Daiwa Capital Markets

U.S. Economic Comment

- Consumer inflation: in step with the retreating economy
- The Fed: aggressive QE; more credit facilities, but slow implementation
- Coronavirus: bending the curve

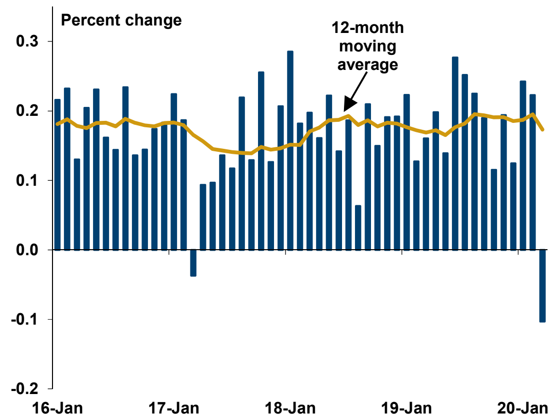
Michael Moran
Daiwa Capital Markets America
212-612-6392
michael.moran@us.daiwacm.com

CPI: Virus-Related Changes

The coronavirus has had a profound effect on the labor market, with claims for unemployment insurance moving to mind-boggling levels, but it also seems to have influenced the rate of inflation.

The March reading on the consumer price index showed a decline of 0.4 percent. Analysts were looking for a drop in the headline index because of soft energy prices, but the decline exceeded the consensus estimate of -0.3 percent. The surprise occurred in the core component, which fell 0.1 percent, softer than the expected increase of 0.1 percent and only the third decline since the recession. One of the earlier declines occurred in March 2017, driven by reduced cell phone charges; the other occurred in January 2010, with several items contributing to the softness.

Core CPI



Source: Bureau of Labor Statistics via Haver Analytics

Two areas sensitive to the effects of the virus contributed noticeably to the decline in March: Charges for hotel stays dropped 7.7 percent and airfares tumbled 12.6 percent. Large shifts in hotel fees are quite common, but the latest change easily represented a record decline (previous record was -4.0 percent, data back to 1967). The level of average airfares in February was a bit on the high side and was perhaps due for a correction, but the decline in travel associated with the virus undoubtedly added to the softness.

Like the cost of hotel stays, prices of apparel registered a record decline of 2.0 percent (previous record was -1.9 percent in 1949; data back to 1947). Apparel prices can be volatile, and factors other than the virus might have been in play, but a lack of buyer traffic probably induced retailers to trim prices.

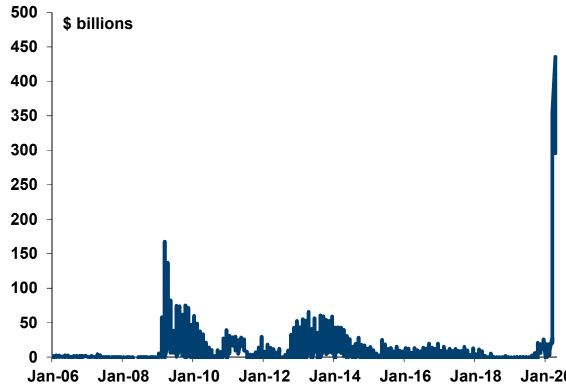
The virus also might have triggered some price increases. The index for food at home (i.e. purchases for consumption at home, in contrast to meals at restaurants) rose 0.5 percent, one of the larger increases of the past several years. Panic-like activity at grocery stores was probably a factor behind the above-average increase.

The Fed: Offering More Support

The subdued inflation rate gives the Fed a green light to adopt an aggressive policy stance, although it probably would have given priority to fighting the downturn even if inflation were stirring. The Fed is continuing to purchase Treasury and mortgage-backed securities at a frenetic pace, with average acquisitions in the past three weeks more than double the volume seen during the Fed's most active period in the financial crisis (chart, next page). Purchases eased some in the latest week, but the central bank was still quite active.

