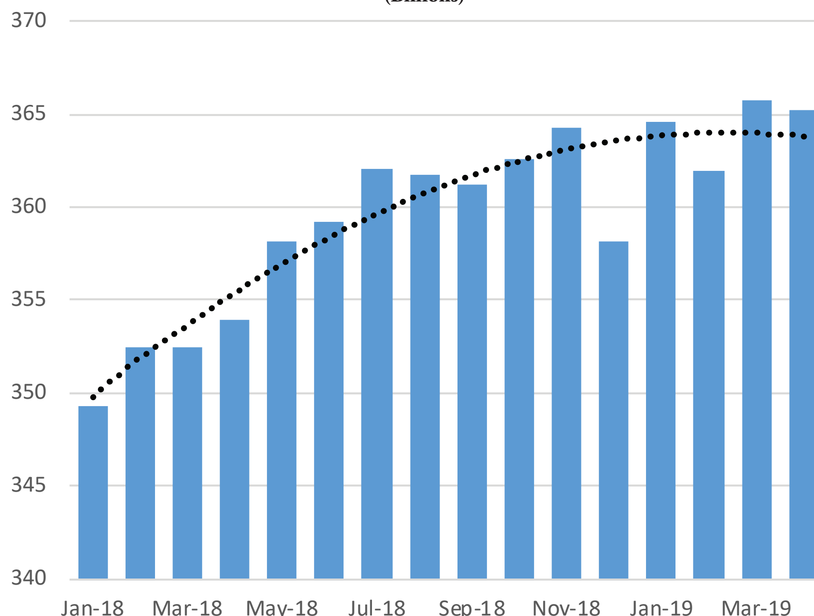
THE WEEKLY REPORT

Shortfalls in US data, such as those seen in the middle of the week, are increasingly important to the bond market. Not only because the numbers are weak, but also because roughly half of all domestic investors still anticipate sufficient economic growth to tilt the Fed toward tightening as long as inflation inches forward. As Thomas Barkin of the Richmond Fed expressed to reporters, "it's hard for me to make the case to step on the gas" with low unemployment. For the FOMC, reducing rates would be easing – not adjusting the target to reflect an iffy inflation forecast.

Current data disappointments, then, create the expectation the next batch will be that much better to achieve the economic forecasts currently built into rate expectations. The Atlanta Fed Q2 GDP estimate captured the importance of Wednesday's numbers when it sank from 1.6% to 1.2%. Private forecasters, though, see Q2 GDP at 2.0%-2.6% on the back of 2.7% growth in consumption. In other words, spending slowed in April, but it's expected to make up the difference before the end of the quarter.

That kind of growth is possible, perhaps, but it's obvious the stakes for May data to be released by the middle of June have stepped up considerably.

As for retail sales, charted below, the change in the growth pattern since last November has flattened almost to a straight line. The one piece of good news in April was the month's print stayed above the trendline. The Fed is happy with current growth as it anticipates yet another rebound in spending.



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MARKET UPDATE P. 2
China and the US dominate global trade, but the repercussions are felt everywhere. Emerging markets and Europe are both vulnerable to the fallout. Interest rates are subject not only to the two economies in a trade war, but also the risk perceptions of international traders. Equities in developed countries are not that concerned, but it isn't hard to find disruptions everywhere else. Concludes with a short discussion of how risk flows are distorting UST values.

PERFORMANCE UPDATE P. 8
Volatility has calmed sufficiently to get an accurate read of the big themes that have driven month-to-date results. Snapshots of key markets and focus on how and why lower inflation expectations can keep rates from bouncing too high due to any relief on the trade front.

HOUSEHOLD LEVERAGE P. 11
Consumer debt growth in the first quarter once again lagged GDP and consumption. That's nothing new, but there was the potential for catch-up borrowing after abnormally low growth to close 2018. It just didn't happen. Mortgage originations slowed much faster auto loans. Consumer credit continues to improve, and the New York Fed offers three post-crisis insights on household leverage.

AGENCY UPDATE P. 15
FHLB and Farm Credit first quarter results fell in line with expectations. Details and charts.

Jim Vogel, CFA
901.435.8056
jim.vogel@ftnfinancial.com

Disclaimer is on the last page of this report.

Trade Dispute Turns Hotter; US Stocks Find Comfort in Equilibrium

The US/China trade dispute went from diplomatic failure last week to retaliatory economics this week. Investors did not take the escalation as a major negative. Rather, they concentrated on forecasts the US economy can survive the impact of moderate price increases from tariffs, and confusion over US policy.

As that theme stabilizes global risk assets, not every region is safe. The first recession casualty could well be Asia outside China or Europe, particularly the industrial leaders of Germany, France and Italy. Given the size and depth of the EU, it is unusual to think it would be that vulnerable to China. EU leaders find themselves battling big problems on several fronts, though, and there's no capacity for stimulus to offset emerging market distress that could develop. Without a cheaper euro, the economy has no easy ways to keep growth near the global pace.

