

# Credit Market Barometer

Tour of North American  
credit conditions

**2019 – Volume Three**

## Welcome to the Credit Market Barometer (CMB).

Incoming signs from the global economy remain weak. Forecasters such as the IMF describe a “synchronized slowdown,” with a “precarious” outlook for 2020. Yet the US stock market hit new highs in December, because market fears of a 2020 recession have been much reduced. This more optimistic mood has been driven by two key factors – the continuing solid performance of the US economy and a perceived reduction in some key global risks, especially on trade.

It is true that the US manufacturing sector remains in recession, but overall Q3 GDP growth (at 2.1%) was slightly above Q2's 2.0% rate. Consumer spending rose solidly again in Q3 (up 2.9%), employment growth has averaged 205,000 over the past three months, real wages are rising, and consumer confidence remains high. Housing activity is showing life in both starts and sales, helped by the recent declines in mortgage rates. The data shows an economy that has slowed, but not one on the verge of recession.

Even more importantly, some key risks appear to have diminished. In October, President Trump announced that a limited “Phase 1” trade deal between the US and China was being prepared. This would involve China buying more US agricultural products, and making promises on intellectual property protection and on opening markets to foreign financial services. In return the US would stop ratcheting tariffs higher and perhaps roll some back. This deal would fail to address most of the key issues between the two nations, and it could still fall apart. But the prospect of any deal, however limited, has at least provided a signal that the Trump administration does not want to risk further escalation right now that could hurt economic growth and threaten the President's re-election prospects.

In Europe, a disruptive no-deal Brexit on October 31 was avoided, as the UK was granted another delay. Prime Minister Johnson achieved a new Brexit agreement, at the cost of concessions that would leave Northern Ireland in a de facto customs union with the EU. A general election on December 12 will determine whether Johnson can achieve a parliamentary majority to push through his agreement. If he fails to do so, another round of Brexit negotiations and a second referendum would be likely. In either case, no-deal Brexit would be off the immediate agenda.

It's still possible that this good news could evaporate – and there are plenty of other geopolitical risks to worry about – but the worst-case outcomes now look less likely. As long as these risks do not blow up again, this extended expansion looks set to run at least through 2020.

– Nigel Gault  
EY Parthenon Chief Economist

# Credit Market Barometer

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# Executive summary

## Credit Market Barometer 2019 – Volume Three

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Chair Powell said that he and his colleagues on the Federal Open Market Committee will set monetary policy, as required by law, to support maximum employment and stable prices and will make those decisions based solely on careful, objective and nonpolitical analysis.

– Fed Statement on Chair Jerome Powell’s meeting with the President and Treasury Secretary, November 18, 2019

### What we’re seeing

- ▶ Credit officers’ top concerns heading into 2020 are completing CECL readiness, better use of data to inform risk management and the possible impacts of an economic slowdown.

### Macro picture

- ▶ Despite many signs that the economy is stable, market watchers have drawn attention to the Institute for Supply Management (ISM) surveys of US manufacturing and services, which have both slipped lower. These leading indicators are hinting that an economic slowdown may occur in 2020.

### Risks to the economy

- ▶ The Fed eased rates three times in 2019 as protection against a slowdown, but further easing appears unlikely for the foreseeable future.
- ▶ High US federal debt/GDP, high asset valuations and high corporate leverage each contribute to greater risk that a downturn in the US could be worse than many are expecting.
- ▶ China’s slowing trade dispute with the US and a disorderly Brexit outcome are each meaningful risks with follow-on implications for the US economy.

### Loan growth

- ▶ The loan and lease balances of US commercial banks grew 4.1% year over year (YoY) in Q3 2019, after growing at rates of 5.7% and 4.1% in Q1 and Q2 2019, respectively, based on Fed H.8 data.
- ▶ November H.8 releases are showing a slower growth trend in commercial and industrial (C&I) loan balances. The slowing comes following a period of rapid growth in late 2018 and early 2019.
- ▶ Consumer lending (excluding residential mortgage) growth remained strong, reaching 5.4% in Q3 2019.

### Bank performance

- ▶ Q3 2019 bank reporting was marked by material drops in earnings. Slowing lending continued among the largest four banks, but fair growth continued among super-regional and regional banks.
- ▶ Average deposit costs should drop for most banks because of rate cuts, but further flattening of the yield curve is a more powerful effect, which led to pressures on banks’ net interest margins.
- ▶ Credit performance across almost all loan classes remains strong – including for early stage delinquencies.

# Credit weather snapshot

Job creation showed unexpected strength in November. Spending growth fell to 3.7% in October, dropping below the 4%-5% range it had held earlier in 2019. Slowing consumer spending points to GDP growth remaining modest. Banks' returns on average assets (RoAA) and returns on average equity (RoAE) dropped materially in 3Q. Loan balances, however, are still rising at a strong pace through Q3 2019.

## US macro

US nonfarm payrolls, mo. change (k)



Unemployment rate, U-3 (%)



Real GDP, ann. change (%)



Inflation, CPI, ann. change (%)



Case-Shiller US housing pr. index (HPI)

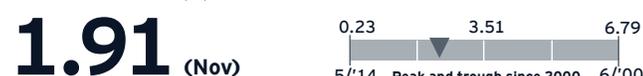


Expenditures, PCE, ann. change (%)



## US rates

LIBOR – 3 mo. (%)



Mortgage rate US avg., 30-yr. fixed (%)



2-yr.-10-yr. UST spread (%)

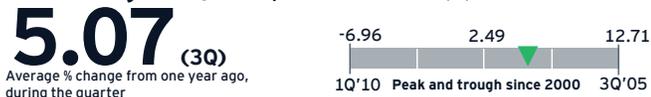


Fed funds effective rate (%)

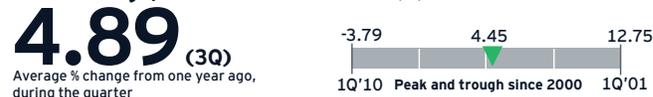


## US bank credit growth

Ann. change loan/lease, comm. banks (%)



Ann. change, total consmr. credit (%)



## US bank asset quality

NPLs, all loans, comm. banks (%)

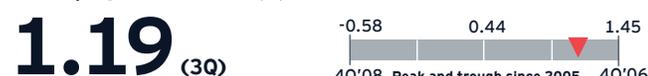


NPLs, commercial loans (%)



## US bank performance

RoAA, >\$100b banks (%)

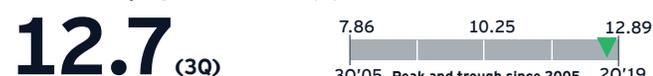


RoAE, >\$100b banks (%)

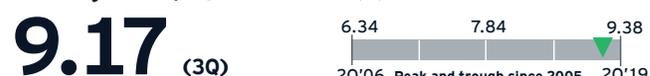


## US bank capital

CET1 ratio, >\$100b banks (%)



Leverage ratio, >\$100b banks (%)



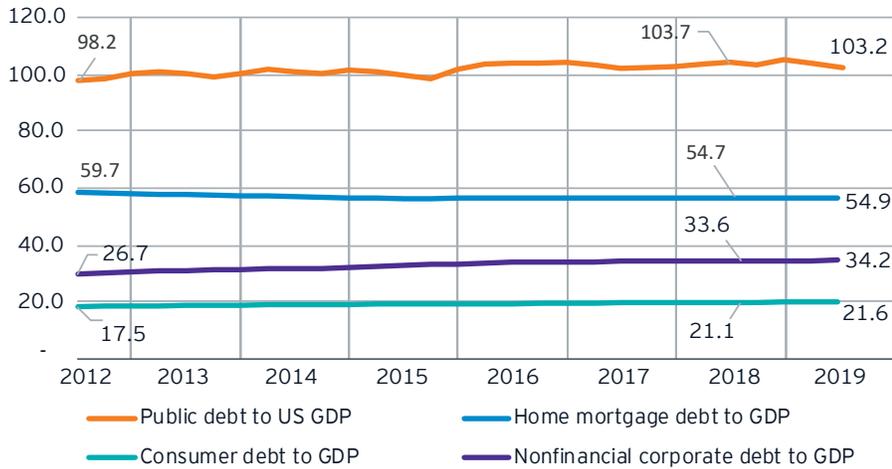
Note: ▲ Generally favorable or trending favorably for banks ▼ Generally not favorable or trending unfavorably for banks ▾ Generally neutral for banks

Sources: EY, Federal Reserve Economic Data, S&P Global Market Intelligence

# System leverage and loan growth

Overall leverage in the US financial system remains high relative to US real GDP but has stabilized. US commercial banks' loans and lease balances are still growing at healthy rates but at a slowing pace entering into Q4 2019.

## Public, corporate, home mortgage, consumer debt to GDP (%)

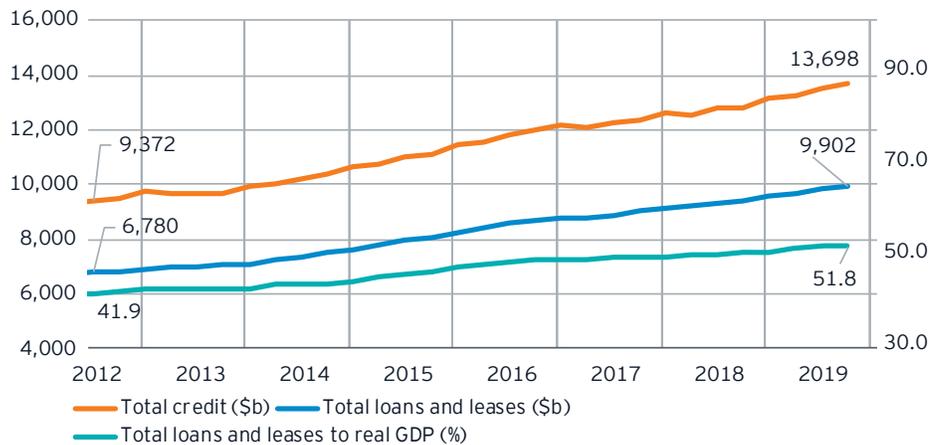


## Leverage relative to GDP

- ▶ Total US government-related (public) debt to GDP fell slightly to 103.2% in Q2 2019, from 103.7% in Q3 2018.
- ▶ Household mortgage debt-to-GDP was 54.9% in Q2, down from 54.7% in Q3 2018.
- ▶ Nonfinancial corporate debt-to-GDP rose 58 bps to 34.2% in Q2 from 33.6% in Q3 2018.
- ▶ Consumer debt (non-mortgage)-to-GDP was 21.6% in Q2, up from 21.1% in Q3 2018.

