In each quarterly issue of "U.S. Business Cycle Barometer," we highlight and comment on key economic activity data, and we evaluate their potential relevance for risks to expansion.

U.S. Business Cycle Barometer

February 13, 2018

Summary

S&P Global sees a 10%-15% risk of recession in the U.S. economy over the next 12 months--down from 15%-20% in our November publication, despite recent financial market strains. Compared to recent years, the economic growth momentum is stronger and broad-based to start the year; macroeconomic policies remain growth-supportive for the next 12 months, notwithstanding a gradual normalization of monetary policy.

The uptick in economic growth in the second half of 2017 more or less closed the output gap, defined as the difference between actual output and estimated potential output, for the first time in a decade. This marks a regime shift for the economy: moving from a recovery stage (faster-thantrend growth but below capacity level of output) to a boom stage (faster-than-trend growth and above-capacity level of output). Still, with the output gap only narrowly closed and uncertainty around the estimate of potential output, inflationary pressures could remain modest in 2018.

Data from the key coincident indicators we monitor show that the expansion is either in or approaching late cycle. However, this does not mean that a recession is on the horizon--especially since none of these indicators show the economy is overheating in historical terms.

Relatedly, recently passed tax cuts in the neighborhood of \$1.5 trillion over 10 years, combined with the budget agreement that increased caps on government discretionary spending by \$296 billion for fiscal years 2018 and 2019 combined, will provide some late-cycle stimulus to the U.S. economy. As such, we anticipate at least three rate hikes (with rising chances of a fourth) of 25 basis points (bps) each in 2018 while long-term rates also rise driven by pass-through from short-term rates, boost to growth and inflation expectations from fiscal stimulus and a larger budget deficit.

The principal leading indicators point to a continuation of growth momentum in the first half of 2018. We expect economic growth this year--as measured by real GDP--to be 2.8% (annual average), following 2.3% growth in 2017. The economic expansion is likely to transition back to its longer-run trend of little under 2% growth by 2020 as the boost from the fiscal stimulus wanes and the cumulative monetary tightening begins to bite.

We are all but certain that the current expansion—at 104 months and running—will become the second longest (106 months in the 60s) in the post–World War II era, and there is a good chance it will surpass 120 months (in the 90s) to become the longest expansion. Barring a shock, this expansion has staying power.

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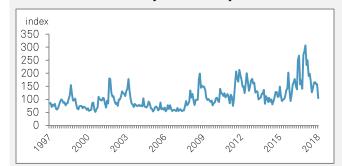
Recession Risk

We anticipate that the U.S. economy will continue to mature on its expansion path in the coming quarters. Data on orders, production, labor demand, sentiment, and financial conditions all support this. Growth has also picked up globally, and policy uncertainty worldwide has steadily declined since January of last year (see chart 1). Risks to growth in the next 12 months appear roughly balanced.

Driven by the current strength of economic and financial indicators, our econometric model suggests small probability of a recession in the coming 12 months, despite the recent swings in the stock market (see chart 2). Odds of a recession using an augmented yield curve-based recession probability model is just under 10% (was little over 6% in our November report)--still well below the thresholds for the prior six recessions.

Still, beyond our quantitative assessment, there is government-related market risk, geopolitical risk, and governance risk that we cannot ignore. In relation to our past assessment, the recent budget deal reduces uncertainties and the threat of a government shutdown. The deal could boost contribution to growth from the public sector more than earlier thought. It also suspends the Federal government debt ceiling through March 2019. Still, in the near term, a prolonged sell-off in the financial markets risks derailing economic growth momentum. In the medium term, the current administration's protectionist tendencies related to trade is a wildcard as we move toward the mid-term Congressional elections later in the year. At the same time, a lot hinges on how the economy and the monetary authorities respond to recently passed fiscal stimulus, especially given that the Fed deems the output gap closed (see chart 3) and the economy at full employment (see chart 4).

