

Stonebridge Economic Outlook Forecast Update

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Summary

A few aspects of the economic outlook for 2021 have been revised considerably from the forecast published last December. In particular, real output growth of the U.S. economy is now expected to be much stronger this year than projected earlier as vaccines become more widely administered, government directives restricting activity to contain the pandemic are removed, the Federal Reserve maintains its very accommodative policy stance and the federal government continues to borrow and spend in an attempt to counter the adverse economic effects of the pandemic. Despite the ongoing sluggishness of the labor market, consumers are still acquiring the wherewithal to spend due in large part to the two massive government stimulus/relief programs enacted last year and the even more massive \$1.9 trillion spending program enacted recently. Although stronger gains in consumer spending are expected to be key to the much improved growth outlook for 2021, other sectors of the economy that are now expected to do better than presumed, especially business fixed investment and government spending. Residential investment, which has been stellar throughout the pandemic, should hold up well through most of this year, although it could come under some pressure due to escalating home prices and rising mortgage interest rates. Payroll employment is expected to improve as those industries in the service sector that were hit hardest by the pandemic reopen for business. This aspect of the forecast remains intact from the last time. Indeed, the unemployment rate is still expected to fall to 5.0 percent by the end of the year. Consumer price inflation is showing signs of accelerating a bit in 2021 and is expected to return essentially to its pre-pandemic level at some point this year. Of course, even this much improved forecast is exposed to risks, including the prospect of inflation accelerating far more than expected, the Fed dramatically tapering its very accommodative policy stance or the federal government finding it extremely difficult to borrow the funds needed to provide further debt-financed economic relief. At the moment, none of these risks seem to be a serious threat to the U.S. economy but a milder version of one or all could create headwinds for the U.S. economy beyond 2021.

2021 Economic Outlook Revised Higher

In light of the ongoing munificent macroeconomic economic policies of the federal government, the forecast for 2021 has been revised substantially from last December. As shown in Table 1, real gross domestic product (GDP) is now expected to grow 4.4 percent over the four quarters of 2021, up markedly from the 2.0 percent estimate shown in the forecast three months ago. An important assumption underlying the 2021 forecast is that the COVID vaccines effectively reduce the number of cases and deaths from any variant of the virus by the middle of the year, allowing people to feel less threatened by the virus and giving local governments the confidence to remove all mandates on activity. Although states are reopening, most have eased restrictions to allow businesses to be mostly open but many still recommend or require social distancing, the wearing of masks and limits on the size of social gatherings.

This stronger growth now forecasted for 2021 reflects an upward revision to productivity gains over the four quarters of the year more so than an upward revision to total hours

worked. The implication is that the unemployment rate is still expected to end the year near 5.0 percent, unchanged from the previous forecast. Although most of the gain in employment will occur in those service sector industries that were hit hardest by the restrictions on activity in an attempt to ease the pandemic, job growth may not be as stellar as the drop in the unemployment rate suggests. In particular, I doubt that labor force participation will return to the level it was at pre-pandemic anytime soon, in large part because the U.S. population continues to age; those aged 65 or older accounted for 16.5 percent of the population in 2019 (most recent data available), up from 16.0 percent in 2018 and 14.5 percent in 2015. As this cohort of the population retires, labor force participation declines, which means fewer new jobs are needed to lower the unemployment rate. Although 2020 data is not yet available, the older members of our population were hit hardest by the pandemic, suggesting that cohort may not have increased as much as it would have without the pandemic. After all, life expectancy at birth in the U.S. was 77.8 years in 2020, down a year from 78.8 years in 2019.



Other features of the current forecast for 2021 are little changed from the December forecast. In particular, consumer price inflation, crude oil prices, the broad measure of the exchange traded dollar, S&P 500 operating earnings per share and short-term interest rates over the four quarters of 2021 are roughly the same. The only items that have been revised meaningfully from last time are the yield on the 10-year Treasury note and the interest rate on the 30-year fixed-rate conventional mortgage, owing to the recent backup in such rates.