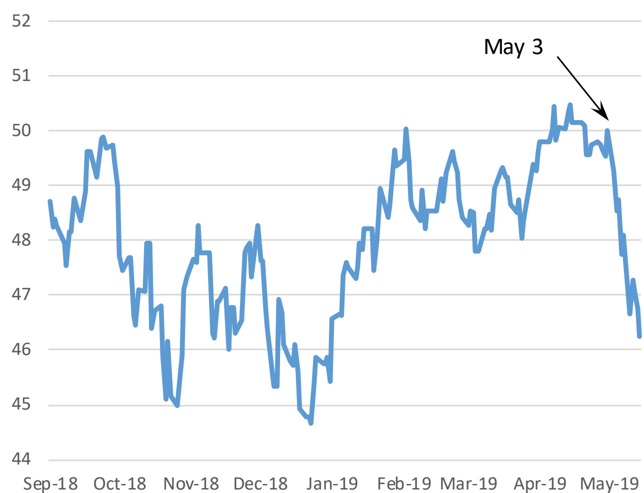
> In *Economic Weekly*, Chris Low outlines the key US/China economic dynamics that are taking shape for the next several months. Portfolio managers need that grounding, of course, and then need to see how US/China negotiations are hitting each region. That's the second phase, outlined below. The third phase will be consideration of how regional distress could loop back to the US, China, and the EU. Consider timing for the third phase as starting in six to eight weeks.

After a review of overseas markets, the focus returns to US rates on page 6.

Emerging market stock values vanish as talks disappear

Stocks around the world withstood the Fed's conviction insurance cuts aren't necessary in early May, but they have done nothing but drop starting the night of May 5. ***The decline is all the more noticeable because emerging market stocks held up better than most the fourth quarter last year when every other risk asset was on edge.*** Then, their stocks benefited on par with the global run-up on US/China/Fed relief in the first month of 2019.

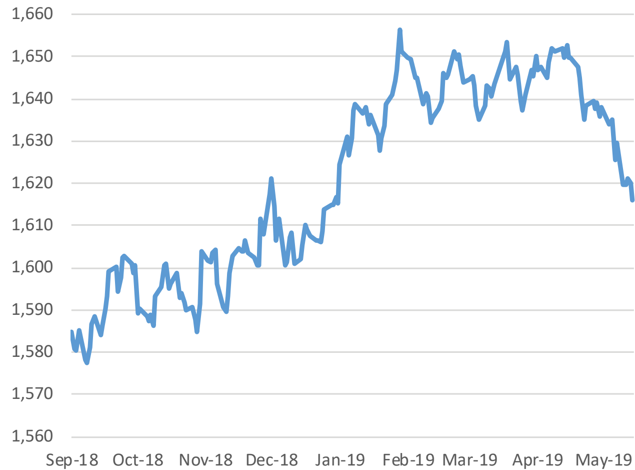
Emerging Market Equities, Ex-China
September 4, 2018 to May 17, 2019



Source: MSCI

Currencies for these countries mimic stocks, unfortunately. They are falling quickly, but have not yet reached the danger zone where central banks will have to consider raising rates to defend their currency from the loss of investor confidence. Although Turkey's currency meltdown/rate melt up last year was on its own merit – where rates have exceeded 20% and damaged the economy – the principle is the same if US/China trade is to blame.

Emerging Market Currencies
September 4, 2018 to May 17, 2019



Source: MSCI, FTN Financial

Bottom Line: As with any rapid market adjustment, the key to the next reaction is whether these critical risk signals can reach equilibrium. The coffin nail China comment "nothing is planned for Beijing with the US" could resonate for another week. ***Month-end asset allocation decisions in May are the next point at which risk appetite will gain clarity.***

European stocks suggest it's too soon to worry; bonds disagree

EU valuations are closely following those in the US this spring, as they have been for the last 12 months. Yet, the performance of the US economy has been strides ahead of Europe in the last six months. And, US monetary policy is now on a shallower monetary policy trajectory than it was six months ago, roughly in the same "what's next?" mode as the European Central Bank.

European Stocks
September 4, 2018 to May 17, 2019

Source: Stoxx LTD

The correlation between the S&P 500 and the broad EU index is a remarkable 60% R^2 when it comes to weekly *changes* in direction. That demonstrates either remarkable confidence that global economics are the factor in equity performance or alarming complacency around the low growth/low inflation plague in Europe.

Bond yields are falling as fixed income investors have moved closer to the edge, though. Although German 10-yr yields are off their intra-week lows on May 17, they still closed at 30-month lows.

10-Yr German Govt Yields
September 2018 to Present

Brexit planning went from dogged to dead this week as Prime Minister May remains in office in name and calendar only. EU rates reacted to each headline of an imminent departure, in addition to global trade concerns. Additional fraying within Italy's coalition government remains a worry for investors, too. Italy's credit deterioration is the primary reason why corporate/bank spreads in Europe have widened so much more than US investment grade names this week.

Italian 5-Yr Credit Default Spreads
July 2017 to Present

Currency traders unsettled, still chasing flows

In addition to falling Chinese stocks (see page 8), traders are punishing the yuan in fear China will respond to tariffs with an unofficial devaluation to counter some of the impact. ***Relative to facts, this reaction is easily the most out-sized of any major market – an indication it provides valuable insight into the direction of currency flows and preparation for what could change next.***

This week, the difference between the off-shore value of the yuan and the "official" value is equal to the wides of the year (last seen in early February when the trade negotiations merely looked iffy).