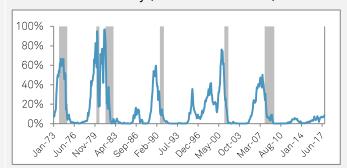
Global Economic Policy Uncertainty Index



Source: Baker, Bloom, and Davis; <u>www.policyuncertainty.com</u> Data until January 2018.

ART 2

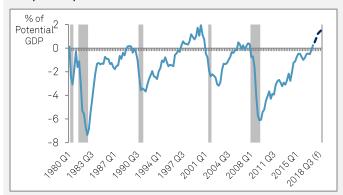
Recession Probability (12 Months Forward)



Note: Parameter estimated by Probit regression using data 1973-2009; recession predicted using data through January 2018. Yield curve model augmented with S&P500 and estimate of excess bond premium.

CHART 3

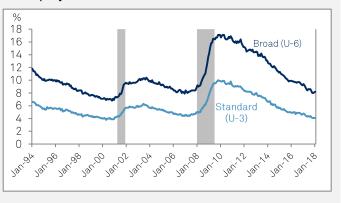
Output Gap



Sources: CBO and S&P Global Ratings' forecasts.

CHART 4

Unemployment Rates



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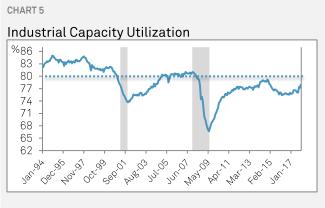
Sources: BLS and the Federal Reserve; Data until January 2018.

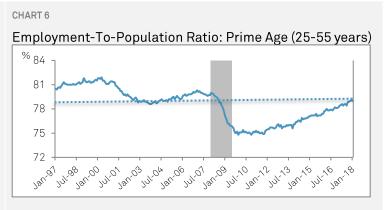
While there is no shortage of low-probability/high-impact risks facing the U.S. (e.g., war), but if history is any guide, the end to current cycle would more likely result from the asset price bubble bursting, an oil-price spike, or the central bank's policy action, which in the past has tightened aggressively either prematurely or too late.

While these three most likely hypothetical endings are not entirely independent of each other, the risk to expansion from oil price shock has receded since the U.S. shale—oil producers became major players in the oil market. Any significant price rise will cause U.S. producers to ramp up production, which in turn will limit price rise. Meanwhile, although extreme financial dislocations in the near term are not evident, there is no shortage of concerns. The market turmoil of late comes at a time when the stock market appears overvalued by most traditional measures. Rich valuation means the expected total returns in the future of investment made today in the stock market will be weak, or worst case scenario, a crash. Still, the stock market is not the real economy. Instead, profits—a better gauge of the real economy—appear healthy with positive earnings. The general tone of recent economic data remains broadly upbeat.

At the same time, the Fed, while remaining cautious in its normalization path until now, brings heightened uncertainty this year from challenges to the standard policy framework that is more or less predicated upon the estimate of the potential of the economy, which is not directly observable, and personal changes that will reshape the outlook of U.S. monetary policy.

The Fed is now working under the assumption that the economy is in full employment. But alternative measures of spare capacity suggest there could still be some ways to go to complete a normal cyclical recovery. In the products market, capacity utilization in the industrial sector at 77.9% is still below past expansion averages (see chart 5), and core price inflation, though slowly making its way toward the Fed's 2% target from low levels, has yet to show signs of pressure from resource utilization. In the labor market, employment-to-population rates for prime-age workers (ages 25 to 54)--which is unaffected by voluntary retirement--are still below prerecession levels and well below 2000 levels (see chart 6). The shortfall applies to both men and women, at varying degrees of education (not all by the same amount), suggesting more folks could be pulled in from the sidelines as demand picks up. There is a good chance that a wage inflationary spiral won't kick off until the unemployment rate falls even further. And relatedly, if the economy's current potential is indeed greater than the Fed's estimate (or even ours), then the recent stimulus will lift the growth rate for several years (assuming it's not muted prematurely by the Fed).