The 10-year Treasury note yield currently stands at 1.55 percent, compared with a level of 0.54 percent on March 9, 2020. Although the previous forecast dated December 9, 2020 expected the 10-year Treasury yield to end 2021 at 1.2 percent, the current yield already exceeds that forecast. Indeed, given the improved outlook for real growth through the end of this year, as well as the increased likelihood of substantially higher federal debt levels by the end of this year, it now looks as if the 10-year Treasury yield will continue to rise to a level close to 2.0 percent by the end of the year. Moreover, as the economy

Table 1 U.S. Economic Forecast

2021

	Q1f	Q2f	Q3f	Q4f	2020	2021f	2022f
Real Gross Domestic Product	5.0	4.0	5.8	2.5	-2.5	4.4	2.1
Consumer Price Index, All	2.4	2.5	2.2	2.2	1.2	2.3	2.4
Consumer Price Index, Core	2.0	2.1	2.1	2.2	1.6	2.1	2.5
GDP Chain-Type Price Index	1.8	1.8	1.9	1.9	1.3	1.9	2.1
Civilian Unemployment Rate	6.2	5.8	5.4	5.0	6.8	5.0	4.2
Price of WTI crude oil (\$/bbI)	57.0	60.0	62.0	61.0	42.4	61.0	58.0
Trade-Weighted Dollar	112.3	111.1	110.5	1 09.6	114.2	109.6	1 05.0
S&P 500 Operating Earnings	38.6	40.8	41.0	42.1	118.5	162.5	172.7
Percent vs. Year Ago	97.9	52.3	8.2	22.6	-24.4	42.3	6.3
91 -Day Treasury Bill Rate	0.1	0.1	0.1	0.3	0.1	0.3	1.0
10-Year Treasury Note Yield	1.4	1.6	1.8	2.0	0.8	2.0	2.5
30-Year Mortgage Rate	3.5	3.5	3.8	4.0	2.8	4.0	4.5
Bank Prime Rate	3.2	3.2	3.2	3.5	3.2	3.5	4.0

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Standard and Pool's, Federal Reserve Board, Department of Energy, and Federal Home Loan Mortgage Corporation.

Annual changes in real gross domestic product (GDP) and all measures of inflation are percent changes from the fourth quarter of the previous year to the fourth quarter of the year indicated. The annual estimates of the unemployment rate, the price of crude oil, the trade-weighted dollar and all interest rates are averages for the last quarter of the year indicated. S&P 500 operating earnings per share are for the period indicated.

Quarterly changes in real GDP and all measures of inflation are percent changes from the previous quarter at annual rates. For the unemployment rate, the price of crude oil, the trade-weighted dollar and all interest rates, quarterly estimates are averages for the quarter indicated. S&P earnings are per share for the period indicated. Trade-weighted dollar is the new broad index from the Federal Reserve Board.

f-forecast; bold type reflects a major change from the previous forecast



improves, it becomes increasingly likely that the Federal Reserve will feel pressured to shift its monetary policy stance to be less accommodative sooner than they have advertised recently. Of course, the Fed will not change course until the economic recovery can survive without additional government assistance, a situation that may not become apparent this year. My guess is that as long as the economy appears to be struggling from the effects of the pandemic, the feds will provide further assistance.

Although stronger gains in consumer spending are expected to be key to the improved growth outlook, other sectors of the economy are now expected to do better as well, including business fixed investment and government spending (see Table 2). Business fixed investment should improve markedly in 2021, as businesses increase spending on new technology designed to replace some jobs. This may be especially true of the service sector industries hit hardest by the pandemic. Electronic kiosks, self-checkout facilities and drive-through will become more widely available, as well as the ongoing acceptance of online shopping for both pickup and delivery.

Government spending on consumption and investment also is expected to improve this year owing to strong gains in infrastructure and education spending. Over the twelve months of 2020, public construction spending increased 3.8 percent and climbed 1.7 percent in January from a month earlier. I suspect that such spending will hold up well for most of this year, especially if the Biden administration is successful at getting its infrastructure spending initiative enacted. In addition, state and local government spending on education and safety as the economy reopens also should increase markedly this year.

Residential investment, which was stellar throughout the pandemic, is expected to hold up reasonably well over the first half of the year but it could come under some pressure due to rising home prices and further increases in mortgage interest rates as the year unfolds. Moreover, with schools likely returning to classroom instruction and many workers returning to their offices, it is unclear that demand for housing will be as strong this year as it was last year.