In addition, the Fed plans to provide additional support through various credit facilities. Some of the programs were resurrected from efforts used during the financial crisis; others are new. The Fed has moved rapidly in announcing its plans; indeed, it is difficult to keep pace with its efforts. We have provided a table on the final few pages of this week's comment to help readers (and ourselves) organize the Fed's programs in their minds.

Change in Purchases of Securities by the Fed*



** The change in the size of purchases of Treasury securities and mortgage-backed securities. Wednesday data.*
Source: Federal Reserve Board via Haver Analytics

The Fed's latest efforts, announced on April 9, involve support for the Paycheck Protection Program authorized by the CARES Act (i.e. loans from the Small Business Administration that can convert to grants). The new efforts also involve credit programs for small and medium-sized businesses and for state and local governments (see table on p 4-5). The two "Main Street" facilities offer hope for small and medium-sized businesses facing severe disruptions and possible bankruptcy, and the "Municipal" facility is likely to be tapped extensively by state and local governments, which face financial strains because of the coronavirus.

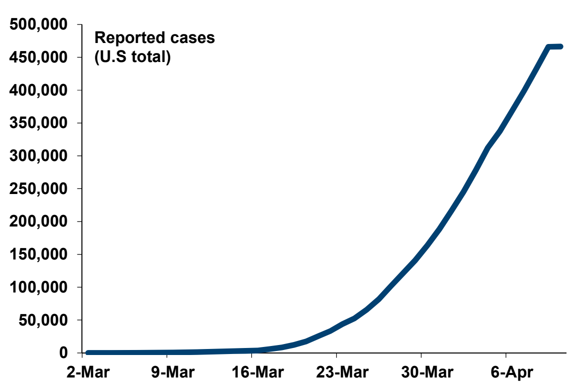
The Fed has more room to move, either through new efforts or by enlarging the amount of credit advanced through the announced programs. The CARES Act authorized the Treasury Department to allocate $454 billion to the Fed for credit programs, with the intent of levering this equity base 10 times. Thus far, Treasury backing has totaled $215 billion, and $30 billion was pledged before the passage of the CARES Act (it is not clear to us if the $30 billion will be counted as part of the CARES allocation).

While the Fed has been aggressive in announcing its lending facilities, take-up or implementation has been slow. The Fed's balance sheet is showing activity in only two of the 10 credit facilities with combined balances of $85.7 billion (Primary Dealer Credit Facility and Money Market Mutual Fund Liquidity Facility).

Virus Watch: Less Negative

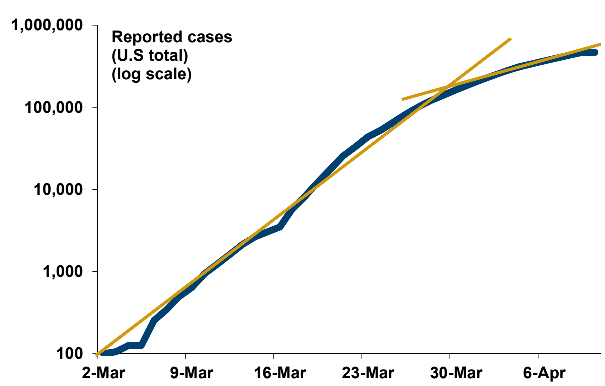
Medical and governmental officials have sounded a more optimistic tone, or at least a less pessimistic one, when discussing the pandemic. There is now lots of talk about "bending the curve." Indeed, the first evidence of a break in the exponential trend of new Covid cases in the U.S. has emerged. As shown in the chart on the left, the latest observation on the number of confirmed illnesses has barely increased, suggesting that the spread of the virus is slowing (April 10th is the last date shown).