Source: Federal Reserve Economic Data, latest available Fed Z.1 data

## Total credit held by commercial banks (\$b)



## Total credit and total loans and leases

- ▶ Total US commercial bank credit holdings were \$13.7t at the end of Q3 2019, up 6.75% from the previous year.
- ▶ Total loans and leases held by US commercial banks were \$9.9t at Q3 2019, up 5.07% YoY, slower than the four-year compounded annual growth rate (CAGR) of 5.26%.
- ▶ US commercial bank loans and leases to GDP were 51.8%, up sharply from 50.3% one year ago.

Source: Federal Reserve Economic Data; total credit is all loans and leases plus fixed income securities held by US commercial banks.

# US macro view and interest rates

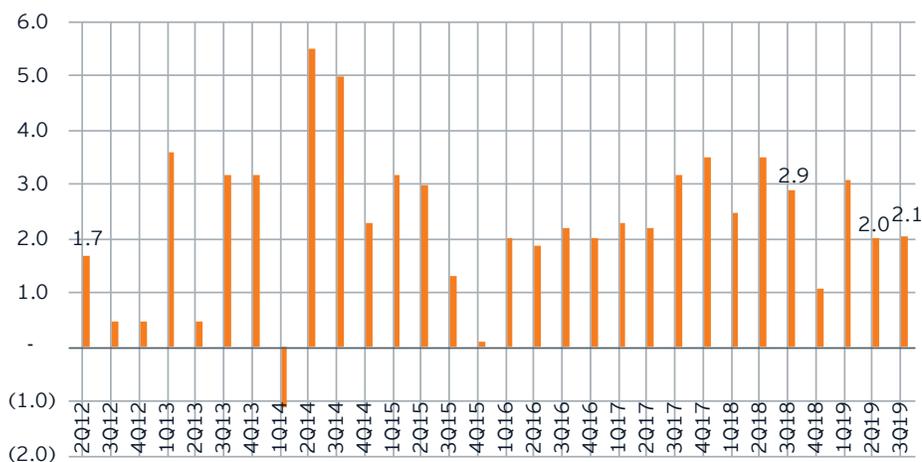
US growth is likely to remain muted over the near term. The Fed made three rate cuts in 2019 as insurance against downside risks. The Fed had room to do so because of below-target inflation and multiple political risks growing around the globe.

## Executive summary

- ▶ Core measures of the US economy remained healthy as of the end of November 2019, but some attention continues to be drawn to the ISM Manufacturing Survey, which is marginally indicating expectations for a manufacturing contraction. November's reading was 49.1%, up from 46.2% in October.
- ▶ Despite the immediate good signs, the case for a stalled economy includes the points below:
  - ▶ Labor force participation is trending better, but at 63.2% for November, the measure remains well below pre-2008 levels of over 66%. Some argue that depressed labor participation is a reflection of a skills-to-qualifications mismatch, meaning fewer qualified workers are available to put upward pressure on economic growth.
  - ▶ Total nonfarm payroll employment increased by 156,000 in October. Job growth has averaged about 180,000 per month thus far in 2019, compared with an average monthly gain of 223,000 in 2018 – a significant decline. (The health care and professional/business services sectors have been the biggest gainers).
  - ▶ Inflation indicators are weakening. Core CPI and PPE price index measures are running under 2% and were trending lower as of their latest readings.

Real GDP growth slowed in 2019 as the boost from tax cuts and government spending increases faded. Employment growth is also likely to slow as capacity constraints bite into the labor market. But continued modest growth, not recession, is the most likely path for now.

## Real GDP growth (%)



Source: Federal Reserve Economic Data

Last shown reading Q2 2019

## Real GDP growth

- ▶ GDP growth was 2.1% in Q3 2019, up from 2.0% in the previous quarter but down from 2.9% in Q3 of 2018.
- ▶ On average, economists surveyed by *The Wall Street Journal* expect real GDP growth to slow to 1.75% for full-year 2020.

► **The US macro view and interest rates** *cont.*

**Unemployment rate (%)**



Source: Federal Reserve Economic Data

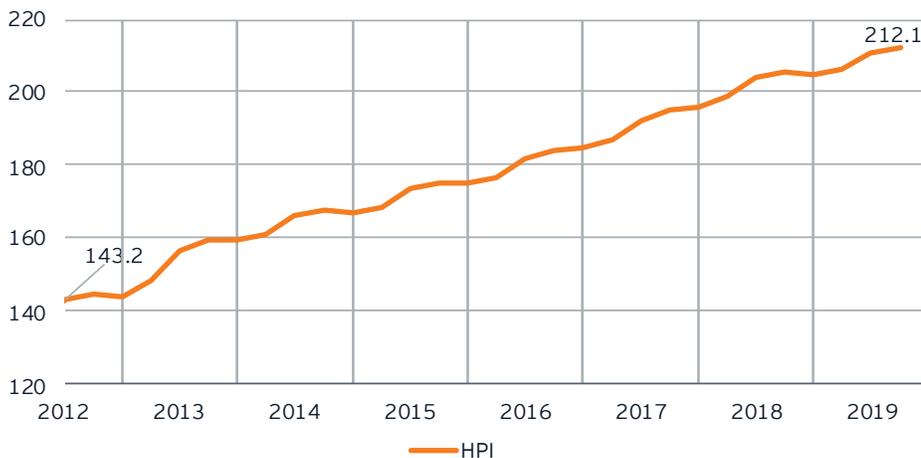
Last shown reading Q3 2019

**Unemployment rate**

- The US unemployment rate dropped slightly to 3.5% in November, from 3.6% in October and even with September's level.
- Job creation over the first half of 2019 slowed to its lowest level of any first half since 2011.
- A gradual deceleration in employment growth is inevitable given the already low unemployment rate and slow growth in the working-age population.

US housing prices are about 14% above pre-financial-crisis peaks, nationally, as of August 2019. Corporate credit spreads for BBB-rated corporate issuers rose 110 bps over 2018 to 4.69%, only to be more than reversed in the first nine months of 2019.

**Case-Shiller national housing price index (HPI) (%)**



Source: Federal Reserve Economic Data

Last shown reading Aug. 2019

**Housing price index (HPI)**

- The housing market continues to exhibit strong pricing, as the HPI reached 212.1 in August, up from 205.0 in December 2018.
- The three US cities with the highest one-year index increases in July were Phoenix at 6.3%, Tampa at 4.3% and Charlotte at 4.5%.
- Overall, leadership remains in the Southwest (Phoenix and Las Vegas) and Southeast (Charlotte and Tampa), but other pockets of relative strength include Minneapolis, which increased its YoY gain to 4.2%, and Detroit, which is closely behind at 4.1% YoY.

**BBB corp. yield (%)**



**BBB corporate yield**

- ▶ Average effective yields among BBB-rated bonds has fallen 139 bps to 3.30% in the nine-month period ending September 30.
- ▶ The tightening completely reverses the widening trend that lasted throughout all of 2018.

Source: Federal Reserve Economic Data, ICE BofAML US Corporate BBB Index

Last shown reading Q3 2019

**What the Fed is focused on**

In October, the Federal Open Market Committee (FOMC) lowered the federal funds target range to 1.75% to 1.50%. It was the third of what will likely be three rate cuts in 2019.

In the FOMC's June summary of economic projections, shown below, the real GDP growth projection for 2019 was actually lifted 10 bps to 2.2%.

Variable	Median					Central tendency					Range				
	2019	2020	2021	2022	Longer run	2019	2020	2021	2022	Longer run	2019	2020	2021	2022	Longer run
Change in real GDP	2.2	2.0	1.9	1.8	1.9	2.1-2.3	1.8-2.1	1.8-2.0	1.7-2.0	1.8-2.0	2.1-2.4	1.7-2.3	1.7-2.1	1.6-2.1	1.7-2.1
June projection	2.1	2.0	1.8		1.9	2.0-2.2	1.8-2.2	1.8-2.0		1.8-2.0	2.0-2.4	1.5-2.3	1.5-2.1		1.7-2.1
Unemployment rate	3.7	3.7	3.8	3.9	4.2	3.6-3.7	3.6-3.8	3.6-3.9	3.7-4.0	4.0-4.3	3.5-3.8	3.3-4.0	3.3-4.1	3.3-4.2	3.6-4.5
June projection	3.6	3.7	3.8		4.2	3.6-3.7	3.5-3.9	3.6-4.0		4.0-4.4	3.5-3.8	3.3-4.0	3.3-4.2		3.6-4.5
PCE inflation	1.5	1.9	2.0	2.0	2.0	1.5-1.6	1.8-2.0	2.0	2.0-2.2	2.0	1.4-1.7	1.7-2.1	1.8-2.3	1.8-2.2	2.0
June projection	1.5	1.9	2.0		2.0	1.5-1.6	1.9-2.0	2.0-2.1		2.0	1.4-1.7	1.8-2.1	1.9-2.2		2.0
Core PCE inflation	1.8	1.9	2.0	2.0		1.7-1.8	1.9-2.0	2.0	2.0-2.2		1.6-1.8	1.7-2.1	1.8-2.3	1.8-2.2	
June projection	1.8	1.9	2.0			1.7-1.8	1.9-2.0	2.0-2.1			1.6-1.8	1.8-2.1	1.8-2.2		
Federal funds rate	1.9	1.9	2.1	2.4	2.5	1.6-2.1	1.6-2.1	1.6-2.4	1.9-2.6	2.5-2.8	1.6-2.1	1.6-2.4	1.6-2.6	1.6-2.9	2.0-3.3
June projection	2.4	2.1	2.4		2.8	1.9-2.4	1.9-2.4	1.9-2.6		2.5-3.0	1.9-2.6	1.9-3.1	1.9-3.1		2.4-3.3

