FHN FINANCIAL

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THE WEEKLY REPORT

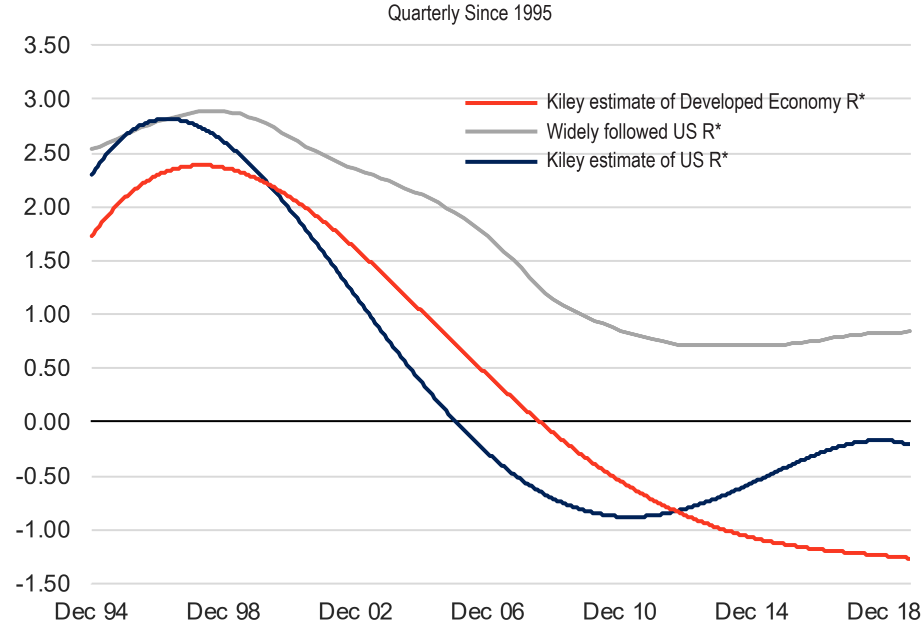
Two carryover items from the FOMC press conference last week, still very relevant even with all eyes on trade headlines for the rest of the year.

First, Chair Powell said the Fed is in no rush to reconsider how it targets inflation, still the thorniest issue of the last four years for the FOMC and other central banks. Perhaps the middle of next year might be a time for an update, he said in answer to a question at the press conference. If the Fed does change inflation management – along the lines of keeping rates lower than it would like to make certain inflation not only approaches 2% but occasionally rises above it – it would mark the fourth major new policy since 2016. That is a tremendous amount of change for traders to relearn and apply.

Second, the Fed might be moving from its view R* is stable to the idea R* might be lower than it thought just three years ago. *Economic Weekly* discusses a paper by a senior Fed economist on that very point. Chris Low suggests policy that the FOMC sees as appropriate at 1.75% might actually be tight when viewed from the perspective of the global economy after trade normalizes.

This week's chart captures the stark views in the latest paper on where global R* has fallen, the relevant impact on rates in the US, and the 'standard' view of neutral real interest rates as published by John Williams and his team. If you're squeamish about the possibility of negative policy rates in the US in the next several years, look away.

Three Different Historical R* Trends
Global and US
Quarterly Since 1995



Source: Kiley at the Board of Governors, The Federal Reserve Bank of New York

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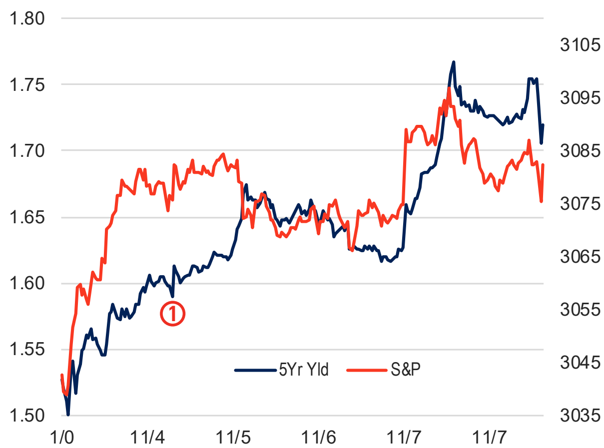
WARMER TRADE OUTLOOK APPLIES HEAT TO BOND YIELDS