Confirmed U.S. Cases of COVID-19



Source: Johns Hopkins University & Medicine via Bloomberg

Confirmed U.S. Cases of COVID-19



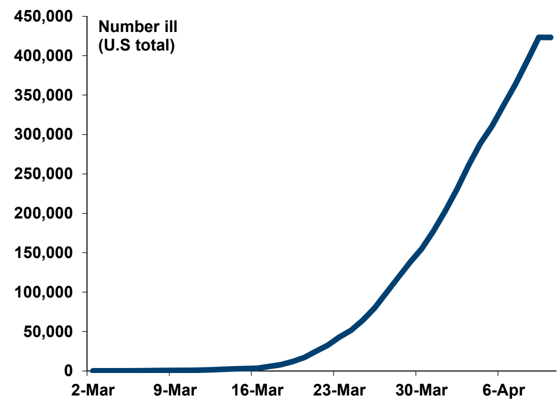
Source: Johns Hopkins University & Medicine via Bloomberg

Even before the kink in the curve emerged, close inspection of the data offered a hint that the situation was beginning to improve in the latter part of March. The right-side chart on the prior page plots the same data, but it is presented on a log scale. The slope of the curve began to flatten in late March, signaling a slower rate of growth, and recent observations suggest additional flattening. (When plotting on a log scale, distances between tick marks represent equal percent changes. For example, on the chart, movement from 100 to 1,000 and from 1,000 to 10,000 both represent changes of 900 percent. Phrased differently, a straight line on a log scale traces a constant rate of growth. The superimposed gold line in late March has a flatter slope than the line in early March, indicating a slower rate of growth in late March.)

New York State leads the nation in Covid cases, and its curve is bending as well. The number of New York cases plotted on a linear scale, like the national curve, has a kink at April 10. Plotted on a log scale, New York has shown greater variation than the nation as a whole, speeding up and slowing down at times, but like the national curve, it is showing a distinct flattening recently.

The number of confirmed cases is perhaps near a peak, but this does not mean the virus is close to being eradicated. Unconfirmed cases could be lurking, and these carriers could spread the illness to others. Also, most of the confirmed cases are still struggling. The chart to the right shows the number of individuals still sick (defined as confirmed cases less deaths and recovered). This series seems to be peaking, but it needs to trace a downward path.

U.S Citizens Ill with COVID-19*



** Total reported cases less those recovered or deceased.*

Source: Johns Hopkins University & Medicine via Bloomberg; Daiwa Capital Markets America

Federal Reserve Facilities

Facility	Beneficiary	Description	Size	Equity Backing	Intended Termination
Commercial Paper Funding Facility	Highly rated issuers of commercial paper	Federal Reserve Bank of New York lends on a recourse basis to a special purpose vehicle; the SPV uses the borrowed funds to acquire highly rated commercial paper.	Not specified, but $100 billion if 10x levered	$10 billion from US Treasury Department	March 17, 2021
Primary Dealer Credit Facility	Primary dealers (24 financial firms currently authorized to transact with the Federal Reserve Bank of NY)	The Fed lends funds to primary dealers for up to 90 days against a broad range of collateral. The borrowing rate is equal to the discount rate.	Limited only by the collateral of primary dealers	None, but loans are made with full recourse beyond the pledged collateral	Sept 17, 2020
Money Market Mutual Fund Liquidity Facility	Money market mutual funds facing demands for redemptions and illiquid markets	Federal Reserve Bank of Boston lends to depository institutions. Loans are collateralized by assets acquired from money market mutual funds.	Not specified, but $100 billion if 10x levered	$10 billion from US Treasury Department	Sept 30, 2020
Primary Market Corporate Credit Facility	US Corporations rated investment grade as of March 22; rated at least BB-/Ba3 if downgraded after March 22	Federal Reserve Bank of New York lends on a recourse basis to a special purpose vehicle; the SPV uses the borrowed funds to acquire newly issued corporate bonds or syndicated loans with maturities of 4 years or less.	$750 billion for primary and secondary facilities combined	$75 billion from US Treasury Department to back combined activity in the primary and secondary market corporate credit facilities	Sept 30, 2020
Secondary Market Corporate Credit Facility	US Corporations rated investment grade as of March 22; rated at least BB-/Ba3 if downgraded after March 22	Federal Reserve Bank of New York lends on a recourse basis to a special purpose vehicle; the SPV uses the borrowed funds to acquire to acquire outstanding bonds or exchange traded funds with remaining maturities of 5 years or less.	$750 billion for primary and secondary facilities combined	$75 billion from US Treasury Department to back combined activity in the primary and secondary market corporate credit facilities	Sept 30, 2020
Term Asset-Backed Securities Loan Facility	Ultimate beneficiaries are individuals and businesses whose loans might be packaged in an asset-backed security	Federal Reserve Bank of New York lends on a recourse basis to a special purpose vehicle; the SPV, in turn, lends to holders or originators of asset-backed securities, with the ABS as collateral.	$100 billion	$10 billion from US Treasury Department	Sept 30, 2020
Main Street New Loan facility	US small and medium-sized businesses (up to 10,000 employees or $2.5 billion in annual revenue)	A Federal Reserve Bank lends on a recourse basis to a special purpose vehicle; the SPV then acquires 95% of an eligible loan from a depository institution. The depository institution retains a 5% share of the loan. Underlying loan size is limited.	$600 billion for both the Main Street New Facility and the Expanded Facility	$75 billion from the US Treasury Department to cover both the Main Street New Loan Facility and the Expanded Facility	Sept 30, 2020