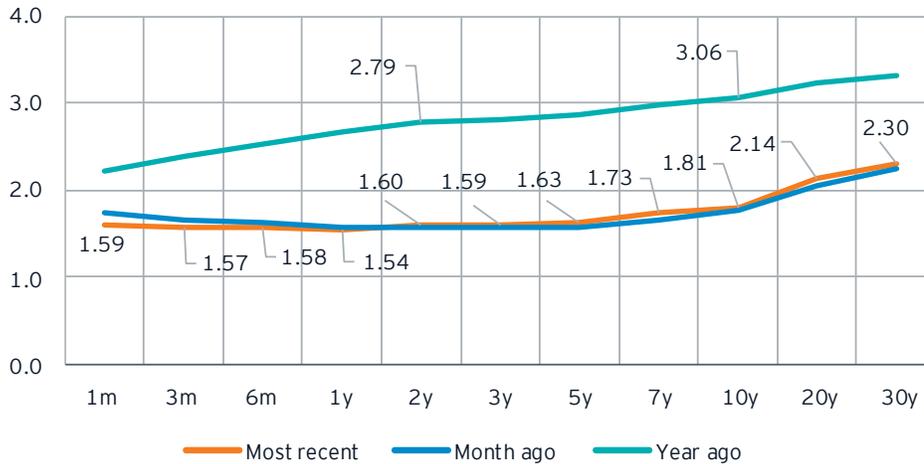
Source: Summary of economic projections, FOMC (September 2019)

- ▶ Persistently below-target inflation, weakening global growth and uncertainty over trade wars are the prime reasons for the move towards rate cuts. The Fed is calling the moves "insurance" against a recession.
- ▶ The FOMC's voting members are not unanimous in views on the economy's direction, however. Two voting members voted to not change the target Fed funds rate in October.

# Interest rates

In October, the Fed announced it would begin a program of purchasing \$60 billion of T-bills per month in order to inject liquidity into the financial system. The effort should help reduce the risk of the Fed funds falling outside its targeted range. The program was a response to spikes in the overnight rate that occurred in mid-September.

## Treasury yield curve (%)



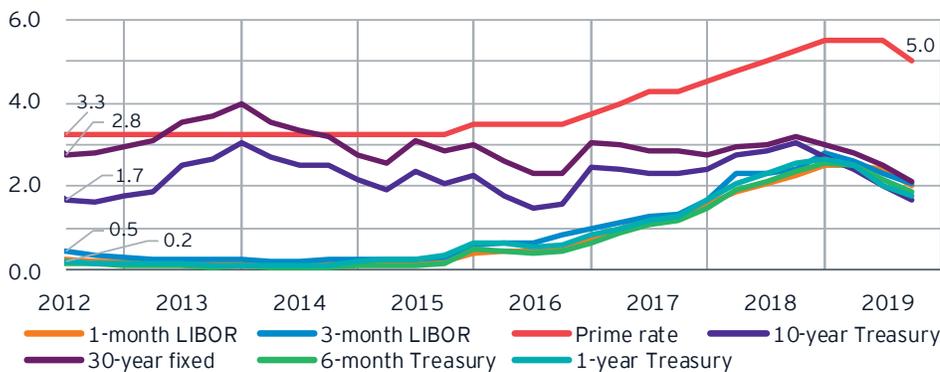
Source: S&P Global Market Intelligence

Data as of November 19, 2019

## Key rates

- As of November 19, the 10-year US Treasury (UST) yield had fallen to 1.81%, declining by 125 bps from the previous year.
- 30-year USTs are yielding 2.30%, decreasing 102 bps from previous year.
- Yields on 10-year USTs briefly dropped below 1.5% on fears over the economic outlook in October

## Key rates (%)



Source: Federal Reserve Economic Data

Chart as of September 30 2019

- One-month and three-month LIBOR rates have compressed since through H1 2019, with three-month LIBOR trading lower than one-month LIBOR as of the end of Q2.
- The prime rate is 4.75% as of November 2019.

# EY Banking & Capital Markets thought leadership



## In times of uncertainty, play it safe or double down?

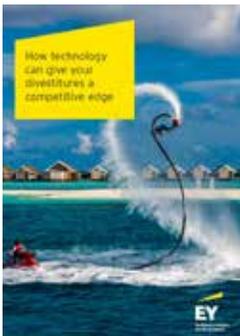
We're in a time of great uncertainty. Perhaps never before have economic signals and indicators been more confusing. Just as unemployment levels hit historic lows and median household income reach all-time highs, news stories and executive surveys herald an impending recession. Seemingly every day, competing headlines suggest that the economy is on an expansion boom that knows no end or is about to contract alarmingly.



## EY analysis reveals significant shift in the global funding landscape led by private capital

Private equity firms now manage commitments of nearly US\$3.4t globally, up from less than US\$500b in 2000, and in a significant shift new capital from private markets has surpassed capital raised in public markets for the first time ever.

This shift and its impact on the dynamics of the funding landscape is analyzed in the new research paper *A new equilibrium: PE's growing role in capital formation and the critical implications for investors*, a joint collaboration between EY and the Institute for Private Capital.



## How technology can give your divestitures a competitive edge

To remain agile and on top of their game, companies are reviewing their portfolios more frequently. Their focus is on unearthing opportunities to keep strategic, operational and commercial performance at the peak of fitness, with an eye on building and maintaining a competitive edge.

Acquiring new technology, talent, production capabilities, market access or innovative startups in their entirety can be transformational but costly. Companies wanting to raise funds to invest in the growth of their businesses are increasingly divesting assets for strategic reasons as opposed to poor business performance. But the cost of a divestment can be more than originally thought.



## Why an economic slowdown does not imply a recession

Despite prevailing fears of an economic slowdown, the C-suite expects growth and a continuing M&A upward trend. The global economy is softening and desynchronizing, but according to the [EY Global Capital Confidence Barometer](#), survey respondents still expect growth. Global economic activity has slowed in some of the major economies in 2019. But most major economies are still growing.

# Wholesale lending



## Executive summary

- ▶ On a YoY basis in Q3, commercial and industrial (C&I) and commercial real estate (CRE) loan balances rose by 5.9% and 4.7%, respectively. However, for only the second time since 2010, QoQ C&I balances dropped, falling 0.85% in Q3. The drop could be expected given the unusual acceleration in C&I growth that occurred in late 2018 and early 2019.
- ▶ As the credit cycle lengthens, large corporate debt burdens are a clear vulnerability to the credit market.
- ▶ A material number of lower-quality oil and gas companies have experienced strain in 2019, leading to concerns that banks with larger exposures to the sector will be downgrading loans.
- ▶ The Fed's October 2019 Senior Loan Officer Opinion Survey indicated that spreads on C&I credits to larger and middle-market firms contracted for the second straight quarter.
- ▶ Wholesale CRE loan balances continued to grow YoY at super-regional and regional banks by 3.16% and 7.34%, respectively, while universal banks experienced just a 1.44% YoY increase.
- ▶ Commercial property owners in the New York market and other large US cities are facing a fresh set of worries from the pullback of WeWork's expansion. Some market participants, including Boston Fed President Eric Rosengren, have expressed concerns about the rapid growth of commercial rental models reliant on short-term subletting to small businesses while being committed to long-term leases.

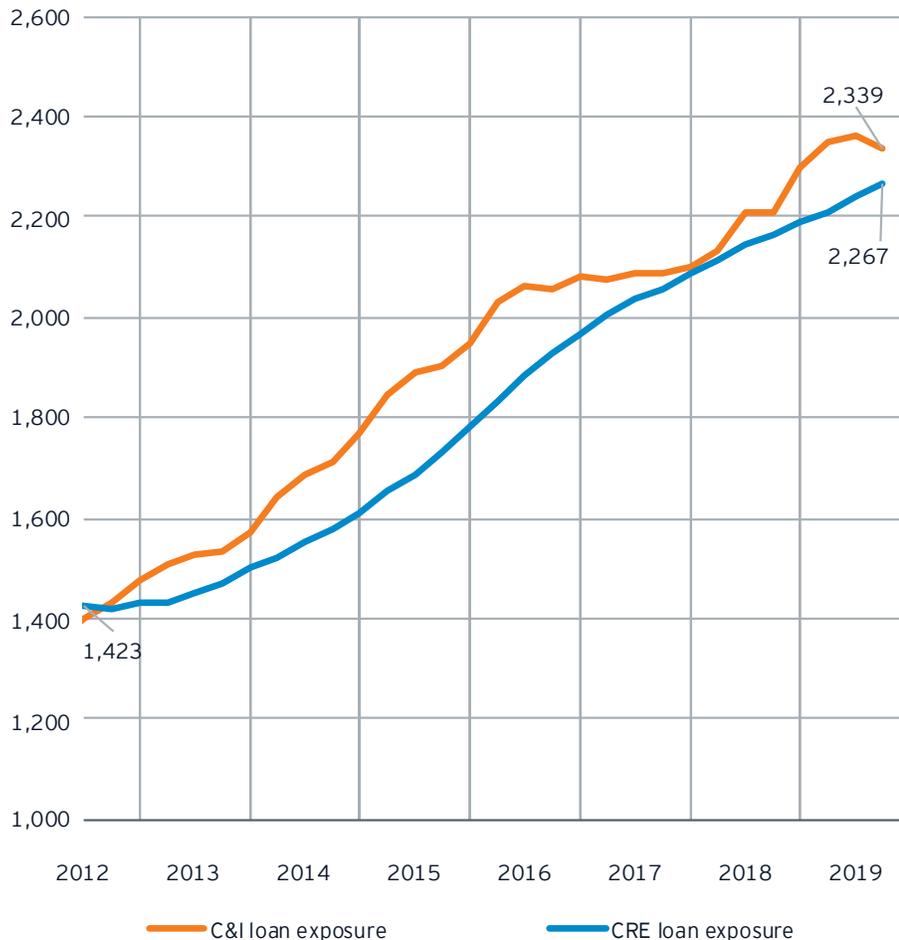
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Outstanding corporate debt stands at almost \$10 trillion, almost 50% of GDP. Those are numbers that should attract our attention. We should recognize what prices and price movement in the corporate debt market are telling us. For example, on a total return basis, the upside has become more limited while the downside has not improved.