Risk-on zeal punished bond prices this week. Over the last four weeks, stocks have progressively brightened on warming trends for international trade. In contrast with doubts about the next step in negotiations at the end of last week, the latest news previews major tariff rollbacks once Phase 1 is completed next month. Until Thursday, yields were more cautious than stocks. (1)

5-Yr UST Yields vs S&P 500 Futures
November 1 to November 8 (10:30 am EST)
30-Minute Intervals



Source: Bloomberg, CME, FHN Financial

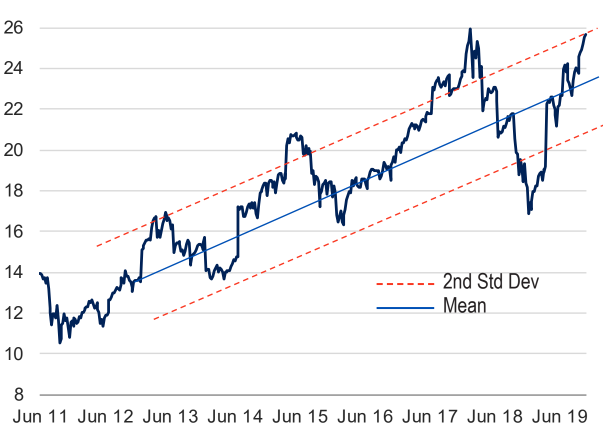
The chart centers on the 5-yr because intermediate yields should be more attached to stable Fed policy than a big jump in global equities. When 5-yr yields increase as much as 16bp in less than 12 hours it demonstrates how wired the entire curve can be to broad sentiment rather than fundamentals.

The first consideration for the rest of the fourth quarter, then, is the state of the stock market.

Equity valuations never fell that much to begin with

When the S&P 500 flirted with 2850 in late August, prices retreated to the median trendline in place for the last 8 years (1). The 1-month gain of 6.6% has taken the price/free cashflow ratio close to its numerical peak of 26 after the passage of corporate tax reform. On the trend, that puts the broad index at two standard deviations above the mean.

S&P 500 Price/Free Cash Flow
June 2011 to Present
Weekly



Source: Standard & Poor's, FHN Financial

Here's a quick comparison around the world since better trade news starting flowing on October 10. The base for the price changes in the first column is October 9; the second column compares that date with October 15, 2018. Current prices in the first column are as of 10:00 am EST on November 9:

	Oct/Nov	Oct '18 to Oct 9
S&P 500	5.5%	6.1%
S&P Semi-conductors	***11.2***	***12.8***
S&P Consumer discretionary	2.3	8.0
Emerging mkts ex China	6.5	.7
German equities	9.5	4.1
Gold	-2.9	18.7
Brent crude	4.9	-27.9

Source: Standard & Poors, MSCI, Bloomberg

Highlighting the trade-sensitive semi-conductor category, an 11.2% gain in a sector that was up double digits the previous 12 months suggests ***prices may have counted some of the positive stories on trade several times over in the last month***. Next, the muted response for the US economy-sensitive consumer discretionary category points to the market's dilemma when it comes to pricing (and re-pricing) trade developments.

- If trade is about economics/growth, then any retreat from hostilities is a positive step. Yields should rise on the potential for a stronger economy, particular a lift from the harsh struggles for industrial Europe. The increase in yields, however, should be a bear steepener because the improvement will take several years to progress toward the need for central bank tightening.
- If trade is actually about business confidence in the direction of world leadership and international stability, then this week is "Exhibit 19" why confidence cannot be restored quickly.

Tactically on the trade negotiations, markets still do not know whether i) the US decides to claim victory that tariffs brought the Chinese to the table; or ii) the White House worries it surrendered too much for Phase 1 with little in return? ***For the rest of the fourth quarter, trading US/China is about reading tactics and messaging rather than substance.*** Included among messaging is the where and when of the signing of any agreement actually reached. The President wants it in the US, preferably in farm country.

Dividend yields and 10-yr UST are neutral for first time in three months

Although US stocks didn't respond to either the Fed's third rate cut or the message it was likely done with insurance easing, lower rates do account for some of the improvement in equities off the lows in August. Over intervals of several months, equities respond more to short-term real interest rates than the cost of money out the curve.