Facility	Beneficiary	Description	Size	Equity Backing	Intended Termination
Main Street Expanded Loan Facility	Same as Main Street New Loan Facility	Similar to Main Street New Loan Facility, but loan sizes are larger.	See Main Street New Loan Facility	See Main Street New Loan Facility	Sept 30, 2020
Paycheck Protection Program Lending Facility	Small and medium-sized businesses and their employees	A Federal Reserve Bank lends to a depository institution that has issued a Paycheck Protection Program loan authorized by the CARES Act. The PPP loans serves as collateral for the Fed loan.	Not specified, but the Paycheck Protection Program is funded for $350 billion	None, but the underlying collateral (the PPP loan) is guaranteed by the Small Business Administration.	Sept 30, 2020
Municipal Liquidity Facility	US states, US counties with populations exceeding 2 million, US cities with populations exceeding 1 million	A Federal Reserve Bank lends on a recourse basis to a special purpose vehicle; the SPV then acquires newly issued notes from an eligible state or local government.	$500 billion	$35 billion from US Treasury Department	Sept 30, 2020
Liquidity Swap Lines	Market participants in general, as the transactions promote the smooth functioning of financial markets	Federal Reserve exchanges dollars for foreign currencies with other central banks. The facility has existed for some time, but the Fed eased the terms on March 15 and expanded the list of eligible central banks on March 19.	None specified	No equity backing, but the Fed is not exposed to risk because the transaction is a simple swap of currencies and a reversal at a later date	As long as appropriate
RP facility for Foreign and International Monetary Authorities	Market participants in general, as the transactions promote the smooth functioning of financial markets	A standard overnight repurchase agreement. Monetary authority sells a Treasury security to the Fed and agrees to buy it back the next day, although the transaction can be extended.	None specified	No equity backing, but the transaction is fully collateralized and arranged with credit-worthy institutions	At least until October 6, 2020