– U.S. Securities and Exchange Commission Chairman Jay Clayton, September 9, 2019

Trade conflict and the volatility of the political environment were on full display in Q3 as market participants weighed whether the next recession will occur in 2020. Concerns about the leveraged lending market have shifted to understanding the nonbank ownership of CLOs. But with US banks holding just 14% of the total outstanding CLOs, some market participants are remaining sanguine on the leveraged loan market's overall risk to banks.

### Total wholesale loan exposure (\$b)



### Wholesale lending, all US commercial banks

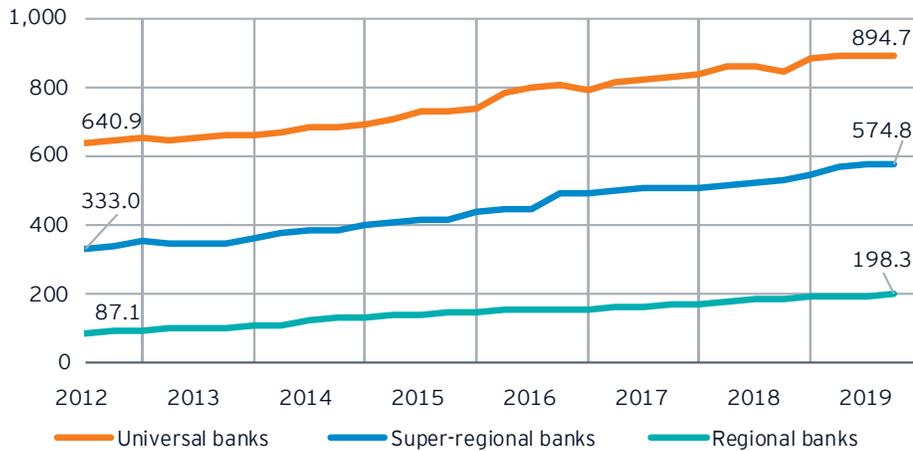
- ▶ As of Q3 2019, total wholesale exposure stood at \$4.61t, up 5.3% YoY. This was driven by growth in both C&I loans and CRE loans of 5.9% and 4.7%, respectively.
- ▶ QoQ, C&I loan balances dropped by \$20 billion, the largest drop since 2009.
- ▶ The Fed's actions to lower interest rates and inject liquidity into the financial system via T-bill purchases are likely to allay concerns about high levels of corporate debt.

Source: Federal Reserve Economic Data; last shown reading end of Q3 2019

► Wholesale lending *cont.*

Given the broadly positive economic environment, the Fed's July quarterly survey of loan officers showed banks leaving standards about the same on loans to large and middle-market firms while easing standards on loans to small firms. The survey indicated an unchanged demand for C&I loans by large and middle-market firms, whereas smaller firms showed a decline in loan demand in Q2.

**C&I lending by bank segment (\$b)**



Source: S&P Global Market Intelligence

**C&I lending, US composites**

- C&I loan balances grew 5.1% YoY for universal banks, 8.6% for super-regional banks and 9.1% for regional banks in Q3 2019.
- The universal and super-regional bank composites are showing signs of C&I growth slowdown in Q3.
- Key highlights from the Fed's July senior loan officer opinion survey:
  - Banks reported that standards for C&I loans to large and middle-market firms remained basically unchanged.
  - The above was also consistent with the portfolio manager's survey conducted by S&P Global Market Intelligence. In the survey, a net 27% of banks reported weaker spreads on C&I loans to large and midsized firms, relative to the lenders' cost of funds. That compares with 27% of respondents reporting stronger spreads in the previous quarterly survey.

**C&I loan delinquency rate (%)**



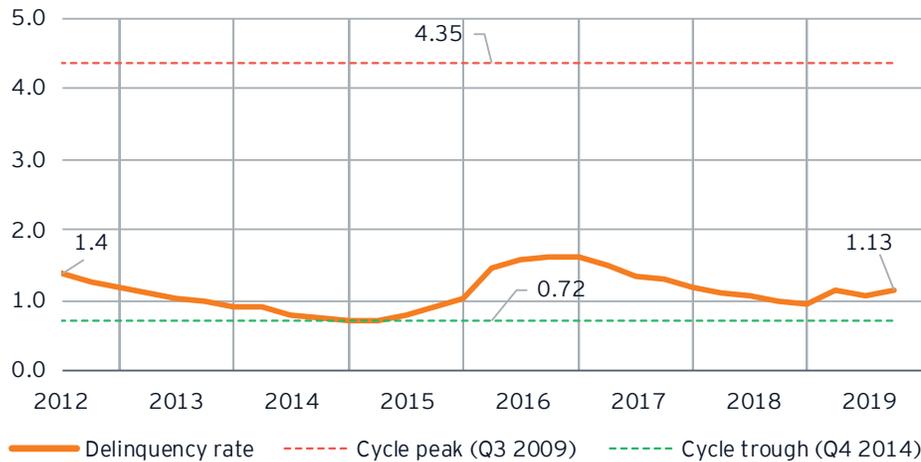
Source: S&P Global Market Intelligence

**C&I delinquency rate, US composites**

- On a QoQ basis, C&I delinquency rates increased by 15 bps and 9 bps for universal and regional banks, respectively, in Q3 2019.
- Super-regional banks experienced a marginal increase in delinquencies of 5 bp, QoQ to 0.92%.

The overall C&I delinquency rate across all US commercial banks remained low but rose 7 bps in Q3. The rise fuels the debate as to whether banks are reasonably managing the risks of the leveraged lending market and high levels of corporate debt.

**C&I delinquency rate vs. cycle peak and trough (%)\***



Source: Federal Reserve Economic Data

**C&I delinquency rate, all US commercial banks**

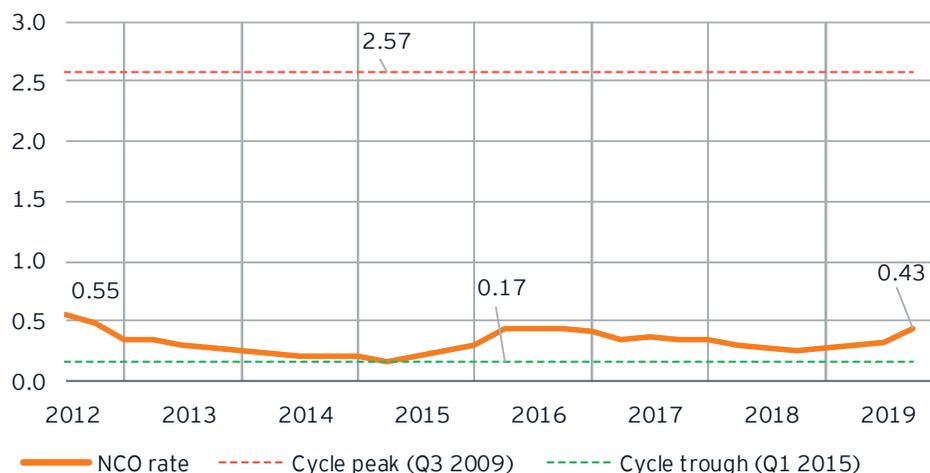
► The overall C&I delinquency among US commercial banks rose 7 bps during Q3 2019 to 1.13%. C&I delinquencies remain above the current cycle trough of 0.72%.



For most banks, problem loans and charge-offs and early-stage delinquencies are low. Because of [this], one-off, idiosyncratic issues are more visible in the credit metrics.

– Moody’s Investors Service

**C&I net charge-off (NCO) rate vs. cycle peak and trough (%)\***



Source: Federal Reserve Economic Data

\*Data captures all US commercial banks

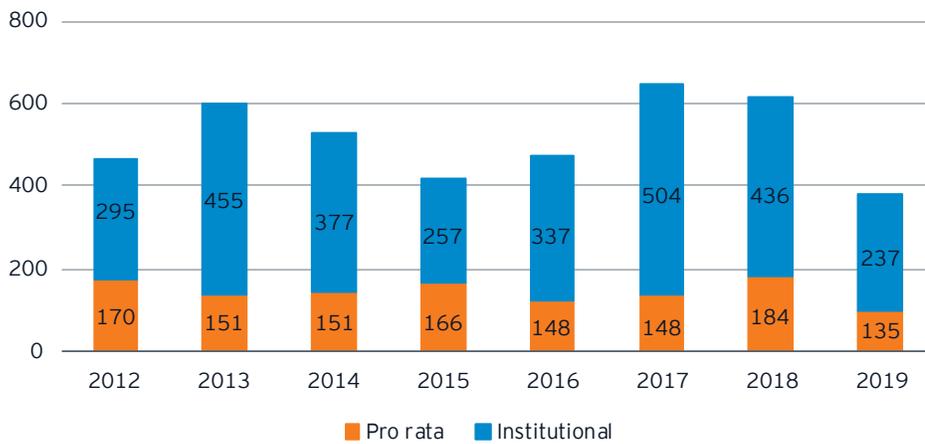
**C&I NCO rate, all US commercial banks**

► The C&I NCO rate rose sharply by 10 bps to 0.43% in Q3 2019, its highest level in three years.

▶ **Wholesale lending** *cont.*

US corporates posted a third straight quarter of thin earnings growth and decline in cash flow coverage in Q3.

**Volume of annual US dollar-denominated new-issue global leveraged loans (\$b)**



Source: S&P Global Market Intelligence. Through Q2 2019

**Leveraged lending**

- ▶ The pro rata market has seen issuances reach 73.5% of last year's total while issuance in institutional leverage loans has been much slower, reaching just 54.3% of last year's total as of Q3 2019.
- ▶ Highlights from S&P Global's LCD commentary for this quarter:
  - ▶ EBITDA growth across issuers in the S&P/LSTA Leveraged Loan Index that file results publicly was a marginal 2% in the second quarter, down from 3% in the first quarter.
  - ▶ Borrower leverage on a weighted-average basis increased one-third of a turn from the first quarter – to 5.59x from 5.26x – while cash flow coverage declined 34 basis points sequentially, to 2.95x.