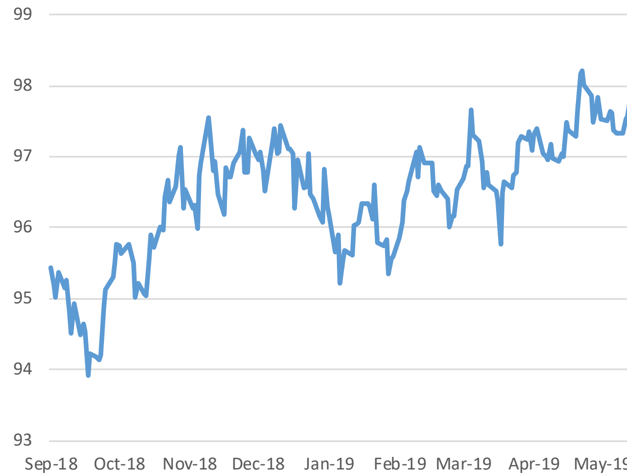
Chinese Yuan/Dollar
Off-Shore Pricing (Secondary)
September 2018 to Present

The value of the yen relative to the dollar is not as dramatic but is still important. As it has been since last fall, Japanese currency receives haven flows during distress – see January 3 as the best example – because the country is seen as stable but its monetary policy will not be changing any time soon, or certainly within the timing of most foreign exchange positions. And of course, lower values relative to the dollar represent strength, particularly when the dollar is soaring as well.

Japanese Yen/Dollar
September 2018 to Present

The US dollar closed at its recent high on April 24 on concerns about German growth that hurt the euro. Lower rates the first full week of May hurt the dollar, but sustained buying on global risk concerns – including sabre rattling in the Middle East for several days this week – sent the dollar up and brought more buying into short UST as a currency play.

US Dollar vs Currency Market Basket
September 4, 2018 to May 17, 2019



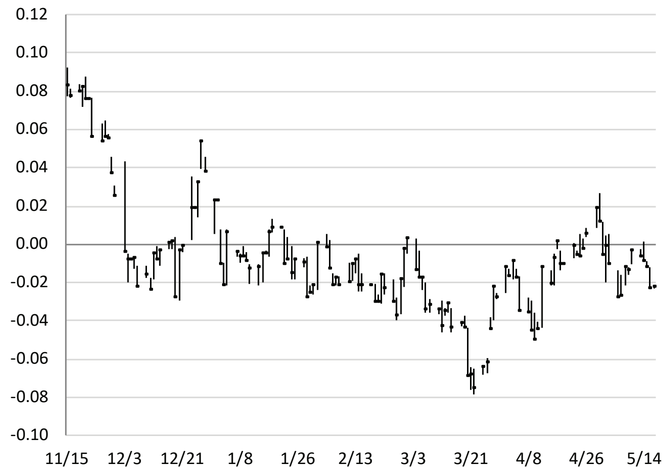
Short Treasuries yields reflect distress more than Fed outlook

During the first week of May, 2-yr UST averaged a yield of 2.31%. Since trade started its domination of global thinking, the average is down almost 10bp to 2.22%. Yields are off their lows, but primarily because consumer sentiment surprised big to the upside the morning of May 17.

2-Yr UST Yields
May 7 to May 17, 2019
Hourly

Also this week – and equally important – the 2s/5s has inverted again in addition to the 2-yr UST rally.

UST 2s/5s Curve
November 15 to Present
Daily

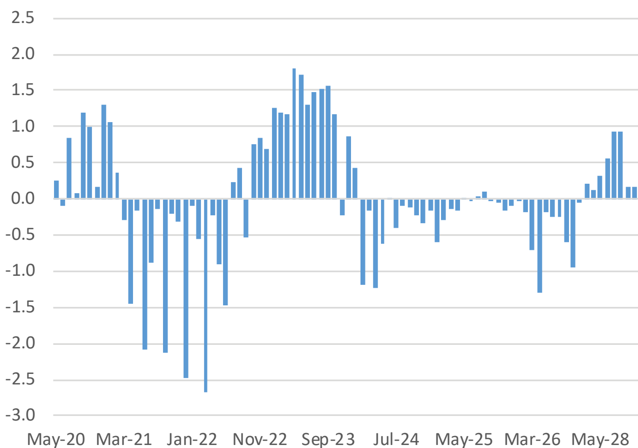


Source: FTN Financial

> Due to long-time usage (and marketing from CME), most observers look to fed funds futures to understand "what's priced in" for Fed policy. The CME's probability math for various time horizons adds artificial precision to the task. Better readings of what's priced in, however, are available from up to a dozen different sources. Of value right now, the 5-yr's reactions to data and market risk. For example, versus fed funds futures' near certainty of rates at 2.0% within 12 months, 5-yrs around 2.18% appear certain of one cut somewhere in the next 4 to 9 months. When the Fed is in motion rather than paused, FTN models the rich/cheap status of 5s against money market forwards. That's not the best approach when the Fed is peering over its glasses at a mountain of new information. Rather, use term UST to gauge market thinking about inflation, the Fed, and global growth.

Discussed last week (TWR 5.10.19.pdf), the rich/cheap calculation on individual Treasuries along the curve can be an indication of distress or confusion. As investors processed the trade news, it was easy to chalk up scattered UST valuation to confusion and lack of time. When it continues into a second week, it is better to start considering the distress flows as a more likely reason. ***This chart is even messier, less coherent than last week's and it should be gradually improving.***

US Intermediate Curve Rich/ Cheap Analysis
Morning of May 9, 2019
[Stocks down 1.4%]
(Basis Points)



Source: FTN Financial

The constant from last week is the 4-yr part of the curve remains attractive on all of FTN's relative measures.

May Disruptions Haven't Eaten Through April Credit Gains

May 1 to May 3 was difficult to keep up with due to weak-ish data and an odd FOMC press conference. Then, tumult the last two weeks felt like it was going off the charts on US/China trade reversals. Checking on financial market results, though, the quarter to date shows less volatility than daily market headlines suggest.