Sources: Federal Reserve Board; Daiwa Capital Markets America

Review

Week of April 6, 2020	Actual	Consensus	Comments
PPI (March)	**-0.2% Total, -0.2% Core***	**-0.4% Total, 0.0% Core***	Energy prices fell 6.7% in March after a drop of 3.6% in February, reflecting the recent collapse in the prices of crude oil and other energy products. Food prices were tame as well, showing no change after falling 1.6% in the prior month. The core component declined 0.2%. Core goods prices rose 0.2%, staying close to the pace in the prior three months, which was faster than the average increase of less than 0.1% in the first 11 months of 2019. Service prices, which are more volatile, leaned to the soft side and pulled the core lower. The core PPI rose 1.0% year-over-year in March, down from 1.4% in February and off sharply from the recent high of 3.1% in September 2018.
Consumer Sentiment (April)	**71.0 (-18.1 Index Pts.)**	**75.0 (-14.1 Index Pts.)**	The index of consumer sentiment plunged 20.3% in early April, adding to the drop of 11.8% in March. The latest monthly change represented the sharpest retreat in history, exceeding the previous record drop of 18.1% in October 2008. Both the current conditions and expectations components contributed to the plunge in the headline measure, although the change in the current conditions index was much larger (off 30.2% versus a decline of 12.2% in expectations). The level of the index in early April was not the lowest of the latest expansion, although one has to go back to December 2011 to find a lower value.
CPI (March)	**-0.4% Total, -0.1% Core**	**-0.3% Total, 0.1% Core**	Energy prices fell 5.8% in March, which followed a decline of 2.0% in the prior month. Food prices, in contrast, rose 0.3% after an advance of 0.4% in February, perhaps driven by panic-like activity at grocery stores because of the coronavirus. Slippage in the core CPI mostly reflected downside volatility in areas influenced by the effects of the coronavirus: airfares fell 12.6% month-over-month, hotel fees dropped 7.7%, and apparel prices slipped 2.0% as consumers likely shifted focus away from discretionary purchases. The year-over-year in the core CPI slowed to 2.1% in March, down from readings centered on 2.3% around the turn of the year and the recent high of 2.4% in August.
Federal Budget (March)	**$119.1 Billion Deficit**	**$120.0 Billion Deficit**	Federal revenues in March grew 3.5% from the same month last year, a slower pace than the average of 7.2% in the first five months of the fiscal year. Outlays were even softer, dropping 5.3% on a year-over-year basis. However, the drop largely was the result of a calendar configuration that shifted some spending from March into February. Without the shift, outlays would have increased approximately 8.0%. The latest monthly deficit was lighter than the $146.9 billion in March 2019, but it would have been in the neighborhood of $170 billion were it not for the shift in outlays. The March results left the budget deficit in the first six months of the fiscal year at $743.6 billion, wider than the shortfall of $691.2 billion in the first half of FY2019.

** The core PPI excludes food, energy, and trade services.*

Sources: Bureau of Labor Statistics (PPI, CPI); University of Michigan Survey Research Center (Consumer Sentiment); U.S. Treasury Department (Federal Budget); Consensus forecasts are from Bloomberg

Preview

Week of April 13, 2020	Projected	Comments
Retail Sales (March) (Wednesday)	**-6.0% Total, -4.0% Ex-Autos**	The retail sales report is likely to show extreme movements in both directions. The onset of the coronavirus probably led to surges at food stores and pharmacies, as well as unusually strong activity at on-line vendors. Pronounced softness at other retailers should swamp these firm areas, leaving a dramatic drop in retail sales. The expected decline does not represent a record, but the existing record (-6.5% in January 1987) reflected unusual volatility in vehicle sales tied to a change in tax laws (sales pulled into late 1986 because of the elimination of the deductibility of sales taxes).
Industrial Production (March) (Wednesday)	**-3.0%**	Outright closures of some factories, along with disruptions of supply chains for those that remained open, will probably lead to a sharp drop in manufacturing output. Lower prices of petroleum products probably led to a drop in mining activity. Warmer-than-normal temperatures most likely led to a declines in heating services and utility output.
Housing Starts (March) (Thursday)	**1.370 Million (-14.3%)**	Housing construction would be less affected by the coronavirus than other sectors of the economy, but it would not be immune. Even without a virus effect, housing starts would probably ease from the lofty readings in the prior three months.
Leading Indicators (March) (Friday)	**-7.0%**	The stunning increases in claims for unemployment insurance in the final two weeks of March account for much of the expected tumble in the leading indicator index, but stock prices, the ISM orders index, and the length of the factory workweek also made noticeable negative contributions. The expected decline is easily a record shift, far exceeding the existing record of -3.4% in October 2008.