**LTM default rate of all leveraged loans (%)\***



Source: S&P Global Market Intelligence

**Default rates**

- ▶ The prior 12-month default rate by dollar volume for leveraged loans stood at 1.24%, as of June 30, 2019, up 30 bps from last quarter.

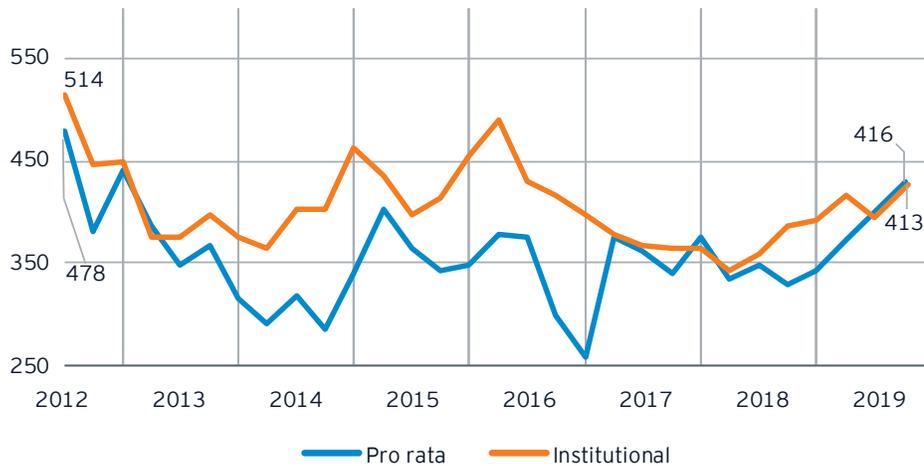


After excluding rating revisions that were primarily the consequence of special events, Q3 2019's downgrade-to-upgrade ratio for high-yield issuers was 2.25:1. [This level] is an atypically high number of downgrades driven by fundamentals.

– John Lonski, Chief Economist, Moody's Capital Markets Research, October 11, 2019

The camp of analysts defending the market continues to maintain that as thin as earnings growth has been, it is not a call for concern as long as corporate earnings remain strong and issuers are well-positioned to service the debt.

**Quarterly average new-issue B+/B spreads (LIBOR+X bps)**



Source: S&P Global Market Intelligence

**Leveraged loan spreads (single-B)**

- ▶ Average single-B-rated leveraged loan spreads (in relation to LIBOR) rose by 30 bps QoQ to 413 bps in Q3, while institutional spreads rose by 28 bps to 416 bps.
- ▶ The data is indicative of investors' pricing of corporate credit risk in the deepest portion of the primary loan market.

**Quarterly average new-issue BB/BB- spreads (LIBOR+X bps)**



Source: S&P Global Market Intelligence

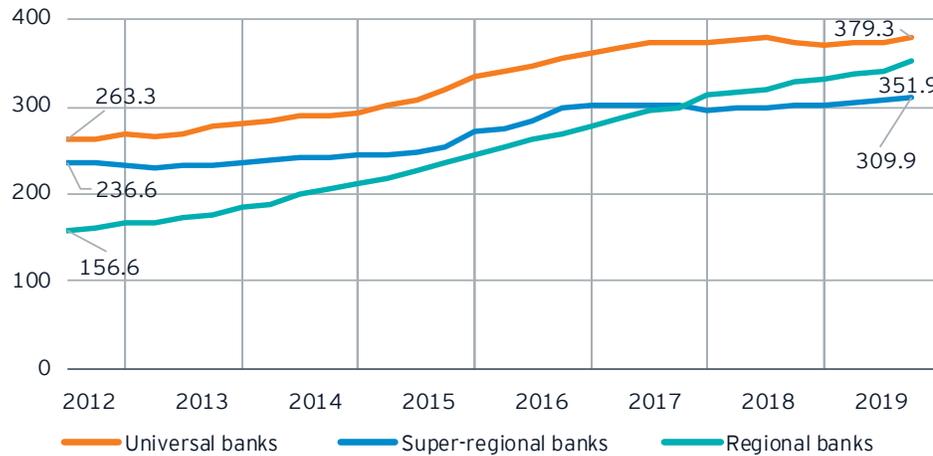
**Leveraged loan spreads (double-B)**

- ▶ Average double-B-rated leveraged loan spreads (in relation to LIBOR) rose by 8 bps QoQ to 225 bps in Q3, while institutional spreads fell by 21 bps to 265 bps.
- ▶ The data is indicative of investors' pricing of corporate credit risk in the deepest portion of the primary loan market.
- ▶ The spread between institutional market double-B and single-B loans rose to 148 bps, the highest level since 2011.

► Wholesale lending cont.

CRE lending growth among our tracked composites was fair in Q3. The trend of regional banks growing their CRE portfolios at a robust pace is continuing. CRE delinquency rates have shown no material signs of either strengthening or weakening.

**CRE lending by segment (\$b)**



Source: S&P Global Market Intelligence

**CRE lending, US composites**

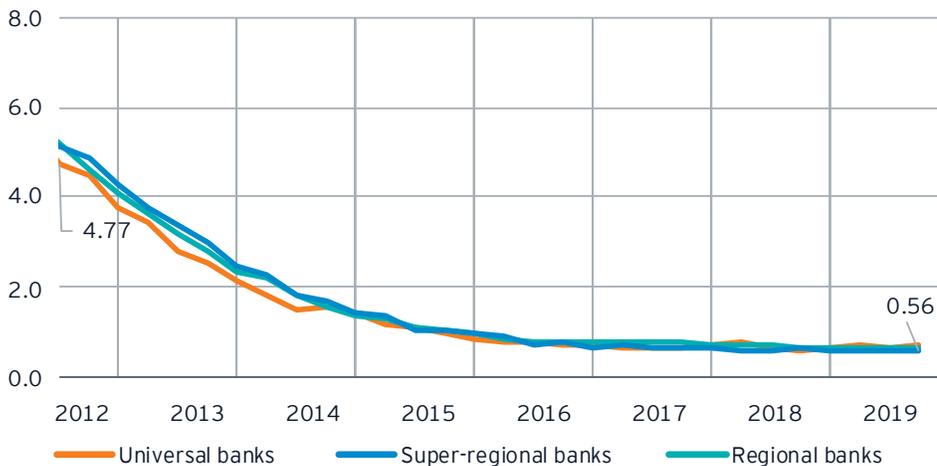
- Super-regional and regional banks expanded their CRE portfolios by 3.16% and 7.34%, YoY, respectively. Universal banks experienced a 1.44% YoY increase.
- CRE exposures at regional banks have grown at a four-year CAGR of 10.86%, highlighting this group's traditional emphasis on CRE. Universal and super-regional banks, by comparison, grew CRE balances at 4.25% and 5.15% CAGR, respectively, through Q3 2019.



For a local or regional bank, real estate loans are essentially the easiest and best asset to lend against.

– President at private real estate investment management firm

**CRE loan delinquency rate (%)**



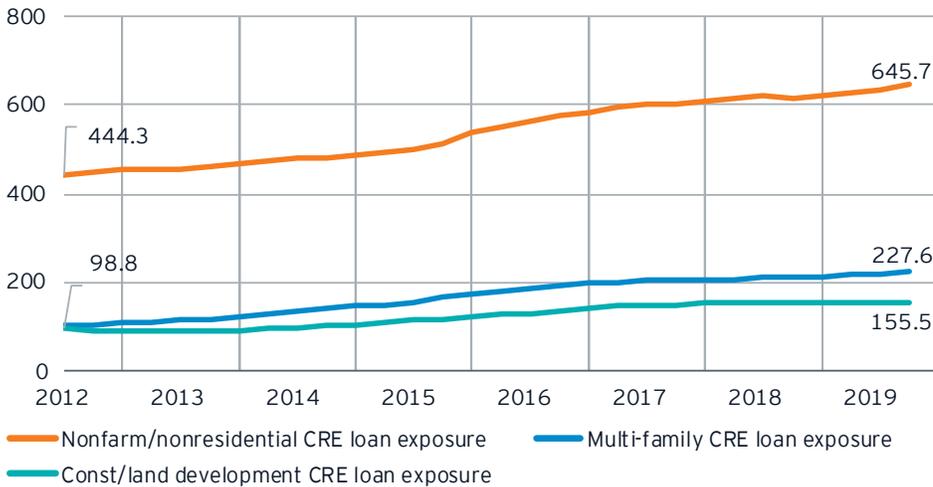
Source: S&P Global Market Intelligence

**CRE delinquency rate, US composites**

- YoY, delinquencies have declined marginally for super-regional and regional banks by 2 bps and 6 bps, respectively. Universal banks saw an increase in delinquencies of 12 bps.

The graphs below show total CRE lending across our three bank composites, with breakouts of multi-family and construction and land development loan types. Construction and land development loans have slowed in volume growth, in part due to an increase in alternative lenders, as well as an increase in construction and labor costs. Multi-family remains very strong in asset quality, as evidenced by very low delinquencies.

**CRE lending by loan type (\$b)**



Source: S&P Global Market Intelligence

**CRE lending, loan types within US composites**

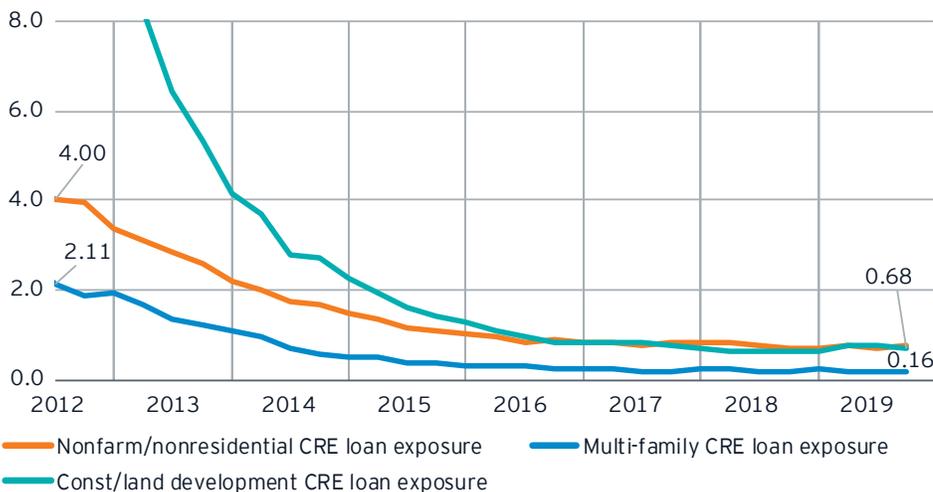
- The overall growth of CRE among our tracked composites was 3.99% YoY. Multi-family CRE drove the growth, rising by 5.44% YoY. Construction/land development exposures, however, declined by 1.45% YoY in Q3 2019.