In terms of investor preference between for asset classes, though, many are sensitive to the cash earnings differential between stocks and bonds. This chart is by no means perfect, but it correctly captures a major rebalance between Treasuries and large-cap stocks.

10-Yr UST Yields less Dividend Yield on S&P 500
January 2018 to Present
Daily

Source: Standard & Poor's and FHN Financial

In mutual fund flows, high-grade debt funds have continued to dominate weekly inflows, despite the hot run in stocks. For Treasury ETFs, only the longest maturities (20-yrs +) saw significant outflows this week. Yet, bond prices fell as though they had been shot out of a tree.

> Bottom Line: If the first question for the rest of the year centers on trade headlines, the second question is how much it influences real money asset reallocation into year-end. Buying flows away from Treasuries have remained steady even through the most volatile sessions this week. That's a strong antidote to a broad fixed-income sell-off. Certainly the risk-on move has benefitted high yield and emerging market debt so far this month.

Global risk influences entire UST curve, but it should discriminate

One explanation for the hard fall in bond prices was gold – the inverse risk barometer – fell through support on November 7.

Price of Gold
Dollars/Ounce
September 1, 2018 to Present
Daily

Source: CMX Commodity Exchange

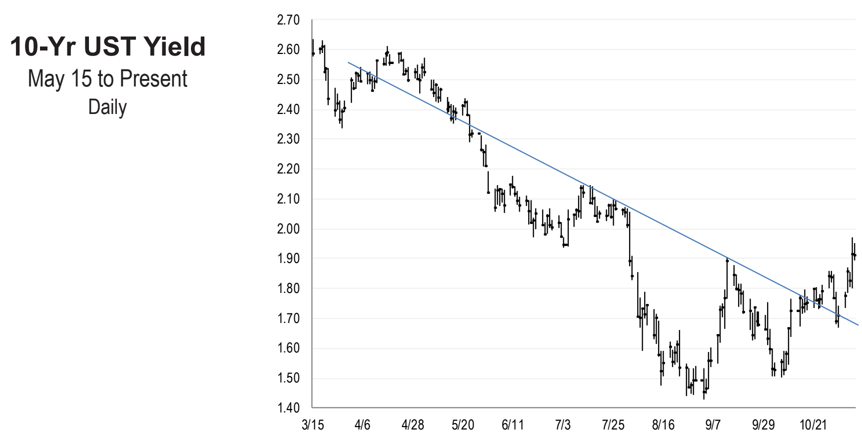
Treasury yields have tied to gold prices at the 90% r-squared level since the beginning of April because Treasuries, the yen, German bonds, etc. have all been safe havens from global distress. In 'average' distress events, the relationships are the tightest for 10-yr and 30-yr bonds. Instead, the last seven months have seen no drop in correlations between gold and individual maturities until moving shorter than the 5-yr UST.

Fast adjustments to global safe havens, though, don't last that long without fundamental follow-through after the flash news headline. This is also true, for example, on equity option volatility that soars on fear then retreats quickly after prices adjust.

Bottom Line: Hard, definitive announcements about approval of Phase 1 will again bring a sharp, risk-on move that can send UST yields higher. Teases about progress – unless the repeated source is the White House – should not bring a repeat of this week's spiked yield increase. Continue to watch gold and the value of the yen as outside, independent reads on risk sentiment.

Technical breaches added fuel to the sell-off

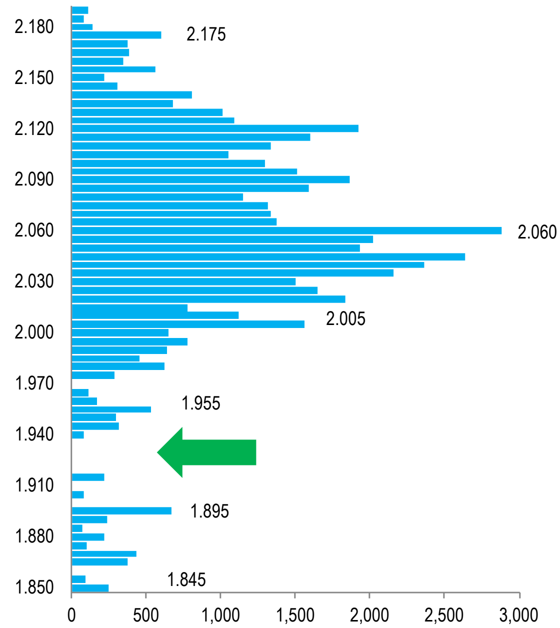
The last time 10-yr yields drifted above the trend, it was in the pre-FOMC period that always weakens price performance (1). The inability of the buying early Thursday to keep the yield near 1.80% created a scarier signal (2) that still looms over next week.