Source: Forecasts provided by Daiwa Capital Markets America

Economic Indicators

April/May 2020

Monday	Tuesday	Wednesday	Thursday	Friday
6	7	8	9	10
	NFIB SMALL BUSINESS OPTIMISM INDEX Jan 104.3 Feb 104.5 Mar 96.4 **JOLTS DATA** Openings (000) Quit Rate Dec 6,552 2.3% Jan 7,012 2.3% Feb 6,882 2.3% **CONSUMER CREDIT** Dec $21.0 billion Jan $12.1 billion Feb $22.3 billion	**FOMC MINUTES**	**INITIAL CLAIMS** Mar 21 3,307,000 Mar 28 6,867,000 Apr 04 6,606,000 **PPI** Final Demand Core* Jan 0.5% 0.4% Feb -0.6% -0.1% Mar -0.2% -0.2% **CONSUMER SENTIMENT** Feb 101.0 Mar 89.1 Apr 71.0 **WHOLESALE TRADE** Inventories Sales Dec 0.0% -0.4% Jan -0.6% 1.3% Feb -0.7% -0.8%	***GOOD FRIDAY*** **CPI** Total Core Jan 0.1% 0.2% Feb 0.1% 0.2% Mar -0.4% -0.1% **FEDERAL BUDGET** 2020 2019 Jan -$32.6B $8.7B Feb -$235.3B -$234.0B Mar -$119.1B -$146.9B
13	14	15	16	17
	IMPORT/EXPORT PRICES (8:30) Non-fuel Imports Nonagri. Exports Jan 0.2% 0.6% Feb 0.3% -1.0% Mar -- --	**RETAIL SALES (8:30)** Total Ex.Autos Jan 0.6% 0.6% Feb -0.5% -0.4% **Mar -6.0% -4.0%** **EMPIRE MFG (8:30)** Feb 12.9 Mar -21.5 Apr -- **IP & CAP-U (9:15)** IP Cap.Util. Jan -0.5% 76.6% Feb 0.6% 77.0% **Mar -3.0% 74.0%** **BUSINESS INVENTORIES (10:00)** Inventories Sales Dec 0.1% 0.0% Jan -0.3% 0.4% **Feb -0.4% -0.5%** **NAHB HOUSING INDEX (10:00)** Feb 74 Mar 72 Apr -- **BEIGE BOOK (2:00)** **March Beige Book** "Economic activity expanded at a modest to moderate rate over the past several weeks…" **TIC DATA (4:00)** Total Net L-T Dec $78.7B 85.6B Jan $122.9B $20.9B Feb -- --	**INITIAL CLAIMS (8:30)** **HOUSING STARTS (8:30)** Jan 1.624 million Feb 1.599 million **Mar 1.370 million** **PHILLY FED INDEX (8:30)** Feb 36.7 Mar -12.7 Apr --	**LEADING INDICATORS (10:00)** Jan 0.7% Feb 0.1% **Mar -7.0%**
20	21	22	23	24
CHICAGO FED NAT'L ACTIVITY INDEX	**EXISTING HOME SALES**	**FHFA HOME PRICE INDEX**	**INITIAL CLAIMS** **MARKIT MANUFACTURING PMI** **MARKIT SERVICES PMI** **NEW HOME SALES**	**DURABLE GOODS ORDERS** **REVISED CONSUMER SENTIMENT**
27	28	29	30	1
	U.S. INTERNATIONAL TRADE IN GOODS **ADVANCE INVENTORIES** **S&P CORELOGIC CASE-SHILLER 20-CITY HOME PRICE INDEX** **CONSUMER CONFIDENCE** **FOMC MEETING**	**Q1 GDP** **PENDING HOME SALES** **FOMC DECISION**	**INITIAL CLAIMS** **PERSONAL INCOME, CONSUMPTION, PRICE INDEXES** **EMPLOYMENT COST INDEX** **CHICAGO PURCHASING MANAGERS' INDEX**	**ISM MANUFACTURING INDEX** **CONSTRUCTION SPEND.** **VEHICLE SALES**

* *The core PPI excludes food, energy, and trade services.*

Forecasts in Bold.