The low interest rate environment, coupled with continuously strong demand for commercial and multi-family assets, has pushed property values higher and increased demand for mortgages. At the beginning of the year, many economists, investors, and others anticipated long-term rates would be around 3% and rising – potentially putting pressure on property values and decreasing demand for debt. Instead, the 10-year Treasury yield is at approximately 1.5%, and many market participants are planning for rates to remain ‘lower for longer.’ The result is heightened demand and higher volumes.

– Vice President of CRE research at Mortgage Banker’s Association, September 2019

**CRE loan delinquency rates by loan type (%)**



Source: S&P Global Market Intelligence

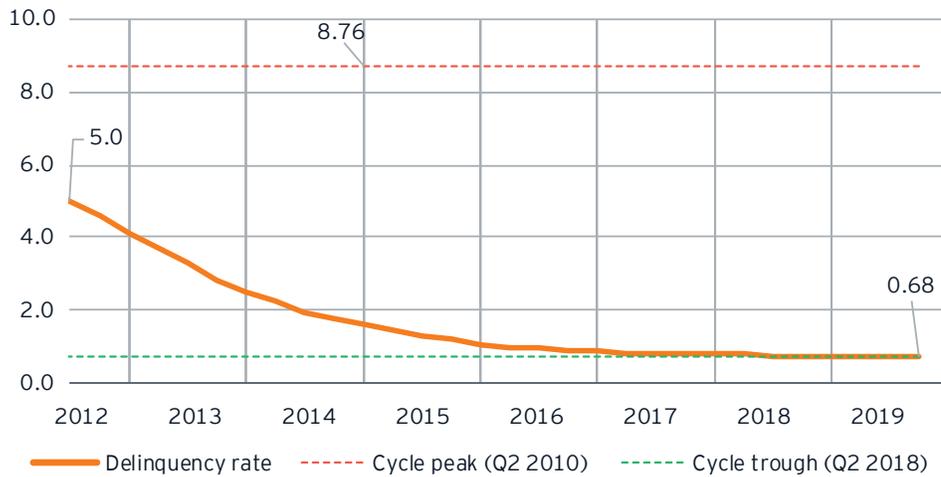
**CRE delinquencies, loan types within US composites**

- Delinquency rates declined just slightly Q3. Multi-family CRE loan delinquencies were just 0.16%, while construction and land development loan delinquencies were 0.68% as of Q3 2019.
- Across all CRE loan types (including multi-family and construction/land development) delinquency rates rose slightly YoY to 0.74%.

► Wholesale lending *cont.*

The asset quality of CRE loans across all US commercial banks is also in very good health, with delinquencies below pre-crisis levels and at current cycle lows. Net charge-offs have remained exceptionally low since mid-2015.

**CRE delinquency rate vs. cycle peak and trough (%)\***

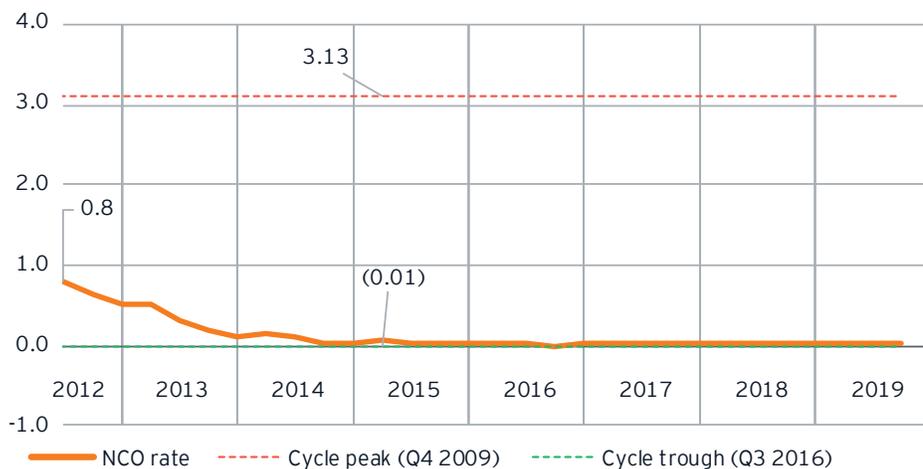


Source: Federal Reserve Economic Data

**Delinquency rates, all US commercial banks**

- Delinquencies on all CRE loans outstanding at US commercial banks touched their historical low of 0.68 in Q2, but rose 1 bp to 0.69 in Q3 2019.
- Contributing to the exceptionally low CRE delinquency rates are more prudent underwriting standards relative to prior to the Great Recession. On balance, banks are underwriting less aggressively. Deals are being financed with more equity vs. debt.

**CRE NCO rate vs. cycle peak and trough (%)\***



Source: Federal Reserve Economic Data

\*Data captures all US commercial banks

**Net charge-offs, all US commercial banks**

- The net charge-off rate on CRE loans was about constant at 0.02% in Q3 2019.
- The CRE NCO rate has remained low as interest rates are still historically low. Per Green Street's Property Price Index (PPI), commercial real estate values are above pre-recession peaks in nearly every asset class (as of October 2019, the PPI was 134.8, an all-time high but flattening. The index was set at 100 in August 2007).

# Consumer lending



“On the surface things look pretty good, but if you dig a little deeper you see different subpopulations are not performing as well,” said Cris deRitis, deputy chief economist at Moody’s Analytics.

– *The Wall Street Journal*, Cris deRitis, August 1, 2019

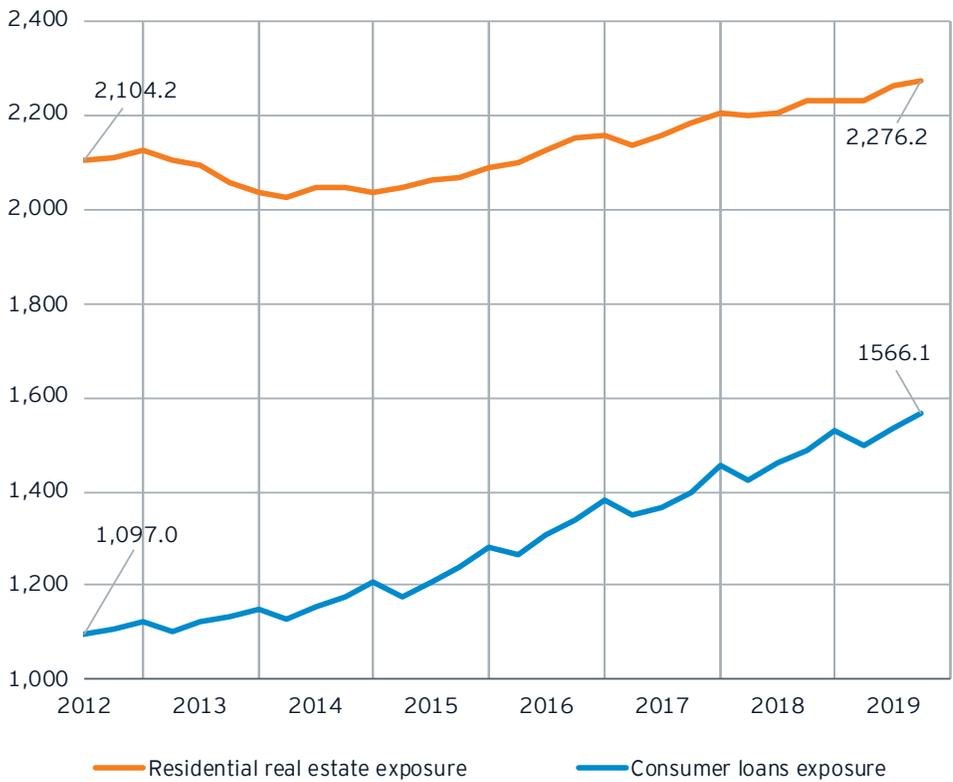
## Executive summary

- ▶ The health of the US consumer remains steady and the appetite for consumer credit remains solid. Bankruptcies, foreclosures and transitions into serious delinquencies mostly fell in Q3 across residential mortgage, auto, credit card and student loans.
- ▶ Card, auto and other consumer loans continue to attract demand, which is likely aided by the declining use of home equity lines of credit (HELOCs).
- ▶ Consumer loan balances across US commercial banks were up 3.37% YoY at the end of Q3 2019, with non-mortgage balances driving growth, up 5.41% YoY.
- ▶ Residential real estate (RRE) lending grew only modestly in Q3, despite falling mortgage rates. Delinquency and net charge-off rates for RRE reached post-crisis lows.
- ▶ Balances in auto loans grew for each of our three tracked composites. According to Experian, median credit scores for auto lending rose sharply in Q3 to 711, indicating that lenders may be tightening standards.
- ▶ Following a typical seasonal pattern, credit card lending exposure rose modestly across all bank segments in Q3 2019, while overall delinquencies rose to 2.62% nationally.
- ▶ Super-regional banks continued to grow their other consumer lending balances (up 13.04% YoY), while delinquencies trended lower to a national average of 1.91%.

▶ **Consumer lending cont.**

Loan balances in residential real estate grew just 0.55% QoQ in Q3, compared with a rate of 1.34% over Q2. Balances in non-residential consumer loans continued solid growth, having achieved a 6.01% compounded annual growth rate over the past four years.