Source: FHN Financial

Equally important, the summer rally left a large gap in trading volume between 1.895% and 1.955% (green arrow). The gap effectively ends at 2.005% on 10s.

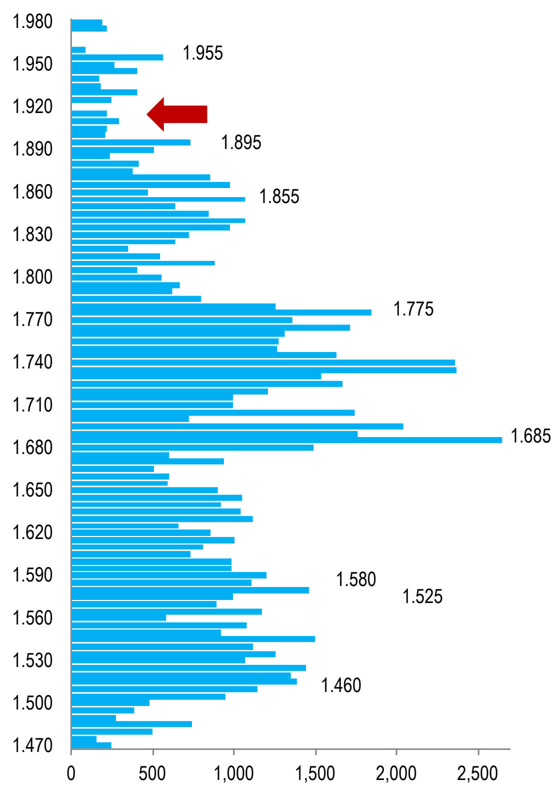
10-Yr UST Yields with Volume Totals from Corresponding Futures Trading
May 31 to August 2, 2019



Source: CBOT, FHN Financial
Note: Yield/Volume measured in 30-minute intervals

This week still left a lot of room in that gap (red arrow). In the current territory, the nearest "comfort zone" for stable trading is 1.855%. A move through there for two days might spark buying back to the high 1.70s, depending on news away from US/China.

10-Yr UST Yields with Volume Totals from Corresponding Futures Trading
Since August 1



Source: CBOT, FHN Financial
Note: Yield/Volume measured in 30-minute intervals

The chart also shows that while selling definitely made an impact, it was not overwhelming. Daily flows approached the level last seen in the buying the first week of October on disappointing ISM surveys.

Summary

It was never a question how markets would react to easing trade conditions. Traders have been drooling over the prospect of a trade breakout for months. Analysis of Nov 7-8 indicates either earlier breakouts were early or the most recent was a rally too far. Expect stocks to move sideways next week to consolidate recent gains and assess how much real news appeared in the headlines as opposed to negotiating tactics. Remember, of course, tariffs themselves began as a tactic; only later when they became the premier lever applied by the US did they become a real issue for the economy. Also, the big move in interest rates ignored the once hot topic that tariffs boost short-term inflation. We haven't seen the reverse side of that coin mentioned in the last three weeks of commentary, but it could be important for prices in Q2 2020 if tariffs reverse in December.

Next week, the first test for US/China trade dominance over interest rates will arrive on November 13 when Chair Powell testifies to Congress and pulls attention back to fundamentals and the challenges the Fed deals with in the absence of responsible fiscal policy at home or abroad.

