs in August following gains of 1.763 million jobs in July and 4,791 million in June. Even with these healthy job gains the economy remains well behind replacement of jobs lost in April and March.

- The unemployment rate recently fell to 8.4% from 10.2% in July and 14.7% back in April. The data on monthly employment appear in Table 5. More rapid progress back to full employment will require containment of the COVID virus.

Table 5. Monthly Unemployment and Job Expansion Data

	Aug. 2020	July 2020	June 2020	May 2020	Apr. 2020	Mar. 2020	Feb. 2020	Jan. 2020	Dec. 2019
Unemployment Rate (%)	8.4	10.2	11.1	13.3	14.7	4.4	3.5	3.6	3.5
Change in Non-farm Payroll (000s)	1.371	1,763	4,791	2,725	**-20,787**	**-1,373**	251	214	184
3-mo. Moving avg. change (000s)	2,629	3,093	**-4,424**	**-6,517**	**-7,270**	**-303**	216	220	210
Labor Force Participation Rate	61.7	61.4	61.5	60.8	60.2	62.7	63.4	63.4	63.2

Source: Bureau of Labor Statistics

- Unemployment declined across demographic groups with the largest decline occurring for Hispanic workers. Most of the decline occurred for less-educated workers. The number of involuntarily part time workers fell by 619,000 in July, another positive indicator. The number of marginally attached workers fell by nearly 500,000.

- The number of workers on temporary layoff declined from 10.6 million to 9.2 million in the second quarter while the number of workers on permanent layoff was unchanged at 2.9 million. Productivity (measured as the change in output divided by the change in hours worked) increased at an annual rate of 7.3% in the second quarter. The increase in productivity is a result of COVID-19 factors. Hours worked fell by 43% due to layoffs while distancing and closures led to a 38.9% reduction in output.

- Nonfarm hourly compensation increased 20.4% while unit labor costs grew by12.2% at an annualized rate in the second quarter. Continued increases in labor costs will hurt profitability going forward.

- Manufacturing productivity fell 15.5% at an annualized rate in the second quarter, Table X shows quarterly data on productivity and labor costs.

Table 6. Quarterly Productivity, Compensation, and Unit Labor Costs

	Q II 2020	Q I 2020	Q IV 2019	Q III 2019	Q II 2019	Q1 2019	Q IV 2019	Q III 2019
Non-Farm Business								
Output per Hour	7.3	**-0.3**	1.6	0.3	2.0	3.7	0.8	1.7
Compensation per Hour	20.4	9.4	3.3	**-0.2**	1.4	8.7	1.8	3.4
Unit Labor Costs	12.2	9.8	1.7	**-0.4**	**-0.6**	4.8	1.0	1.6
Manufacturing								
Output per Hour	**-15.5**	1.6	**-0.7**	**-0.5**	**-2.3**	1.3	0.9	0.3
Compensation per Hour	10.7	6.2	5.2	**-1.9**	1.4	6.9	3.5	2.3
Unit Labor Costs	31.1	4.6	6.0	-1.4	3.8	5.5	2.4	2.0

Source: Bureau of Labor Statistics

Production and Manufacturing *– U. S. production fell during the lockdown but a rebound began in May. Increased motor vehicle demand boosted manufacturing in June and July due to low interest rates, improved income, and better expectations. August data may be less promising since several states backed off openings due to an uptick in virus cases. An initial bounce in production after the shutdown is to be expected, but the next phase of the recovery in production will be slower unless confirmed cases of the virus decline.*

- The ISM manufacturing index had a broad based increase to 54.2 from 52.6 in June.

- The ISM manufacturing survey is consistent with a recovery but the future path of COVID-19 cases, uncertainty over a new round of fiscal stimulus, and political uncertainty all pose downside risks. The data do not suggest that production is set for a large increase, rather optimism for a reopening prompted more positive views over the next few months. Table 7 provides the monthly Purchase Manager's Index data.