Treasury Financing

April/May 2020

Monday	Tuesday	Wednesday	Thursday	Friday
6	7	8	9	10
AUCTION RESULTS: Rate Cover 13-week bills 0.125% 2.82 26-week bills 0.160% 3.08 43-day CMB 0.095% 3.15 3-year notes 0.348% 2.27 **ANNOUNCE:** $45 billion 69-day CMBs for auction on April 7	**AUCTION RESULTS:** Rate Cover 69-day CMB 0.135% 2.71 119-day CMB 0.180% 2.74 10-yr notes 0.782% 2.43 **ANNOUNCE:** $90 billion 4-week bills for auction on April 9 $70 billion 8-week bills for auction on April 9 $45 billion 40-day CMBs for auction on April 8 $40 billion 103-day CMBs for auction on April 8 $40 billion 154-day CMBs for auction on April 8 **SETTLE:** $80 billion 4-week bills $60 billion 8-week bills $40 billion 154-day CMBs	**AUCTION RESULTS:** Rate Cover 40-day CMB 0.160% 2.65 103-day CMB 0.200% 2.79 154-day CMB 0.250% 2.60 30-yr bonds 1.325% 2.35 **SETTLE:** $60 billion 43-day CMBs $45 billion 69-day CMBs	**AUCTION RESULTS:** Rate Cover 4-week bills 0.190% 2.84 8-week bills 0.290% 2.56 **ANNOUNCE:** $105 billion 13-,26-week bills for auction on April 13 $35 billion 69-day CMBs for auction on April 13 $65 billion 43-day CMBs for auction on April 14 $25 billion 119-day CMBs for auction on April 14 **SETTLE:** $99 billion 13-,26-week bills $40 billion 119-day CMBs $45 billion 40-day CMBs $40 billion 103-day CMBs	***GOOD FRIDAY***
13	14	15	16	17
AUCTION: $105 billion 13-,26-week bills $35 billion 69-day CMBs	**AUCTION:** $65 billion 43-day CMBs $25 billion 119-day CMBs **ANNOUNCE:** $90 billion* 4-week bills for auction on April 16 $70 billion* 8-week bills for auction on April 16 **SETTLE:** $90 billion 4-week bills $70 billion 8-week bills $40 billion 154-day CMBs	**SETTLE:** $40 billion 3-year notes $25 billion 10-year notes $17 billion 30-year bonds $35 billion 69-day CMBs $65 billion 43-day CMBs	**AUCTION:** $90 billion* 4-week bills $70 billion* 8-week bills **ANNOUNCE:** $105 billion* 13-,26-week bills for auction on April 20 $28 billion* 52-week bills for auction on April 21 $17 billion* 5-year TIPS for auction on April 23 **SETTLE:** $105 billion 13-,26-week bills $25 billion 119-day CMBs	
20	21	22	23	24
AUCTION: $105 billion* 13-,26-week bills	**AUCTION:** $28 billion* 52-week bills **ANNOUNCE:** $90 billion* 4-week bills for auction on April 23 $70 billion* 8-week bills for auction on April 23 **SETTLE:** $90 billion* 4-week bills $70 billion* 8-week bills		**AUCTION:** $90 billion* 4-week bills $70 billion* 8-week bills $17 billion* 5-year TIPS **ANNOUNCE:** $105 billion* 13-,26-week bills for auction on April 27 $21 billion* 2-year FRNs for auction on April 28 $42 billion* 2-year notes for auction on April 27 $42 billion* 5-year notes for auction on April 27 $33 billion* 7-year notes for auction on April 28 **SETTLE:** $105 billion* 13-,26-week bills $28 billion* 52-week bills	
27	28	29	30	1
AUCTION: $105 billion* 13-,26-week bills $42 billion* 2-year notes $42 billion* 5-year notes	**AUCTION:** $21 billion* 2-year FRNs $33 billion* 7-year notes **ANNOUNCE:** $90 billion* 4-week bills for auction on April 30 $70 billion* 8-week bills for auction on April 30 **SETTLE:** $90 billion* 4-week bills $70 billion* 8-week bills		**AUCTION:** $90 billion* 4-week bills $70 billion* 8-week bills **ANNOUNCE:** $105 billion* 13-,26-week bills for auction on May 4 **SETTLE:** $105 billion* 13-,26-week bills $21 billion* 2-year FRNs $17 billion* 5-year TIPS $42 billion* 2-year notes $42 billion* 5-year notes $33 billion* 7-year notes	

**Estimate*