Table 2
Details of Real Gross Domestic Product Forecast, 2021
(Annual Percent Change)

	Q1	Q2	Q3	Q4	Q4/Q4	Annual
Personal Consumption Expenditures	5.0	4.0	6.2	2.4	4.4	4.0
Nonresidential Fixed Investment	10.9	8.8	8.0	5.3	8.4	9.4
Residential I nyestment	15.0	8.0	5.0	3.0	8.0	15.6
Government Spending	4.5	2.0	7.0	3.2	3.6	1.3
Exports	5.5	7.0	7.0	3.5	6.8	7.6
Imports	11.5	10.0	10.0	6.0	9.8	15.3
Final Sales	5.0	3.7	5.9	2.4	4.3	4.5
Gross Domestic Product	5.0	4.0	5.8	2.5	4.4	4.9

Quarterly data are percent changes from the previous quarter at annual rates. Q4/Q4 is the percent change from the fourth quarter of 2020 to the fourth quarter of 2021. Annual is the percent change from all of 2020 to all of 2021.



Based on what could be considered reasonable assumptions about the pandemic, monetary policy and federal stimulus spending in 2021, real GDP should be quite stellar in 2021 but maybe not quite as robust as the consensus forecast now seems to be leaning. In that regard, when comparing forecasts, make sure the measures being compared are the same. For example, real GDP for 2021 is expected to increase 4.4 percent on a fourth-quarter to fourth-quarter basis but 4.9 percent on a year-over-year basis (see the last two columns in Table 2). Remember that growth rates of the same data series can be expressed in different ways. I prefer the fourth-quarter to fourth-quarter measure because it reflects economic developments over the course of the calendar year indicated, whereas the year-over-year measure essentially reflects economic developments over two calendar years, the year indicated and the preceding vear.

Don't Fight the Feds

The adage often quoted by financial market participants is "don't fight the Fed" referring to the impact of monetary policy by the Federal Reserve (Fed) on the economy and markets. Recent developments may suggest that the adage be changed to "don't fight the feds" referring to the aggressive use of both monetary and fiscal policy measures to combat the adverse economic effects of the pandemic. In particular, with the Federal Reserve maintaining a very accommodative policy stance, federal fiscal policy has been in overdrive since March of last year. For example, for all of 2020, personal income increased \$1.14 trillion or 3.7 percent, reflecting primarily the \$1.09 trillion increase in federal government social transfer benefits paid to persons last year. Indeed, if the income measures are adjusted for inflation, personal income excluding the government transfer benefits paid to persons actually declined 0.9 percent over the twelve months of 2020.

In that regard, the start of 2021 appears to be on that same path. The Coronavirus Response and Relief Supplemental Appropriations Act of 2021 (actually signed into law on December 27, 2020) provided a massive \$1.98 trillion (annual rate) increase in government social

transfer benefits paid to persons in January. Interestingly, the government benefits actually exceeded the total increase in personal income in January, continuing the recent trend of government payments to persons being the primary source of personal income.

As shown in Chart 1, real personal income (personal income adjusted for inflation) in January jumped 11.4 percent from a year ago compared with the 2.4 percent increase over the twelve months ended in December 2020. However, if current transfer benefits are excluded, real personal income in January actually declined 2.0 percent from a year ago, compared with a decline of 0.9 percent in December 2020. In other words, without government relief, real income in January would have been down from a year ago, something that typically occurs during a recession.

Clearly the last year was unprecedented in terms of the source of income growth—government assistance has never been as important to income growth as it was over the last year. More importantly, it looks as if the economy is in store for more such benefits given the whopping \$1.9 trillion relief/stimulus package enacted recently, called the "American Rescue Plan." The headline item in the package is the \$1400 per person direct payment to qualifying individuals, including dependent children, which is the third and the largest direct payment paid out so far during the pandemic (the first was \$1200 and the second was \$600). As evident in the data over the last year, the infrequency of government payments directly to persons causes the monthly personal income data to be very volatile, surging in the month the direct transfer payments to persons are received but then dropping in the preceding month in the absence of another direct payout. Despite the lumpiness of the relief payments, they still boost personal income on average for the calendar year.

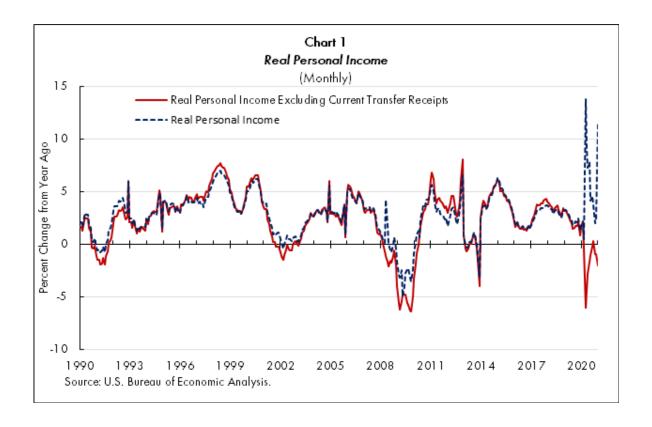
In the meantime, real personal income growth most likely slowed sharply in February following the surge in January, reflecting the absence of another relief payment immediately as well as the prospect of another decline in real personal income excluding current transfer receipts.