GSE CAPITAL RETENTION: BETTER EQUITY BUILD PROTECTS DEBT HOLDERS

Just before the end of the third quarter, FHFA and Treasury agreed to let Fannie Mae and Freddie Mac retain their earnings rather than sweep it to the government in payment for the explicit guaranty behind their securities. Rather than the previous $3 billion caps, at Sept 30 equity was:

- Fannie Mae: $10.3 billion vs new limit of $25 billion
- Freddie Mac: $6.7 billion vs new limit of $20 billion

Because the new agreement was signed prior to the end of the quarter, Fannie and Freddie did not dividend their Q2 earnings to the Treasury. In effect, the September 30 equity accumulates two quarters of income. At a reasonable pace of earnings, Fannie should be close to its $25 billion limit in early 2021, possibly at the end of next year. For Freddie Mac, look for it to arrive by the middle of 2021.

The previous limit that triggered dividend payments to Treasury was $3 billion for both. For the first time in 11 years, the government actually recognized Fannie is bigger than Freddie Mac with different limits for each. Also for the first time in 11 years, debt and mbs securities now have four layers of protection:

- The backstop of the preferred stock purchase agreements
- Loan loss reserves and accumulated but unrealized writedowns on non-performing assets.
- Credit risk transfers to outside parties.
- Equity

> Treasury and FHFA pitched earnings retention as an important step to eventually freeing both GSEs from conservatorship, putting them in a place to attract private equity capital. ***From a credit perspective, though, the important news of an equity buffer is it amplifies the value of the preferred stock purchase backstops.***

By design, the size of the purchase agreement was supposed to be too big to ever be drained completely. Draws, then, could not be replenished by repayments, a feature designed to stymie GSEs' return to their old stature. The backstop is not refillable, but the equity account can now be refilled if it falls below $25bb/$20bb respectively for FNMA and FMCC. It stands in front of draws of new preferred stock.

Periodic losses that reduce the equity account aren't permanent hits as long as subsequent earnings replenish equity. The odds of continued draws on Treasury support that later might be insufficient to withstand another 2006-10 style event are diminished.

The next table adapts FHN's annual analysis of the sufficiency of remaining Treasury support from Credit Principles. It roughly duplicates much of the credit deterioration seen 10 years ago when loss severities topped at 45%. The assumptions lower severities to 30% to roughly account for credit risk transfers now in place (even though CRT should absorb more losses than that). Fannie has CRT protection on 49% of the principal balance of its loans; Freddie has 47%. Loss reserves are normalized for ongoing production for the next 18 months to raise them above current levels; the increases are proportional to post-crisis credit patterns.

	New Agreement		Previous Cap of $3bb	
	Fannie	Freddie	Fannie	Freddie
Non-Performing Assets	125,000	50,000	125,000	50,000
Loss Severity	30%	30%	30%	30%
Projected Credit Loss	37,500	15,000	37,500	15,000
Equity	***25,000***	***20,000***	***3,000***	***3,000***
Loss Reserves	22,500	7,000	22,500	7,000
Equity (less) Loss	***10,000***	***12,000***	***(12,000)***	***(5,000)***
Trsy Support - Begin	113,900	140,200	113,900	140,200
Trsy Support - End	113,900	140,200	101,900	135,200

Source: FHN Financial

The assumptions are simplistic but do illustrate the power of having equity in front of Treasury support that under current terms cannot be refilled. Investors can supply their own assumptions about the level of non-performing assets, etc, but those numbers were carefully chosen to reflect current housing market conditions and potential deterioration over the next five years.

Contact FHN Financial to discuss likely risk/capital scenarios.

Terms of the new agreement with Treasury

SEC filings from both companies show there has been no decline in the balance of the Treasury Funding Commitment due to the changes in the dividend sweep.[1] Instead, the amount of preferred stock the Treasury owns in each is increased each quarter as an additional "Liquidation Preference" equal to the amount of the increase in net worth.

The preferential shares increase the government's stake in the companies should they ever be liquidated or return to private ownership. Rather than create equity that could eventually accrue to legacy holders of previous common or preferred stock, Treasury now has an even larger amount standing in front of other holders.

Under the terms of the September letter agreement, the GSEs and Treasury "agreed to negotiate and execute an amendment to the Purchase Agreement that further enhances taxpayer protections by adopting covenants broadly consistent with recommendations for administrative reform contained in the Treasury's September 2019 Housing Reform Plan."