Sources: The Federal Reserve; Data until December 2017. Sources: BLS; Data until January 2018.

In terms of personal changes, there is a new chairman at the Federal Reserve (Governor Jerome Powell) and two new governors—Randal Quarles and Marvin Goodfriend. This leaves three more seats to be filled by the current administration. In addition, the usual annual rotation of regional Fed presidents has likely brought a more hawkish-leaning tilt to the Federal Open Market Committee (FOMC) voting committee compared with last year.

All told, the risk from more aggressive monetary policy normalization by the Fed has increased a bit, especially given the uncertainty about the path of natural/neutral rate of interest--a.k.a. r*--generally taken as the real Fed funds rate consistent with stable inflation, which is neither expansionary nor contractionary. The estimates of near-term and longer-run r* vary

considerably, depending on assumptions of future productivity growth, the strength of global growth, and the potential changes in fiscal policies. As the outgoing chairwoman Janet Yellen put it last year, "the scope for surprises is considerable."

In all likelihood, the forces discussed above are more likely to cause a downshift in growth rather than a something worse. At the margin, it still adds to our formally calculated chance of a recession. Thus, our quantitative-plus-qualitative analysis puts our forecast for a recession in the next 12 months at 10%-15%.

Economic Indicators Point To Sustained Growth Momentum

As the U.S. economy continues its transition from its recovery to a boom stage, a majority of high-frequency leading indicators are portending positive growth momentum starting in 2018 (see table 1).

TABLE 1
Near-Term Growth Momentum Is Likely To Continue

Leading indicators	Key element driving momentum	Growth signal
Term spread	Reflects expectations	<mark>Neutral</mark>
Credit spread		Positive Positive
S&P 500		<mark>Neutral</mark>
Consumer sentiment		Positive Positive
Jobless claims	Responds rapidly to changing business conditions	Positive
Freight Transportation Index		Positive
Building permits (single-family)	Signals real production activity coming down the pipeline	Positive Positive
ISM (MFG) New Orders Index		Positive Positive
Chicago Fed NFCI Index	Availability of credit and level of financial stress	Positive Positive
Fed's Loan Survey		<mark>Neutral</mark>



The slope of the Treasury yield curve (i.e., the term spread) has historically been an excellent predictor of changes in the business cycle. The yield curve flattened modestly in November and December, then steepened slightly since mid-January, and it remains positive (see chart 7). The broad rise in yields across the yield curve mainly reflects changes in the implied policy path for interest rates and a higher-term premium. It appears the reduced chances of deflation has moved the term premium higher (although still in negative territory in all of 1-year to 10-year yields, based on New York Fed's ACM model), thus lifting the long end of the curve recently, while tentative signs of wage growth in the latest employment report increased the market's expectation of Fed moving quicker in the short end. Add to that the expectation of increased U.S. Treasury debt in the pipeline (from higher government spending plans and lower tax revenue from tax cuts) in the next two years, and we are looking at a near-term shift in the spreads until all this new information gets sorted out. (An aside: A Fisherian decomposition of the recent increase in the 10-year Treasury yield since Dec. 12 (pre-December interest rate policy meeting) shows 55% of the 45 bps increase is due to a rise in real interest rate and the other 45% is accounted for by a boost in inflation expectations.)

On the one hand, absent any signs of a pickup in productivity growth, it is likely that we see a cyclical readjustment where short-term yields will continue to be lifted by the Fed's rate hikes in the next couple of years while the long-term yield faces resistance, thus flirting with inversion sooner. On the other hand, if the economy has indeed fundamentally shifted gears with a rise in productivity also underway, both the long and short ends of the curve have some room to run. It is too early to tell definitively.

Relatedly, equity markets--another leading indicator--is likely to see pressure that offsets tailwinds from recent tax cuts if wage inflation indeed accelerates. If productivity doesn't follow, it eats into firms' profits, thus weighing on equity prices; if productivity does follow, some of the pressure may be defrayed but an upward shift in the yield curve would still pressure asset valuations more broadly (through a higher terminal discount factor), thus weighing on equity prices.