Despite the 379,000 gain in payroll jobs in February, a shorter average workweek actually caused total hours worked to decline more than the small gain in average hourly earnings. The net result is that wages and salaries, the largest component of personal income, most likely fell 0.3 percent in February.

Of course, under the American Rescue Plan, personal income is likely to take another sharp turn upward in March or April, depending on how quickly the \$1400 payments are made. In addition, the Biden Administration is expected to recommend a very ambitious infrastructure spending bill to provide even more stimulus for an economy still struggling with the pandemic. Although infrastructure spending reportedly has bipartisan support, there are considerable differences of opinion on what that package should look like, which could delay this legislation until later this year. The bottom line is that the federal government continues to provide considerable support for the economy during the pandemic, which will have a significant impact on the outlook for 2021.

That said, consumer spending, especially discretionary spending, tends to reflect permanent income more so than transitory income. Over the four quarters of 2020, real personal income rose 2.7 percent, while real personal consumption expenditures declined 2.6 percent. Clearly consumers failed to spend all of their government pandemic assistance payments last year, causing a surge in the personal saving rate to 16 percent for all of 2020 versus 7.5 percent for all of 2019. Of course, restrictions on activity because of the pandemic may have encouraged consumers to save more of their income than usual. Nevertheless, there was a similar reaction in January of this year when the personal saving rate jumped to 20.5 percent owing to relief benefits paid to persons. Interestingly, the direct benefits to persons in January were not only less generous than the previous benefits, consumers had far more opportunities to spend the money this time. The implication is that consumers still consider government relief benefits paid directly to persons as transitory, at least for now.





That does not mean that the saved money is never spent. The unemployed of course will need any savings they might have mustered during the pandemic to survive in the absence of further government assistance. On the other hand, those who have a job and income without further assistance also may increase spending through the wealth effect (willingness to spend more and save less of current income). After all, savings as defined in the National Income and Product Accounts (NIPA) increases household net worth only by spending less than income. The bottom line is that as long as the government continues to provide relief assistance and the economy continues to reopen, consumers will have the means and the propensity to increase spending.

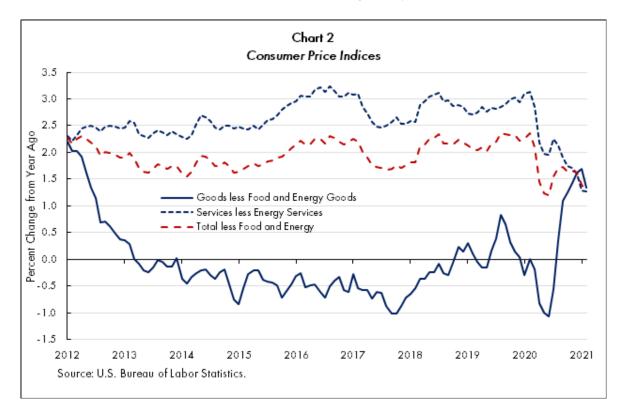
Inflation Stirring?

Overall consumer price inflation has been very subdued over the last year but the components of the price index suggest that a pickup may be in store. Over the four quarters of 2020, the overall consumer price index (CPI) increased a mere 1.2 percent, while the core CPI, which excludes the volatile food and energy prices, was up 1.6

percent. Indeed, to get a feel for what may be ahead for overall inflation, economists tend to focus on the core measure. This does not mean that economists feel that food and energy prices are unimportant. As history has demonstrated, food and energy prices are extremely important to consumers but they tend to temporarily distort the overall inflation picture because of their volatility.

So what does the core CPI suggest for overall inflation ahead? The answer may be shown in Chart 2 that includes three core consumer price indices; CPI services less energy services, CPI goods less food and energy goods and total CPI less food and energy (core CPI). One interesting aspect of inflation is that the increase in the core CPI on a trailing twelve month basis was a mere 1.3 percent in February, down markedly from 2.4 percent in February 2020.