Summary observations:

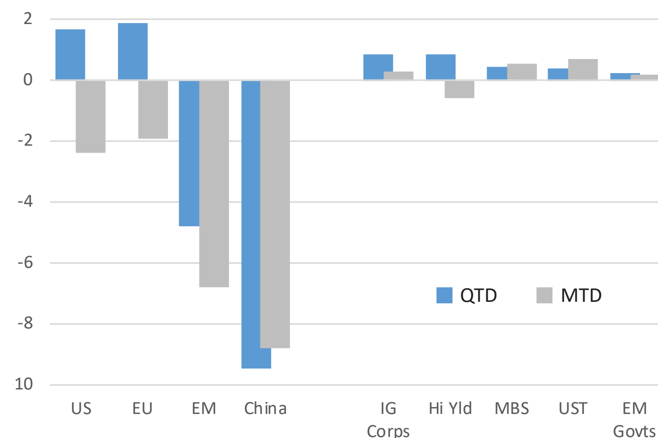
- Broad stock index performance has withstood big selling. Trailing 1-month total return is -75bp; the 3-month total is 4.4%. Contrast that change with 5.7% loss during the three months from the middle of October to the middle of January.
- European stocks are holding up well, despite the potential that EU's industrial leaders run afoul of heightened trade tensions (see page 2).
- Treasuries are indeed a safe haven for domestic and international investors, up 83bp through May 16 with a gain of 1.5% over the previous month. ***Relative to other fixed income sectors, Treasuries are vulnerable to reallocation from de-risking to neutral as trade headlines move from hourly to weekly.***
- Volatility has dinged but not damaged the down-in-credit trade in domestic names. Even high yield shows excess returns vs UST for the quarter to date. It's overseas where the greatest damage has occurred. ***Rather than watch stocks, emerging market bond losses might be the best preview of spillover into domestic names.***

Recommendations:

- Haven buying has concentrated at the short end of the UST curve. Avoiding the richest segments between 2-5 years is an excellent strategy. See page 6.
- A sudden turn against TIPS usually previews better future performance in longer intermediates. Look for opportunities to add 7-year exposure TWR 11.21.18.pdf. Intermediate TIPS are lagging UST coupons this month by about 25bp.
- Lower coupon GNMAs are strong relative to other pass-throughs. Moderate coupon conventionals have been battered and offer potential value.

The chart demonstrates how well EU and US stocks have done on a quarter-to-date basis (blue) and on a month to date basis (gray). Global equities are on the left, expressed in US dollars, and US fixed income is on the right side.

Global Equities and USD Fixed Income
Total Returns to May 16



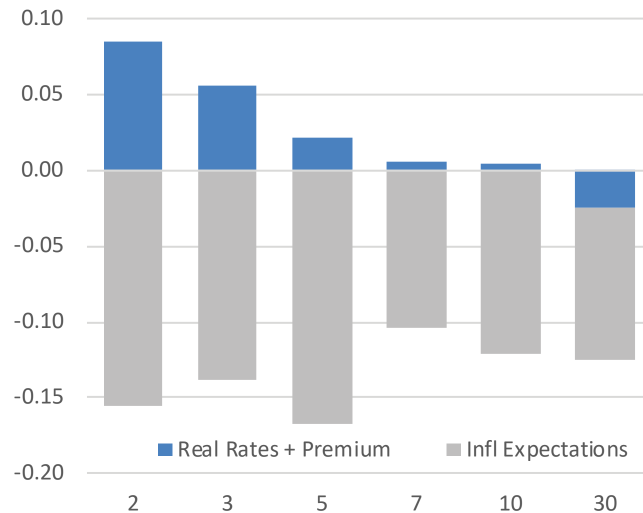
Source: FTN Financial, Bloomberg

Lower inflation expectations dominate bond rally

The story this month has been a slower inflation outlook driven by three components:

- Prospects that slower global trade more than offsets any US inflation pressure caused by larger tariffs on Chinese imports.
- Falling inflation expectations in consumer and economist surveys after the downturn in the first quarter despite an excellent second half of 2018.
- The Fed's stubborn insistence the march to 2.0% core inflation remains on course. ***A stubborn Fed prevents the type of insurance rate cut signal that would spark TIPS buying again.***

Change in Rate Components: Inflation and Real Rates
April 30, 2019 to May 17, 2019



Inflation had been rising as source of pressure on rates based on higher oil prices and confidence trade negotiations could get resolved by mid-year. Three different potential reasons for inflation expectations to stay in check brakes any quick increase in rates from extending too far in reaction to an improvement in the trade outlook. In an odd way, an improving trade outlook would strengthen the Fed's resolve to keep rates on hold as it would expect a bigger inflation pickup by the end of the year.

Digging into the dynamics of the Treasury market in the first half of May provides an excellent example of how return attributions plus the underlying trade outlook shape rate forecasts as scenarios change. Return attributions will be valuable in the next two months.

The 5-yr part of the curve has seen the best performance relative to duration so far in May. It was followed closely by the 3-yr; we see the gains as limiting the near-term return potential unless and until data the week of June 3 disappoint by falling below early expectations for May results.