The other leading indicator from the capital markets, the credit spread, continues to show favorable credit market sentiment. Credit conditions for borrowers in the U.S. remain broadly positive, with credit spreads near the lowest and least volatile since the financial crisis. Some risks on the horizon, as highlighted by S&P Global Ratings' credit conditions committee, include a hit to insurers in light of the recent hurricanes, somewhat more restrictive financing conditions in light of the Fed's monetary policy tightening, and retailers' continued struggles to stay afloat. That said, nonfinancial debt outstanding as a share of GDP has already reached its previous peak, moving this financial indicator into a relatively late-cycle stage. This could dampen corporate borrowing at the margin, which would constrain business investment and become a negative sign for equity markets.

Meanwhile, outside of the capital markets, initial jobless claims--a forward-looking indicator for the labor market--indicate momentum to remove further slack. The upturn in the Institute for Supply Management (ISM) manufacturing new orders, which lead the actual production, suggests that industrial and manufacturing activity is poised to rise from its slump of the last two years. Building permits, a forward-looking indicator of residential investment, are still lagging behind prior expansions but continue to rise steadily as fundamentals of housing demand--low mortgage and unemployment rates with--remain solid. This is reaffirmed by homebuilder attitudes about sales prospects, with the National Association of Home Builders index of single-family sales close to a 19-year high in the beginning of 2018. The composition of housing is now shifting toward single-family as multifamily appears to be leaving its growth in the past after peaking in 2015.

The Freight Transportation Services Index, which captures the movement of products by the mining, agricultural, and manufacturing sectors of the economy (connecting manufacturers to sources of raw materials, intermediate goods, and spare parts, as well as providing the goods sold by wholesalers and retailers), has risen recently, pointing to fewer headwinds from the inventory cycle, seen in the past couple of years when inventory-to-sales ratios were running high.

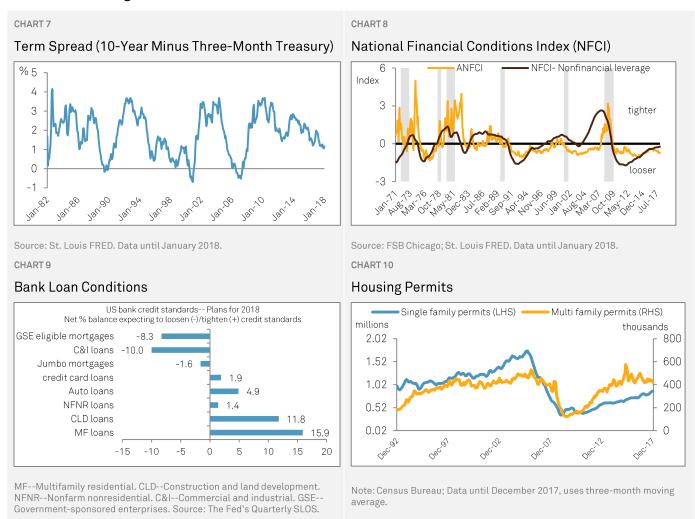
At the same time, according to the Fed's latest loan survey, banks expect to ease or leave unchanged lending standards over the coming months for residential real estate lending, as well as for most consumer loans except auto and credit card loans (see chart 9). Within commercial real estate, a significant proportion of banks reported tightening lending standards for loans secured by multifamily residential properties, suggesting that lenders are attuned to potential imbalances and are beginning to slow lending in this area. Standards for commercial and industrial (C&I) loans to businesses are anticipated to loosen--the easing in C&I credit conditions should lead to some stabilization in C&I activity after the sector saw declines of both supply and demand.