**Total consumer loan exposure (\$b)**



**Consumer loan exposure, all US commercial banks**

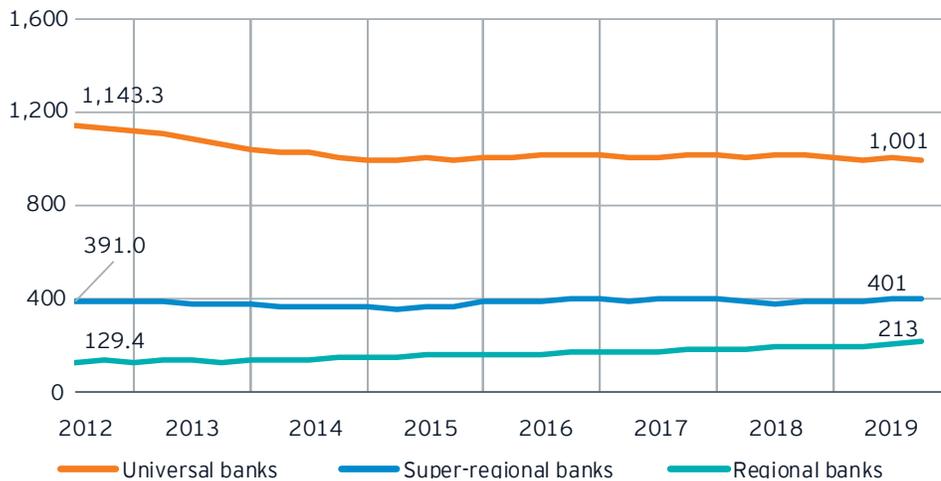
- ▶ Total consumer loan balances at US commercial banks increased by 1.08% QoQ and registered a growth of 3.37% YoY in Q3 2019. As of September 30, 2019, outstanding balances stood at \$3.84 trillion.
- ▶ Non-mortgage consumer loans rose 5.41% YoY, and residential real estate loan balances grew 2.01% YoY.
- ▶ According to the Federal Housing Finance Agency (FHFA), home prices continued to increase through Q3 2019, but the pace of growth has slowed for the fifth consecutive quarter. Recent interest rate changes could bolster price increases.

Source: Federal Reserve Economic Data; quarter-end data, last shown reading Q1 2019

Residential real estate (RRE) lending across all bank segments grew at a slower pace in Q3 than in Q2. Delinquency rates also improved in Q3 across all segments.

**Note:** The composites below include six banks in the “universal” group, 16 banks in the “super-regional” group and 46 banks in the “regional” group. See appendix for more information on these composites.

### RRE lending by composite (\$b)

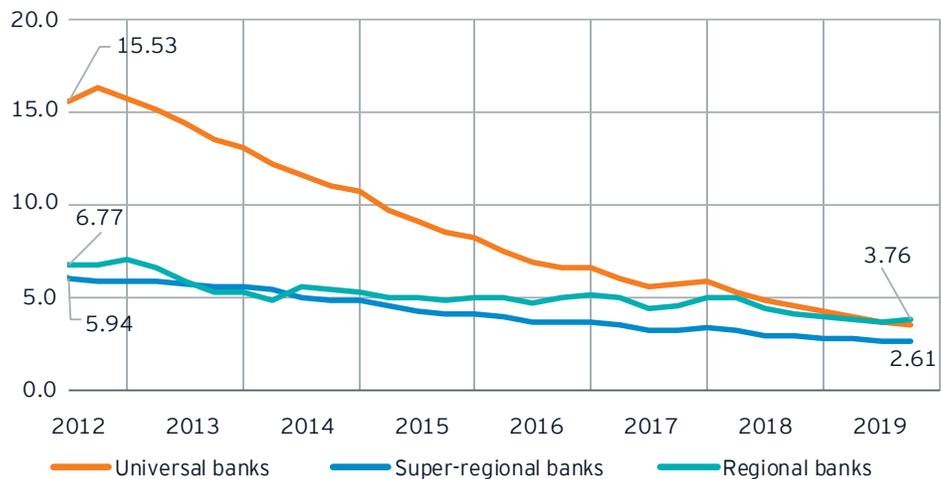


Source: S&P Global Market Intelligence

### RRE lending, US composites

- ▶ YoY, super-regional and regional banks increased RRE loan exposures by 3.42% and 10.32%, respectively; for universal banks, the exposures declined by 1.41%.
- ▶ “Credit supply declined across the board in August, even as mortgage rates fell and application activity picked up, particularly for refinances,” said Joel Kan, MBA’s Associate Vice President of Economic and Industry Forecasting. “Last month’s decrease was the largest since December 2018 and also the first tightening we have seen for conventional loans all year.” This indicates that standards are tightening.

### RRE loan delinquency rate (%)



Source: S&P Global Market Intelligence; data includes delinquencies of loans held with federally backed guarantees

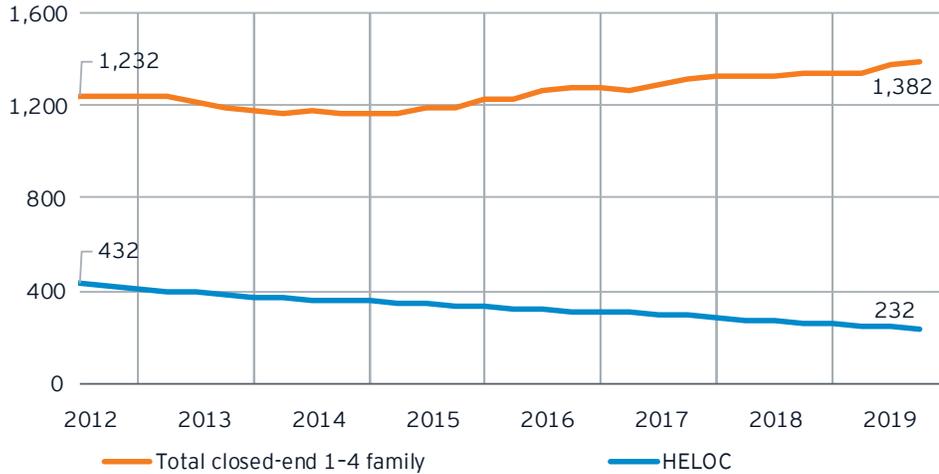
### RRE delinquencies, US composites

- ▶ Delinquency rates on RRE improved in Q3 both YoY and QoQ, with universal banks at 3.45%, super-regional banks at 2.61% and regional banks at 3.76%.
- ▶ Analysis by Redfin highlighted that certain metropolitan areas had a greater risk of real estate downturns during the next recession, with cities in Southern California and South Florida indicating the highest risk. Institutions with greater exposure in these regions could experience higher-than-average delinquency during a downturn.

► **Consumer lending cont.**

The steady decline of the home equity line of credit (HELOC) is continuing, while closed-end residential real estate growth accelerated (growing at the highest rate since 2016). Delinquencies continued declining for both closed-end 1-4 loans and for HELOC.

**RRE lending by loan type (\$b)**

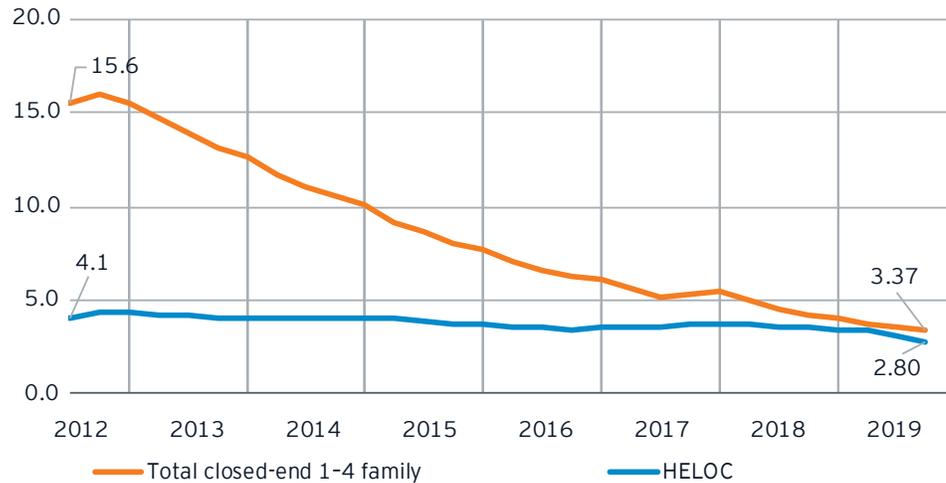


**RRE loan types (within our three composites)**

- Closed-end 1-4 family residential lending growth accelerated in Q3, with 1.01% growth QoQ and a moderate 3.19% YoY rise.
- HELOC continued a declining trend, dropping almost \$24 billion YoY to \$232 billion, a YoY decline of 9.30%.

Source: S&P Global Market Intelligence; HELOC balances are included in the overall residential mortgage values shown in the graph

**RRE loan delinquency rates by loan type (\$b)**



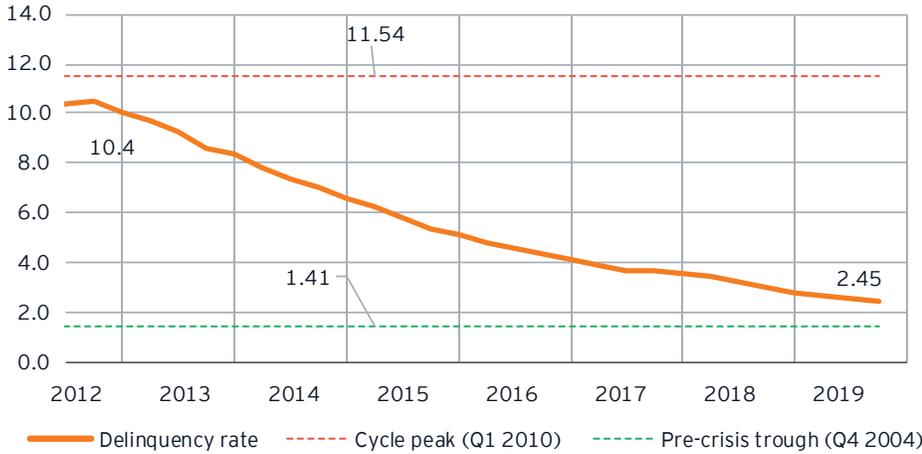
**RRE delinquency rate (within our three US composites)**

- Overall, both closed-end 1-4 family residential and HELOC delinquencies are down YoY.
- Delinquency rates on closed-end 1-4 family residences continued declining, dropping to 3.37% through Q3, from 3.48% in Q2.
- Delinquency performance in HELOC loans also improved, from 3.06% to 2.80% during the quarter.