An interesting aspect of this slowdown was its source. In particular, the CPI for services excluding energy services decelerated markedly over the last year, most likely reflecting the drop in activity in many service industries owing to the pandemic. On the other hand, another interesting





development was the upward move in the percent change from a year ago in the price index for goods less food and energy goods to 1.3 percent in February from zero percent a year earlier. Whether this was an inflection point in goods inflation is still to be determined but it certainly has stirred expectations of such a possibility.

In particular, assuming that goods inflation remains at this higher level for the remainder of this year while service inflation returns to its pre-pandemic level, then overall core inflation is likely to track somewhere in the 2 percent to 2.5 percent range. The last time the percent change from a year ago for all three price indices shown in Chart 2 converged was at 2.3 percent in January 2012. However, the 10-year Treasury yield was 2.0 percent and the 3-month Treasury bill yield was 0.9 percent. I expect that the next time these three inflation indices converge, it will be back to something near 2.3 percent later this year. Such an outcome by itself may not be a problem for the economy but a prolonged period of higher inflation would eventually lead to higher interest rates, which could be more of a headwind for an economic recovery so dependent on debt-financed federal spending for its survival. In order for the expansion to survive, this too will need to change. The forecast is that it will but the outcome may not be as robust as the consensus now expects.

Implication for Financial Markets

Given the revised economic forecast, outcomes in financial markets are likely to be mixed. Longer-term interest rates are expected to continue to drift higher this year, suggesting that market prices on outstanding debt obligations will fall. Of course, longer-duration obligations would be hit harder than short-duration obligations. Exactly how hard the hit is still unclear. After all, it is doubtful that the Federal Reserve will shift its monetary policy stance anytime soon, unless inflation starts to be a problem, which is highly unlikely this year. In the absence of such a shift, a large part of the deterioration in bond prices may have occurred already. Also, because the economy is expected to continue to recover this year, credit spreads, which have already narrowed markedly from the early days of the pandemic, are expected to narrow a bit further on average

over the remainder of this year, suggesting that corporate bond yields rise somewhat less than Treasury yields.

The stock market continues to amaze. Despite a nearly 34 percent plunge in March of last year, the S&P 500 stock price index at the end of last year was up 16.3 percent from its level at the end of 2019. So far this year, the S&P 500 price index is up nearly 4.0 percent. From a valuation perspective, operating earnings per share for the S&P 500 is expected to surge 42 percent this year, following a decline of 24 percent for all of 2020 (based on S&P 500 operating earnings estimated by S&P Dow Jones, which may differ from operating earnings estimates from other investor services). If a price/earnings (PE) ratio of 25 (which was roughly the average PE ratio for all of 2020) is applied to the operating earnings estimate of \$162.5 for all of 2021 shown in the forecast (see Table 1), it suggests a price level at the end of the year of 4200 for the S&P 500 stock price index.

The concern is that if interest rates edge higher as expected, a PE ratio of 25 at first blush may seem too high. However, the many statistical relationships between the PE ratio and the 10-year Treasury yield relies on various definitions of multi-year moving averages of the PE ratio, which complicates using the relationship to predict the PE ratio for the year ahead. For example, if the moving average of the PE ratio in 2021 was closer to its historical average of 19.4, it would suggest a PE ratio for all of 2021 of about 20. If this PE ratio is applied to the \$162.5 operating earnings estimate for all of 2021, the SP 500 price index could end the year at a far less attractive 3300. However, despite the expected rise in the 10-year Treasury yield in 2021, it still will be well below its historic average. Based on the relationship between interest rates and PE ratios, the PE ratio most likely will be well above average again this year.

On balance, stock valuations seem to have priced in the assumptions that the pandemic is over or nearly over, that consumer pent-up demand will unleash a surge in economic activity over the remainder of this year and into 2022, and that inflation will remain benign. In addition,



market participants seem convinced that the Federal Reserve will continue to accommodative any future federal spending programs as needed for as long as it takes to repair all the economic damage inflicted by the pandemic, which is exactly what U.S. macroeconomic policy makers are saying at the moment. Stay tuned. It could be a very interesting year for economists, even if potentially a somewhat challenging year for investors. On second thought, it could be a challenging year for economists as well.

The views expressed here reflect those of Daniel E. Laufenberg, Ph.D. as of the date noted and not necessarily those of Stonebridge Capital Advisors. They may change as economic fundamentals and market conditions change. This commentary is provided as a general source of information only and is not intended to provide investment advice for individual investor circumstances. Past performance does not guarantee future results.