The Chicago Fed's National Financial Conditions Index (NFCI), which is a composite measure used to sense stress in the financial system, remains below zero, which is positive for growth. A zero value for the adjusted-NFCI (adjusted for business cycle) can be thought of as the U.S. financial system operating at a historically average level of risk, credit, and leverage (see chart 8). In other words, the financial cycle remains far from the cyclical peak that shouts of a large recession down the road any time soon.

The key is whether the tightening in credit standards in an individual corporate sector spreads to other sectors that appear to have good underlying fundamentals. This is especially the case in the household sector, which now has healthier and more manageable debt-to-income ratios, helped by aggressive deleveraging after the crisis and employment gains that have remained strong, and wages that are starting to pick up as oil prices remain stable at a lower equilibrium. As long as the credit availability for residential mortgages and consumer lending does not tighten significantly, the economy is likely to keep growing.

All said, leading indicators help signal turning points in business cycles; so far, all indications--from the financial market, the products market, and the labor market--point to sustained growth for the U.S. economy.

Selected Leading Indicators



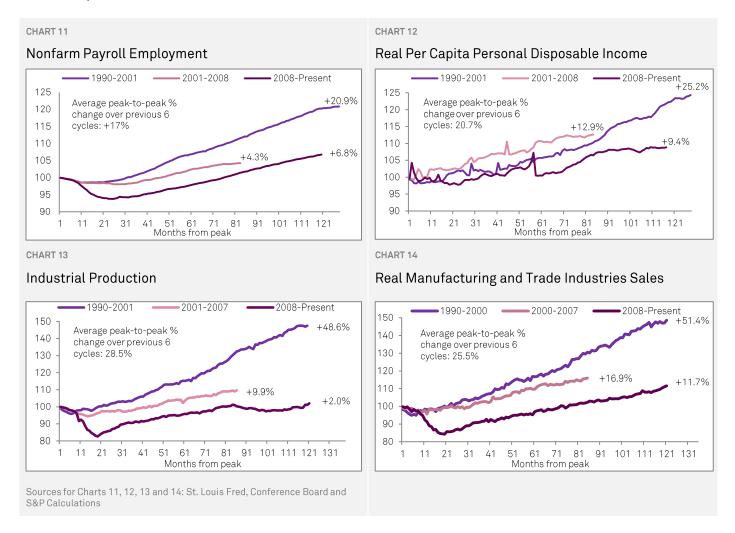
Where Do Coincident Indicators Stand?

Collectively, the coincident indicators from the Conference Board suggest the economy still has room to grow as it approaches the late-cycle stage of expansion. Compared with the average of the prior six cycles, all four key indicators continue to depict smaller cumulative growth in the current cycle from the previous peak. As such, signs of overheating in the broader economy are scant. That said, a comparison of the performance of coincident indicators with previous expansions benchmarked at this stage of the business cycle using the output gap (i.e., an output gap of around 0%, as opposed to their peaks) yields a smaller gap compared with previous cycles.

While growth in nonfarm payrolls from 2008 to now has eclipsed that of the preceding cycle, it is still well below the average 17.0% growth across the previous six cycles (see chart 11). Gains in payroll started to decline after peaking in 2015, but they are still averaging around 176,000 per month in the last 12 months, which is above the range that we estimate will be consistent with absorbing new entrants to the labor force in coming years. Income gains, after adjusting for inflation and population, are similarly far below average, offering further evidence that this expansion is not yet at a late-cycle stage (see chart 12). The pace of industrial production has been extremely sluggish (but picking up momentum of late), which is also reflected in below-average capacity utilization in the manufacturing sector (see chart 13). Gains in manufacturing and trade sales lag behind those of previous cycles; so far this cycle, real sales have increased just 11.7% compared with average peak-to-peak growth of 25.5% (see chart 14).

Selected Key Coincident Indicators

(Previous peak indexed to 100)



Note: Please see our previous editions of the "U.S. Business Cycle Barometer" (published May 4, 2017; Aug. 11, 2017; and Nov. 8, 2017) for other related research pertinent to this quarterly series.

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