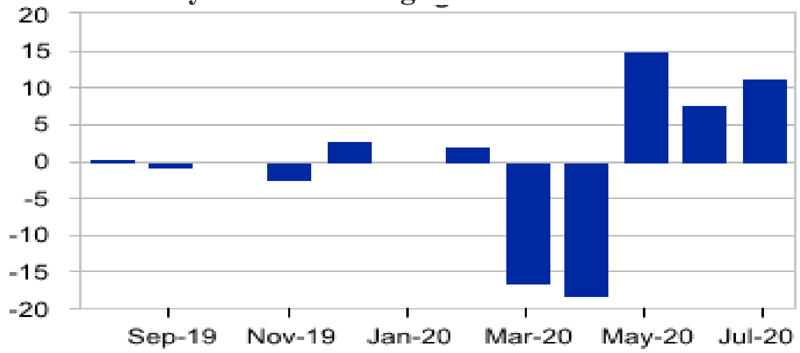
Table 7. Monthly Purchase Managers' Index Data

	July 2020	June 2020	May 2020	April 2020	March 2020	Feb. 2020	Jan. 2020
Purchase Managers' Index	54.2	52.6	43.1	41.5	49.1	50.1	50.9

Source: Institute for Supply Management

- New orders for durable goods rebounded sharply following an 18.3% decline in April. Orders increased 11.2% in July following increases of 7.7% and May, respectively. Figure 5 below illustrates the turnaround in durable goods orders, likely due to pent up demand, low interest rates, and improved income.

Figure 5. Monthly Percent Change in New Durable Goods Orders



Source: U. S. Census Bureau

- Industrial production increased 3% in July with a 3.4% gain in manufacturing. The manufacturing gain was the third consecutive monthly increase. Excluding motor vehicle and parts, manufacturing production rose 1.6%. Table 8 shows the monthly industrial production data.

Table 8. Production, Manufacturing, and Capacity Utilization (% Change by Month)

	July 2020	June 2020	May 2020	Apr. 2020	Mar. 2020	Feb. 2020	Jan. 2020
Industrial Production	3.0	5.7	0.9	**-12.8**	**-4.3**	0.1	**-0.4**
Manufacturing	3.4	7.4	3.8	**-16.0**	**-5.0**	0.0	**-0.1**
Mining	0.8	**-0.3**	**-11.3**	**-7.0**	**-1.6**	**-1.6**	**1.0**
Utilities	3.3	2.0	**-0.5**	1.9	**-3.1**	3.8	**-4.7**
Capacity Utilization – industrial Production	70.6	68.5	64.8	64.2	73.6	76.9	76.9
Capacity Utilization – manufacturing	69.2	66.9	62.3	60.0	71.4	75.2	75.2

Source: Federal Reserve Bank of St. Louis , FRED

- Industrial production gained 3% in July following a robust 5.7% increase in June (revised). Manufacturing industrial production rose 3.4% in July, the third consecutive monthly gain. Within manufacturing, motor vehicle and parts output rose 28.3%. Excluding motor vehicles and parts, production grew 1.6%, compared to 3.7% in June.

- Capacity utilization took the largest hit in April and May but rebounded in June and July. The economy has a long way to go to achieve full employment production and a second bout of virus related contraction is not out of the question.

***Inflation** – Inflation picked up modestly in June and July, helping to ease fears of a prolonged deflation. For the second quarter, the personal consumption expenditures price index (PCE) declined 1.8% following inflation of 1.3% in the first quarter. Excluding food and energy, the PCE fell 1% in the second quarter compared with growth of 1.6% the prior quarter.*

- Personal Consumption Expenditure (PCE) inflation data in May, June, and July helped calm fears of an outright deflation. The headline PCE deflator increased 0.3% in July, 0.5% in June, and 0.1% in May. On a year-ago basis the inflation rate was only 1%. Year-ago inflation for the core PCE, which excludes food and energy prices, was 1.3%. Energy prices increased at an annual rate of 2.5% in July and 4.7% in June. Overall, energy prices are still relatively low. On a year-ago basis, prices for energy goods and service fell 11.4%. Food prices fell by 0.9% in July but increased about 5% over the prior six months. On a year-ago basis, food prices were up 4.3% in June.

- The Consumer Price Index (CPI) gained 0.6% in both June and July. Excluding food and energy, the core CPI also increased 0.6% in July. The CPI often runs higher than the PCE index, but both inflation measures suggest that there is ample room for stimulation in the economy before inflation becomes a concern. Inflation data appear in Table 9.