FHFA Executive Director Calabria said this month negotiations are in early stages, and it looks to move from a dividend "suspension" to a more complete amendment of the sweep that likely includes payments to Treasury for ongoing contingent support. That would align with the housing reform principles the Administration implemented this fall in hopes of turning the GSEs to private shareholders at some point.

Summaries of third quarter results for both start on the next page.

[1] Page 3 in FNMA's 10-Q and page 3 in FMCC's 10-Q.

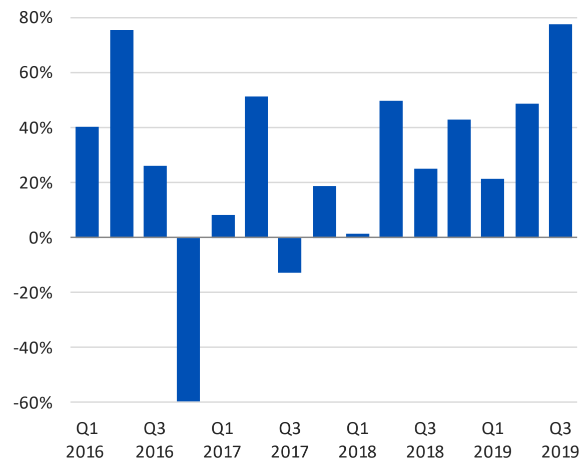
FNMA: Earnings Improve on Credit Upgrades

Net income of $3.96 billion saw a bump from Q2 due largely to the best net interest income from its guaranty book in five quarters plus a $600 million increase in pre-tax credit income. Both single-family and multi-family business lines showed improvement.

"The increase in credit-related income in the third quarter of 2019 was driven primarily by an enhancement to the company's model used to estimate cash flows for individually impaired single-family loans within the company's allowance for loan losses," the company said in its press release. "This enhancement was performed as part of management's routine model performance review process. In addition to incorporating recent loan performance data, this model enhancement better captures recent prepayment activity, default rates, and loss severity in the event of default."

The relative bump from single-family credit income versus pre-tax operating income (as computed by FHN Financial since the guaranty book is no longer broken out), is visible in the chart.

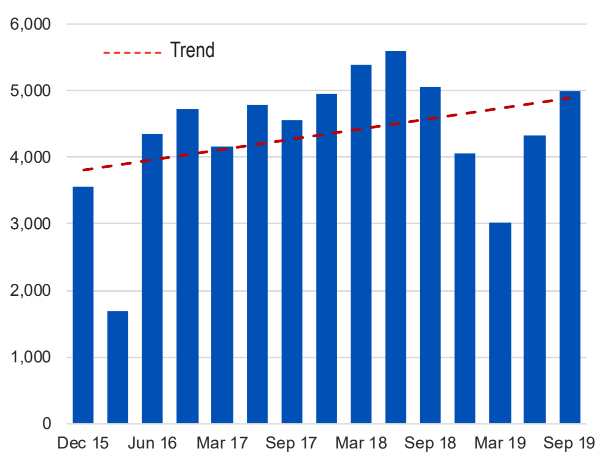
Credit (Costs)/Recoveries as Percentage of Pre-Tax, Pre-Credit Operating Revenues
2016 to YTD 2019
Quarterly



Source: FHN Financial, Fannie Mae

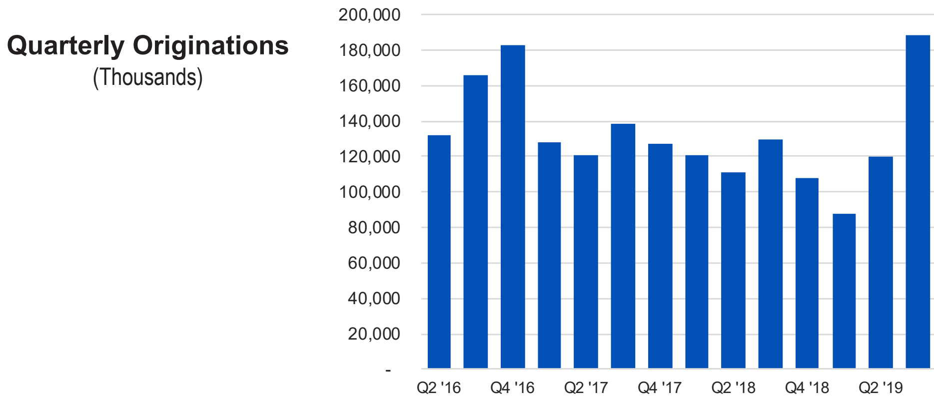
Taking a longer look back at pre-tax net income – adjusting for lower tax rates in the last seven quarters – Fannie's performance approaches the better levels of early 2018. Note, though, the first several quarters of 2018 did not see large credit revenues.