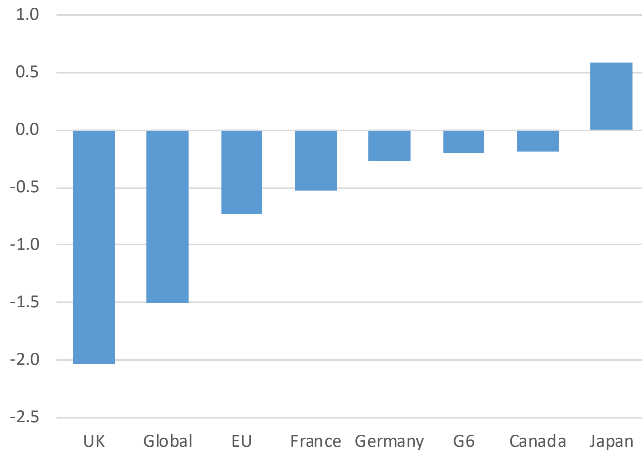
> Although UST are the natural bellwether for curve performance, note that interest rate swaps did even better in the first half of the month. That continues a string of UST underperformance versus swaps that goes back to July 2018 (!). Many large accounts continue to manage duration using derivatives rather than cash securities. The performance of non-UST sectors versus swaps has become increasingly important as a measure of the best bond allocation strategy.

Global flight from volatility rewards US and Japanese bonds

The impact of distress on currencies is obvious, an important signal on global risk analysis as charted here. This month, however, distress has moved harder into the relative bond valuations of the strongest sovereigns as well. They have not been able to keep up with the demand for Treasuries.

The chart shows the negative excess returns for every major sector except for Japan, calculated against duration neutral UST and swapped into dollars. The results, however, are the same when expressed in euros.

Excess Returns of Global Bonds vs UST
Hedged to Dollars
MTD through May 16



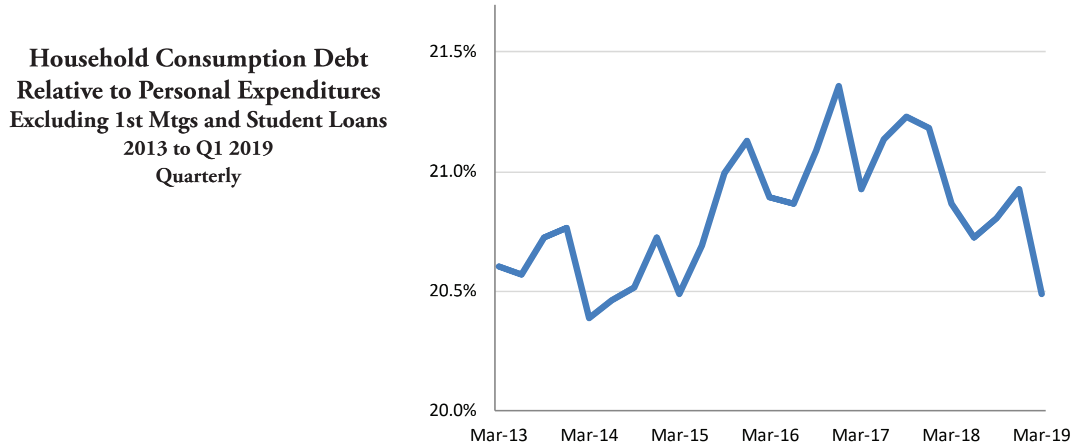
Source: Bloomberg

> Monthly variations in these results usually are measured in 10s of basis points, not full percentage points as seen for the UK, the extreme case so far in May. Whether these cross-market flows begin to rebalance by the end of the month will be critical to June UST performance.

Consumer Debt Growth Restrained in First Quarter

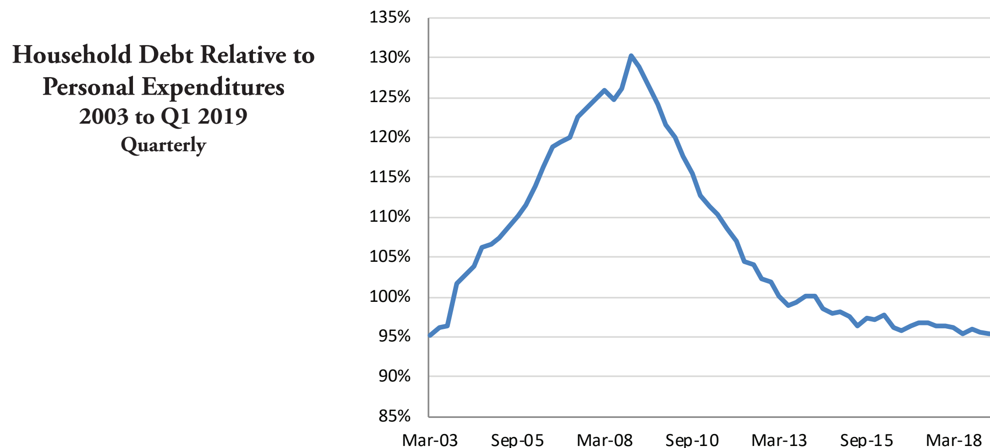
Consumer debt in the first quarter rose 3.4% over 2018, another quarter below annual GDP growth of more than 5%.[1] Modest growth in consumer borrowing is nothing new, but there was no catch-up loan volume after the big slowdown in the fourth quarter of 2018. Instead, seasonal patterns remained in place.