Table 9. Personal Consumption Expenditure Inflation Index by Month

	July 2020	**June 2020**	**May 2020**	**Apr. 2020**	**Mar. 2020**	**Feb. 2020**	**Jan. 2020**
Headline Inflation							
Headline PCE	0.3	0.5	0.1	**-0.5**	**-0.3**	0.1	0.1
% change Year-Ago	1.0	0.9	0.5	0.5	1.3	1.8	1.8
Headline CPI	0.6	0.6	**-0.1**	**-0.8**	**-0.4**	0.1	0.1
% Change Year-Ago	1.0	0.9	0.5	0.5	1.3	1.0	1.0
Core Inflation							
Core PCE	.03	.03	.02	**-0.4**	**-0.1**	0.2	0.2
% Change Year-Ago	1.3	1.1	1.0	0.9	1.7	1.9	1.8
Core CPI	0.6	0.2	**-0.1**	**-04**	**-0.1**	0.2	0.2
% change Year-Ago	1.0	0.7	0.2	0.4	1.5	2.3	2.5

Source: Bureau of Economic Analysis

- Producer prices rose 0.6% in July following a 0.2% decline in June. Prices for final demand goods were up 0.8% while final demand service prices increased 0.5%. The Producer Price Index (PPI) for final demand excluding food, energy and trade services increased by 0.3% for the last three months ending in July. Pressures from producer prices are not shaping up to cause inflation concerns.

Sentiment and Confidence - *Consumer sentiment fell dramatically in March and April during the full shutdown. Since then, the index recovered slowly from its cyclical low. Consumers are balancing expectations for a recovery with fears of another increase in infections and a reversal of re-openings. The massive fiscal and monetary stimulus up to this point has not been sufficient to promote confidence in a strong recovery. Concerns over riots, lawlessness, and social unrest also play a role in dampening views of the future.*

- Consumer sentiment, as measured by the University of Michigan Consumer Sentiment Survey, fell dramatically in March and April during the full shutdown. Since then, the index shows a slow and uneven recovery. The index reached 101 in February before the COVID virus crash in the economy. The reading in August was 74.1, a little above July's 72.5 and far below the 101 index in February. Table 10 provides the monthly University of Michigan Consumer Sentiment Index movement.

Table 10. University of Michigan Consumer Sentiment Survey (1966 Q1 – 100)

	Aug. 2020	**July 2020**	**June 2020**	**May 2020**	**April 2020**	**Mar. 2020**	**Feb. 2020**
Index (1966 Q1 – 100)	74.1	72.5	78.1	72.3	71.8	89.1	101.0
Change in the Index	1.6	**-5.6**	5.8	0.5	**-17.3**	**-11.9**	1.2

Source: University of Michigan

- The survey suggests that a lot of pessimism remains even as a slow re-opening occurs. Approximately 62% of survey respondents expect the country to have bad times over the next 12 months. Prior to the virus shutdown less than one-third of the respondents to the Michigan survey expressed his view.

- The Michigan Survey Index hit a decade-low in April, but it has not reached the low of 60 recorded during the financial crisis.

- The expectations component of the Conference Board survey remains only slightly below the index levels over the past three years leading up to the pandemic.

- Unlike the university of Michigan Consumer Sentiment Index, the Conference Board Confidence Index fell to a cyclical low in August. Table 11 shows the overall monthly Conference Board Confidence Index since January as well as the present conditions and expectations components. The present conditions component of the index fell by more than half in April and remains about half of the January index level. Expectations have declined, but not as dramatically.

Table 11. Conference Board Consumer Confidence Index (1985= 100)

	Aug. 2020	July 2020	June 2020	May 2020	Apr. 2020	Mar. 2020	Feb. 2020	Jan. 2020
Overall Index	84.8	91.7	98.3	85.9	85.7	118.8	132.6	130.4
Present Conditions	84.2	95.9	86.7	68.4	73.0	166.7	169.3	173.9
Expectations	85.2	88.9	106.1	97.6	94.3	86.8	108.1	101.4

Source: Conference Board

- The Conference Board Consumer Confidence Index fell from 91.7 to 84.8 in August. The index softened, likely in response to a resurgence in virus cases. The index fell 22.9 points since February.

- The Conference Board's Leading Economic Index increased 1.4% in July to 104.4, the third monthly increase. While the index suggests that the economy is improving, the index gains are modest. A prolonged series of gains will be required to signal a strong expansion. Table 12 shows the monthly index data.