Pre-Tax Earnings
Q4 2015 to Q2 2019
Excluding Q4 2016
(Millions)



Source: Fannie Mae, FHN Financial

On the single-family side, revenues were boosted by the largest quarterly loan originations in almost three years, a big assist to a business that has struggled to produce top line revenue growth.



Source: Fannie Mae, FHN Financial

One cost to better originations this year has been an increasing expenses for credit risk transfer structures. Fannie's 10-Q says that line item helped to account for almost a 20% increase in S-F expenses from the second quarter to the third. ***Year to date, 2019 S-F CRT expenses are 24.9% higher than the comparable period in 2018.***

Fannie Mae S-F Guaranty Business Statistics

	Q3 2019	Q2 2019	Q1 2019	Q4 2018	Q3 2018	Q2 2018	Q1 2018
Avg total S-F guaranty	2,924,000	2,907,000	2,962,000	2,970,000	2,889,000	2,879,000	2,938,000
MBS issuance	188,500	120,100	88,000	107,700	130,000	111,300	121,000
Effective avg guaranty fee	43.5	43.4	43.3	42.4	43.3	42.7	42.6
Fee new acquisitions	45.9	46.7	50.4	42.5	51.2	49.0	47.1

Fannie Mae S-F Guaranty P&L

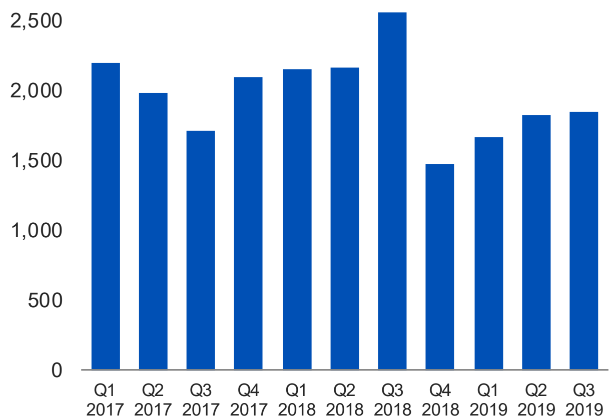
	Q3 2019	Q2 2019	Q1 2019	Q4 2018	Q3 2018	Q2 2018	Q1 2018
Net Guaranty Fees	3,180	3,154	3,206	3,148	3,127	3,073	3,129
Administrative Expenses	520	517	541	569	522	529	521
Expenses less Fee Inc	(407)	(330)	(243)	(389)	(271)	(201)	(265)
Operating Inc	2,252	2,307	2,422	2,190	2,334	2,343	2,343
Credit (Losses)/Recovery	1,747	1,126	518	934	582	1,159	34
Pre-tax income	3,999	3,433	2,940	3,124	2,916	3,502	2,377

Source: Fannie Mae, FHN Financial

FMCC: Single-family Results Improve While Legacy Portfolio Shrinks

Freddie Mac's third quarter income continued its sideways path, still significantly below the quarterly pace for most of 2018 and 2017. Comprehensive income was $1.85 billion, almost exactly equal to the $1.83 billion the previous quarter. The quarterly pace averaged in the mid $2 billion area for most of 2017-2018. GAAP income is steadier than those two years, however, even as interest rate volatility has climbed in 2019.