Net credit card balances always decline in the first quarter to reflect repayment of fourth quarter holiday purchases, while student loans usually take a sharp quarterly jump. ***Relative to even depressed first quarter personal expenditures, though, the ratio of total "consumption" debt to spending was the lowest in four years.***



Source: Federal Reserve Bank of New York, Bureau of Economic Analysis

Total household debt of $13.7 trillion relative to personal expenditures set a new "modern" low, continuing the gradual decline to levels last seen in 2002.



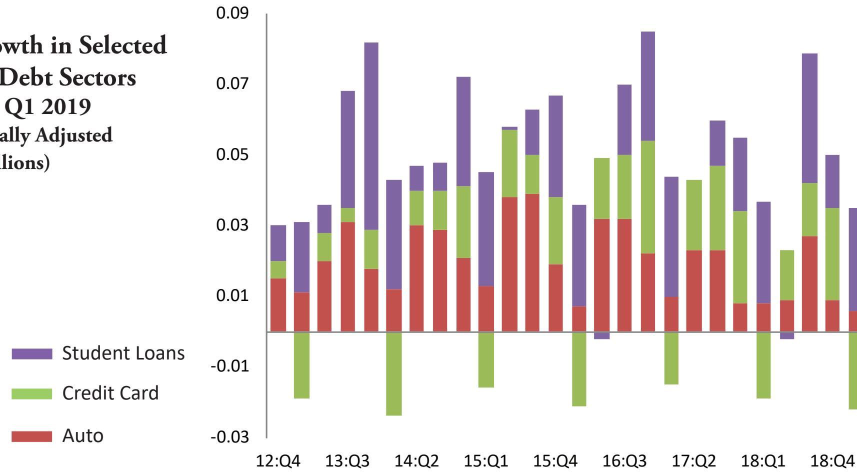
Source: Federal Reserve Bank of New York, Bureau of Economic Analysis

[1] The New York Fed doesn't inflation adjust its total consumer debt data, so GDP growth here is in nominal dollars. Comparisons elsewhere in this analysis to personal consumption, etc also are listed in nominal dollars for the same reason. It is odd, by the way, that even in its historical discussion in the intro it never references inflation.

Including or excluding student loan borrowing, the historical debt burden profile is the same. At the macro level, debt for higher education does not appear to play a major role in household leverage decisions.

The weakest point in non-mortgage debt was the lack of growth in auto loans, with the smallest net increase since the first quarter of 2016.

Quarterly Growth in Selected Consumer Debt Sectors 2014 to Q1 2019
Not Seasonally Adjusted (Trillions)

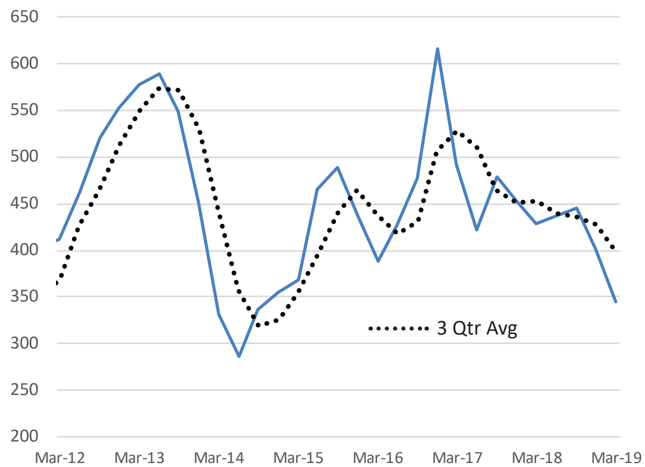


Source: Federal Reserve Bank of New York

Mortgage originations drop more than autos

Quarterly mortgage originations were the lowest since the third quarter of 2014. The decline was much more than seasonals would have indicated. The total dollar value of detached single-family houses sold in the first quarter held constant with the first quarter of 2018, so it's difficult to conclude the real estate market was less active based on higher rates or tighter credit.

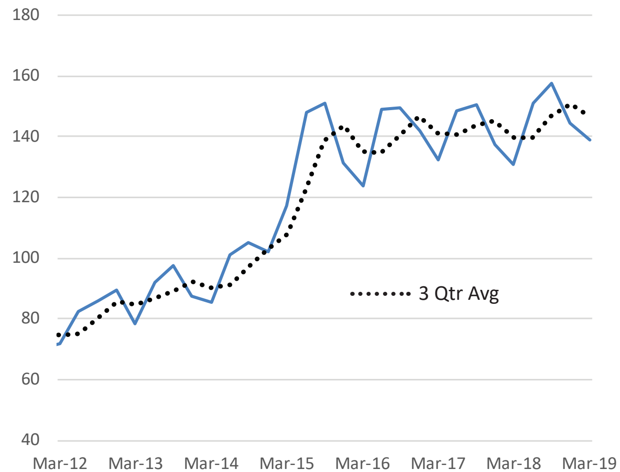
New Mortgage Originations Quarterly
Billions



Source: Federal Reserve Bank of New York, FTN Financial

The three-quarter trend on autos is holding up better, but the seasonal decline was larger than average to start 2019.