Table 12. Conference Board Leading Indicator Index (2010 index =100)

	July 2020	June 2020	May 2020	April 2020	Mar. 2020	Feb. 2020	Jan. 2020
Leading Indicators Index	104.4	103	100	97	103.5	111	112
% Change in the Leading Index	1.4	3.0	3.1	**-6.3**	**-7.4**	**-0.2**	0.5
3-Month Moving Average	2.5	**-0.2**	**-3.8**	**-4.6**	**-2.4**	0.1	0.2

Source; Conference Board

- Of the ten index components, four were negative. The weakness within the index is consistent with a recovery without much momentum. Consumer expectations for business conditions and manufacturers' new orders were the key drags on the index.

***Housing –** Housing is providing a leading role in the recovery due to a combination of low interest rates, pent up demand, a desire for "space" to work at home, and segments of the economy with virus-resistant income. Like the rest of the economy, housing crashed in March and April but the rebound has been strong since then. Pending home sales are the highest since 2005 and are 15.5% higher on a year-ago basis while new home sales have gone up by double digits each month since April. On a year-ago basis, the median home price is 7.2% higher.*

- The National Association of Realtors (NAR) pending home sales index gained 5.9% to reach 122.1 in July. The rebound in housing began in May and has now recovered all the losses due to the virus. The July index is the highest since the end of 2005. The gain in homebuying occurred even though virus concerns for open houses and pauses in re-openings created barriers. Table X provides monthly NAR data on pending home sales.

Table 13. Pending Home Sales Index (2001 Index = 100)

	July 2020	June 2020	May 2020	Apr. 2020	Mar. 2020	Feb. 2020
Index	122.1	115.3	99.6	69.0	88.2	111.4
3-month Moving Average	112.3	94.6	85.6	89.5	102.8	107.9
% Change	5.9	15.8	44.3	**-21.8**	**-20.8**	2.3
% change Year-Ago	15.5	5.6	**-5.1**	**-33.8**	**-16.3**	9.3

Source: National Association of Realtors

- New-home sales were up 13.9% to 901,000 annualized units in July. June sales increased 15.1% following a 20.5% increase in May. New-home sales have risen in excess of 10% in each of the past three months and are now at their highest since 2006. Table 14 shows he monthly new home sale data.

Table 14. Monthly New Home Sales Data

	July 2020	June 2020	May 2020	Apr. 2020	Mar. 2020	Feb. 2020	Jan. 2020
New Home Sales (000s of units)	901	791	687	570	612	716	774
% change	13.9	15.1	20.5	**-6.9**	**-14.5**	**-7.5**	5.9
Months of Supply on Market	4.0	4.6	5.4	6.8	6.5	5.5	5.0
Median New Home Price (000s of dollars)	334.0	343.3	317.4	312.6	327.5	332.7	334.1

Source: U. S. Census Bureau, Department of Housing and Urban Development

- The supply of new homes on the market fell to only four months in July. There were 299,000 new homes listed for sale at the end of July, representing the fourth straight months of declines in homes listed for sale. Inventory constraints are still more binding for the existing-home than the new-home market.

- The median new-home price was up 7.2% on a year-ago basis in July, which comes on the heels of an 8.1% gain in June.

- The National Home Builders Housing Market Index (NAHB) continued to rise in August reaching a reading of 78, which is well ahead of the 50 index threshold that indicates a housing market rebound. The index fell from 72 to 30 in April, due to the COVID virus panic.

International Trade *- The U. S. trade deficit will be a drag on third quarter growth as consumers increase purchases of imported goods with openings of the economy. .*

- The U.S. nominal trade deficit widened in July and will be a drag on third quarter growth. Nominal imports jumped 10.9% for the second consecutive month as U. S. consumers began to come out of lockdown. The real goods deficit widened from

$80.3 billion in June to $90.5 billion in July. Excluding petroleum, the real goods deficit came in at $81.7 billion in July, compared with the $71.4 billion in June. Table 15 provides the monthly U. S. trade data.

Table 15. U. S. Nominal International Trade (billions)

	July 2020	June 2020	May 2020	Apr. 2020	Mar. 2020	Feb. 2020	Jan. 2020
Net Trade Balance (billions of $s)	**-63.6**	**-53.5**	**-57.9**	**-53.6**	**-46.1**	**-37.0**	**-43.4**
Exports (billions of $s)	168.1	155.5	141.8	147/4	186.6	209.7	209.3
Imports (billions of $s)	231.7	208.9	199.7	201.0	232.7	246.7	252.6

Source: Bureau of Economic Analysis

- The trade deficit should narrow over the next couple of months. The U.S. dollar has lost momentum, which should support exports.