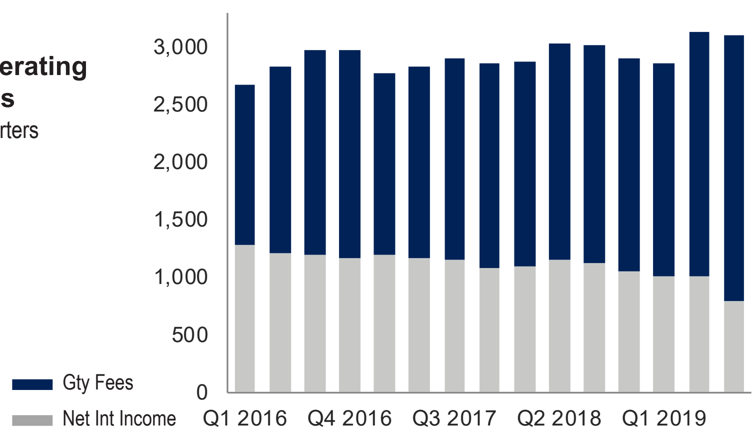
Comprehensive Income
Last 11 Quarters
(Millions)



Source: Freddie Mac

The whipsaw in interest rates also took a toll on FHLB's quarterly results. Net interest income also suffered due to a lower-yielding asset mix, including lower average balances for member advances. Further, its new liquidity investment requirements took a bite. Net interest income was $789 million. The previous two quarters averaged $1 billion on a non-GAAP presentation. The chart looks at growing guaranty income in single-family and multi-family necessary to keep up with the decline in net interest income.[2]

Non-GAAP Operating Revenues
Trailing 15 Quarters
(Billions)



Source: Freddie Mac

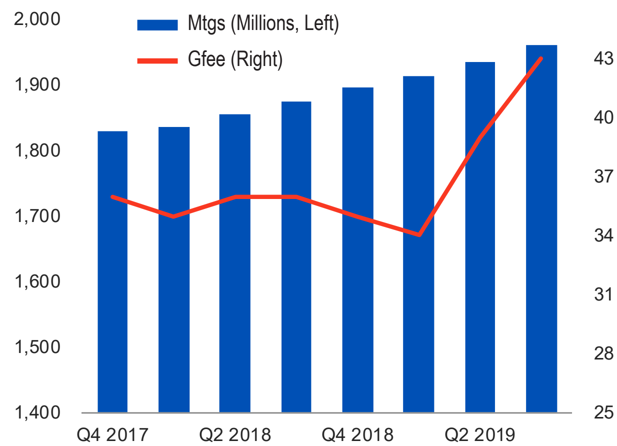
[2] Freddie's net interest income is on its legacy portfolio, termed the "Capital Markets Group." Fannie reports net interest income for single family as a combination of guaranty fees and the net earned on its legacy portfolio.

On the single-family side, Freddie lagged behind Fannie in quarterly originations growth, but has notched at least one quarter of significant improvement in its single-family pre-tax operating income. It represents the best quarter for that business unit in almost three years, and it didn't need credit recoveries to bolster the bottom line. Most important, the average guaranty fee is at a multi-year high.

Freddie Quarter-End S-F Mortgage Book and Average G-Fees (GAAP Basis)

Q4 2017 to YTD 2019

Quarterly



Source: Freddie Mac, FHN Financial

On a GAAP basis, this is a quarterly summary of the single-family business.

Freddie Mac S-F Guaranty Business Statistics							
	Q3 2019	Q2 2019	Q1 2019	Q4 2018	Q3 2018	Q2 2018	Q1 2018
Ending guaranty book	1,961,000	1,935,000	1,914,000	1,896,000	1,875,000	1,855,000	1,836,000
MBS issuances	134,000	102,000	70,000	77,000	81,000	84,000	66,000
Eff avg guaranty fee (bp)	43	39	34	35	36	36	35
Fee on acquisitions (bp)	45	44	40	40	41	41	40

Freddie Mac S-F Guaranty P&L							
	Q3 2019	Q2 2019	Q1 2019	Q4 2018	Q3 2018	Q2 2018	Q1 2018
Guaranty fees	2,075	1,889	1,633	1,637	1,675	1,666	1,590
Administrative Expenses	399	400	374	420	372	363	336
Net (Expenses)/Oth Inc	(236)	(356)	(301)	(135)	(65)	(281)	(270)
Operating Inc	1,440	1,133	958	1,082	1,238	1,022	984
Credit (Losses)/Recovery	73	(7)	(30)	66	164	83	2
Pre-tax income	1,513	1,126	928	1,148	1,402	1,105	986

Source: Freddie Mac, FHN Financial