New Auto Loan Originations
Quarterly
Billions



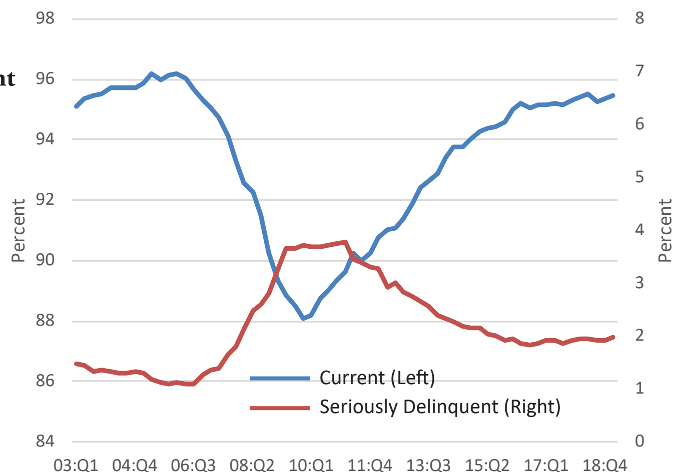
Source: Federal Reserve Bank of New York, FTN Financial

Credit availability for autos actually improved in the first quarter, according to the Federal Reserve Bank of New York. "The median credit score of newly originating borrowers was slightly lower than in 2018Q4 for auto loans, but was flat for mortgages. Mortgage underwriting remained tight, with only 10% of mortgages being originated to borrowers with credit scores under 647 and a median originating score of 759. Auto loans, meanwhile, remained easier to borrow, with the median score at 708."

Credit trend remains solid

The percentage of households current on their debt payments is just shy of the recent peak in the second quarter of last year. The percentage of loans that are seriously delinquent have plateaued the last three years.

Percent of Household Debt ($) Current on Payments and Percent Seriously Delinquent
2003 to Q1 2019
Quarterly



Source: Federal Reserve Bank of New York

Note: Values in the early part of the last decade were higher than current levels because easier credit terms 20 years ago allowed consumers to roll over their debt from one lender to another as banks and mortgage originators lowered standards to gain market share.

New bankruptcies are not an issue either. The New York Fed summarized: "About 192,000 consumers had a bankruptcy notation added to their credit reports in 2019Q1, the same level observed in the first quarter of 2018. New bankruptcy notations have been at historically low levels since 2016…"

Consumer debt study summarizes shifts in last 10 years

Last month, staffers at the Federal Reserve Bank of New York composed a 38-page study of consumer borrowing trends for the last several decades. Their broad conclusions about the aftermath of the Great Recession are summarized in edited fashion below.

- First, the favorable shift in the credit score composition of the outstanding stock of mortgage debt has reduced the vulnerability of the household sector to an income shock. Tight mortgage underwriting has made it difficult for households to use debt to tap home equity, and this has produced a cushion of housing wealth that may be available to help households through a period of reduced income growth, were one to materialize
- Second, this same tight underwriting…has made the outstanding stock of mortgage debt considerably safer than in any time since before the Great Recession. Nonetheless, given the importance of housing equity in default decisions (Gerardi et al. 2008, Haughwout et al. 2008) the household sector is potentially vulnerable to large price declines.
- Third, net home equity has accrued to high-score and/or older borrowers. In 2006, 44% of net equity came from homeowners with credit scores of 780 or higher. In 2017, the share had increased to 53%. The increase in equity for older homeowners is even more striking — in 2006, only a fourth of total net equity was held by homeowners over 60, but in 2017, their share had increased to 41%. Much of the corresponding decline in share came from homeowners under 45, whose share of equity declined from 24% in 2006 to 14% in 2017.

This shift raises new questions about the relative wealth position and prospects of younger individuals. Burdened by increasing amounts of student debt, reduced homeownership and home equity, and relatively high or increasing student and auto loan delinquency rates, their financial situation contrasts sharply with the overall generally improved dynamics in household debt, the study concluded.

FHLB and Farm Credit First Quarter Results In Line with Expectations

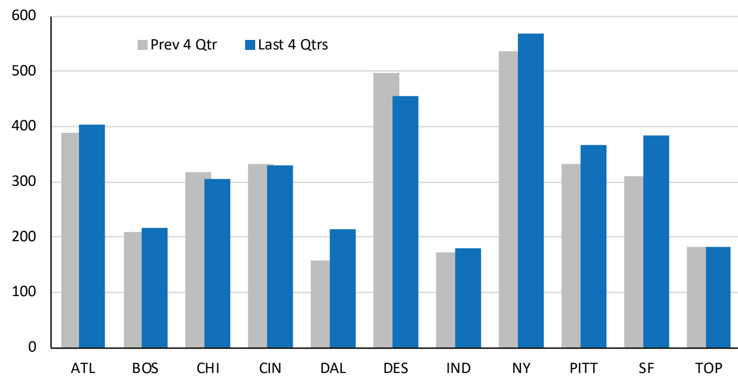
A two-part review, leading with the Federal Home Loan banks then Farm Credit on page 16.

Profitability at the FHLB System returned to its long-running average in the first quarter. Net income reached $900 million, within $70 million of the best quarter of the last four years. Total assets at March 31 were the lowest in the last two years.

Higher interest rates earned on its capital base keep net income at a steady pace, with the exception of the fourth quarter last year when rapidly falling rates brought some negative net marks to its derivative book. The negatives were on a GAAP basis, and do not reflect either risk or operating performance.