***Global Economy** – It is not yet clear whether or not the pandemic will have a V or a W global recovery pattern. The IMF recently revised its prediction of GDP growth for 2020 to a 4.9% decline. For 2021 the IMF forecasts a global GDP increase of 5.4%. The Organization for Economic Cooperative and Development (OECD) presents a slightly gloomier forecast of a 6% to 7.6% decline in global GDP for 2020.*

- The International Monetary Fund revised its 2020 "World Economic Outlook" for growth downward to a negative 4.9% from the 3% decline in the April report. For 2021 the IMF projects global growth of 5.4% as the negative impact of the COVID-19 pandemic is slowly reversed. Strong positive growth will be needed for several years just to get back to pre-virus levels of GDP. Table 16 shows the IMF projections for selected countries.

Table 16. IMF Global Growth Projections (June 2020 Forecast)

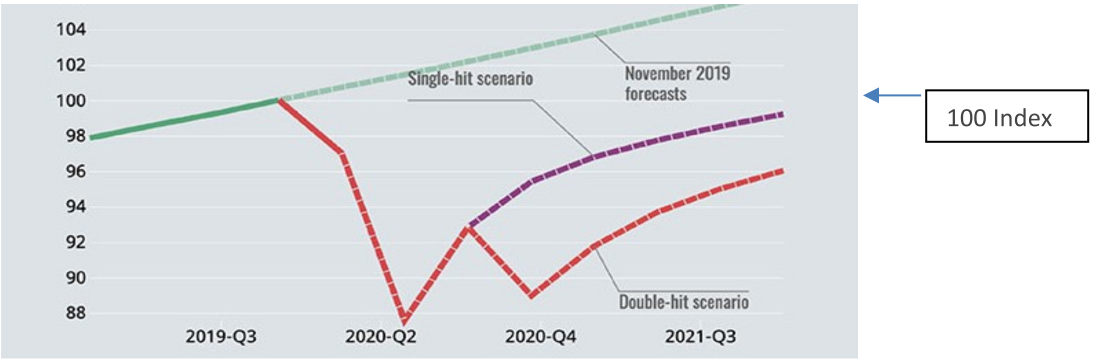
Country/Region	2020 IMF Growth Estimate (%)	2020 IMF Growth Estimate (%)
World Economy	**-4.9**	**5.4**
United States	**-8.0**	**4.5**
Euro Zone	**-10.2**	**6.0**
Germany	**-7.8**	**5.4**
France	**-12.5**	**4.3**
Italy	**-12.8**	**6.3**
Spain	**-12.8**	**6.3**
Japan	**-5.8**	**2.4**
United Kingdom	**-10.2**	**6.3**
Canada	**-8.4**	**4.9**
China	**1.0**	**8.2**
India	**-4.5**	**6.0**
Russia	**-6.6**	**4.1**
Mexico	**-10.5**	**3.3**

Source: International Monetary Fund, World Economic Outlook, June, 2020

- The IMF predicts the worst economic performance for 2020 in France, Italy, and Spain. Oddly enough, China is expected to have prositve growth for the year.

- The Organizataion for Economic Coopeation and Development (OECD) prepared two scenarios for 2020 and 2021. A V recovery (single dip with a recovery) represents one scenario and a W recovery (double dip recession with recovery) is an alternative scenario with a fall rebound in the virus causing a second recession. Figure 6 below illustrates the different GDP paths of the two scenarios. The index of 100 represents GDP at the fourth quarter 2019 level.

Figure 6. OECD Projected Recovery Paths for a Single and Double-Hit Scenarios



Source: 2020 OECD Economic Outlook: Statistics and Projections

- The single dip scenario assumes that there is no second wave of the virus outbreak. In this case, global economic activity falls 6% in 2020 and unemployment reaches 9.2% at the end of the year, compared to the for the 5.4% rate at the end of 2019. The double dip scenario is based on a second wave of infections before the end of the year with new shutdowns in place. In this scenario, world economic GDP falls 7.6% in 2020 and recovers to only 2.8% in 2021. Global unemployment reaches 10% in this case.

- In either of the OECD scenarios, full recovery back to the Q4 2019 level (index = 100) will not take place for at least two years.