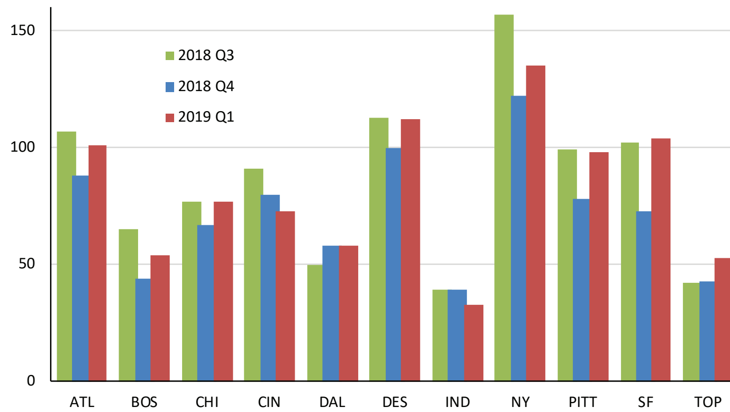
The best quarterly measure of underlying System credit quality is the distribution of earnings across the 11 banks and the stability of earnings at each individual institution. The first chart looks at trailing 12-month results against the previous 12 months. The second chart trends the last three quarters by bank.

FHLB Net Income by Bank
Last 4 Quarters vs Previous 4 Quarters
(Millions)



Source: Office of Finance

FHLB Net Income by Bank
Last 3 Quarters
(Millions)



Source: Office of Finance

In the table, note return on average assets moved back to .33% in the first quarter, the expected bump from .29% in the previous period. Unless FHLBs benefit from extraordinary income or a GAAP derivative gain, the max quarterly return is .34%.

Selected FHLB System Financial Information

	Mar-19	Dec-18	Sep-18	Jun-18	Mar-18	Dec-17	Sep-17	Jun-17	Mar-17
Total Assets	1,082,456	1,102,906	1,089,255	1,130,235	1,087,860	1,103,451	1,097,509	1,081,699	1,026,027
Advances	671,382	728,767	706,005	734,457	697,066	731,544	719,387	706,849	660,740
Term Debt	602,535	603,491	613,471	644,421	627,837	641,601	620,706	582,248	581,538
Discount Notes	407,053	426,034	402,823	412,839	389,052	391,480	407,311	428,684	376,967
Retained Earnings	19,849	19,504	19,308	18,914	18,463	18,099	17,681	17,238	16,779
Capital	56,161	58,344	57,584	58,390	56,638	56,480	55,316	54,563	52,014
Capital/Assets	5.19%	5.29%	5.29%	5.17%	5.21%	5.12%	5.04%	5.04%	5.07%
Reg Capital Ratio	5.24%	5.36%	5.31%	5.20%	5.24%	5.17%	5.11%	5.14%	5.19%
Net Interest Margin	0.47%	0.48%	0.49%	0.48%	0.45%	0.45%	0.45%	0.46%	0.31%
Net Interest Spread	0.34%	0.37%	0.38%	0.38%	0.37%	0.39%	0.39%	0.40%	0.27%
Net Income	$ 900	$ 791	$ 942	$ 971	$ 858	$ 866	$ 854	$ 844	$ 812
Dividends Paid	$ 527	$ 595	$ 622	$ 483	$ 462	$ 448	$ 379	$ 364	$ 379
Dividend Payout	59%	75%	66%	50%	54%	52%	44%	43%	47%
Return on Assets	0.33%	0.29%	0.34%	0.35%	0.30%	0.32%	0.31%	0.32%	0.31%

Source: FHLB Office of Finance, FTN Financial

Farm Credit income off its peak but manages 1.7% gain over Q1 2018

The nation's largest privately owned agriculture lender produced sufficient retained earnings to take its capital ratio back above 17%. Tougher competition lowered its all-important net interest margin by 6bp versus the previous quarter, but credit losses were not an issue.

Net income was $1.3 billion, down from the average of the previous three quarters, and basically flat with the first quarter of 2017.

Nonaccrual loans increased $79 million $2.0 billion at March 31, 2019. This increase in nonaccrual loans was primarily due to credit quality deterioration impacting a limited number of borrowers. Of total non-accrual loans, 60.6% of nonaccrual loans were current as to principal and interest compared with three months ago.

Nonperforming assets (which consist of nonaccrual loans, accruing restructured loans, accruing loans 90 days or more past due and other property owned) increased $169 million $2.5 billion. In addition to the increase in nonaccrualloans, accruing loans 90 days or more past due increased $88 million to $131 million at March 31, 2019 due to the seasonal payment pattern of the System's real estate mortgage and production and intermediate-term loans.

The allowance for loan losses was $1.8 billion to end March versus $1.7 billion at December 31, 2018. Net loan charge-offs of $11 million were recorded during the first quarter of 2019, as compared with $7 million for the first quarter of 2018.

Combined Federal Farm Credit System Quarterly Financials					
	Q1 19	Q4 18	Q3 18	Q2 18	Q1 18
Total Gross Loans	274,151	273,378	265,007	261,985	262,605
Loan Loss Allowance	1,768	1,713	1,682	1,666	1,674
Total Net Loans	272,383	271,665	263,325	260,319	260,931
Total Assets	348,690	348,922	334,988	333,827	333,029
Systemwide Debt					
Due after 1 year	169,657	172,231	165,583	166,607	167,070
Total	281,080	281,459	268,462	268,881	269,401
Total Capital	59,722	58,444	58,217	57,332	56,169
Capital/Assets	17.1%	16.7%	17.4%	17.2%	16.9%
Net Interest Income	2,026	2,029	2,015	1,973	1,959
Loan Loss Provision	65	48	59	18	69
Income Before Taxes	1,327	1,350	1,381	1,417	1,310
Net Income	1,288	1,320	1,363	1,383	1,266
Net Interest Margin	2.40%	2.46%	2.49%	2.43%	2.44%

Source: Farm Credit, FTN Financial

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