Source: S&P Global Market Intelligence; HELOC delinquencies are included in the overall residential mortgage values shown in the graph

Delinquencies and losses in the RRE continue to decline; recoveries again outpaced losses in Q3 2019.

**RRE delinquency rate vs. cycle peak and trough (%)\***

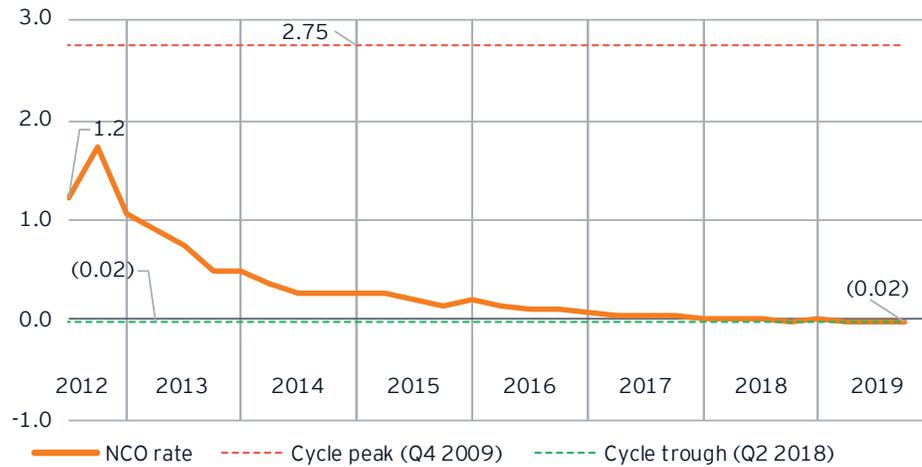


**RRE delinquencies, all US commercial banks**

- ▶ Overall, the delinquency rate for RRE loans continued its declining trend, closing Q3 2019 at 2.45%, down from 2.69% in the previous quarter. If the steady decreases continue, delinquency rates will reach pre-crisis lows in the next 18-24 months.

Source: Federal Reserve Economic Data

**RRE NCO rate vs. cycle peak and trough (%)\***



**RRE net charge-offs, all US commercial banks**

- ▶ Recoveries outpaced losses in Q3 2019, as the annualized NCO rate for RRE was slightly negative.
- ▶ According to the Mortgage Banker's Association, the foreclosure inventory rate was 0.84% in Q3 2019; the percentage of loans in foreclosure was the lowest since 1985.

Source: Federal Reserve Economic Data

\*Data captures all US commercial banks

▶ **Consumer lending cont.**

Strong growth in auto lending balances continued for regional and super-regional banks, while universal banks continued to reduce exposure. Delinquency rates for auto loans rose through Q3, following a seasonal trend of rising delinquency through the year.

**Auto lending by composite (\$b)**

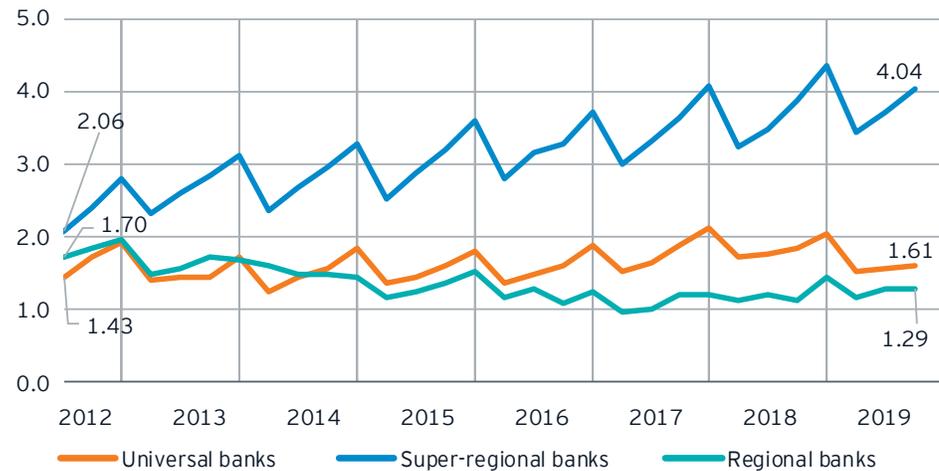


Source: S&P Global Market Intelligence

**Auto lending, US composites**

- ▶ Regional banks have experienced the highest growth in auto loan balances, which increased by 14.4% YoY through Q3. Super-regional banks saw 5.9% growth, while universal bank balances declined 1.4% YoY.
- ▶ Total auto debt increased 4.0% YoY to a record \$1.32 trillion, according to the New York Federal Reserve.
- ▶ While online dealerships have been a favorite among investors, recent stock price activity suggests lower growth expectations.

**Auto delinquency rate (%)**



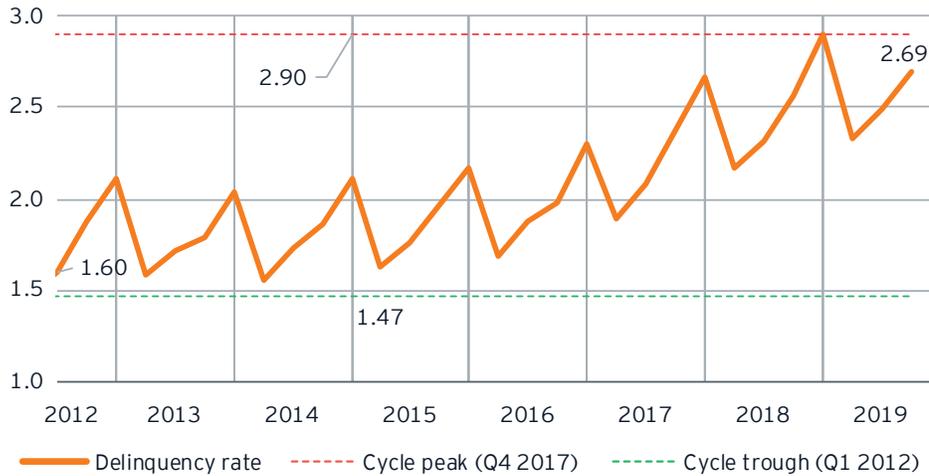
Source: S&P Global Market Intelligence

**Auto delinquencies, US composites**

- ▶ Auto delinquency rates rose 32 bps YoY for super-regional banks and 3 bps for regional banks. Universal banks delinquency rates rose by 4 bps.
- ▶ According to Experian, median credit scores for auto lending rose to 711, indicating that lenders are tightening standards.

The six-year trend of rising auto loan delinquencies is continuing into 2019, but there is some indication that this advance may be slowing. The auto net charge-off rate in Q3 2019 rose by 25 bps YoY.

**Auto delinquency rate vs. cycle peak and trough (%)\***

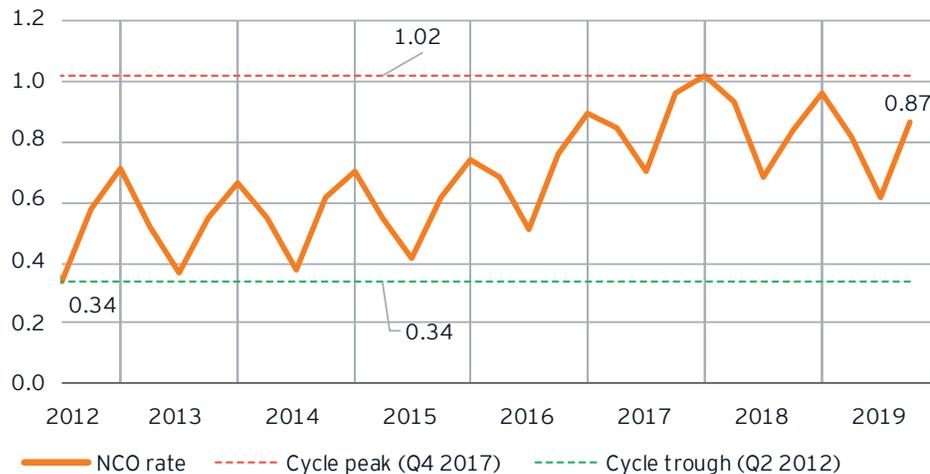


Source: S&P Global Market Intelligence

**Auto delinquencies, all US commercial banks**

- ▶ Delinquency rates in auto lending rose QoQ in a typical seasonal pattern, up 19 bps YoY to 2.69%.
- ▶ If the trend and seasonal patterns continue, auto delinquency rates will likely hit a new peak in Q4.

**Auto NCO rate vs. cycle peak and trough (%)\***



Source: S&P Global Market Intelligence

\*Data captures all US commercial banks

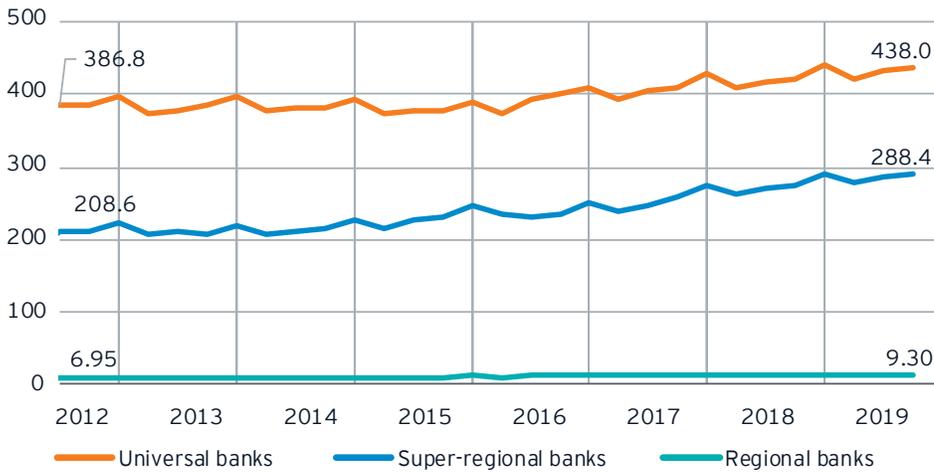
**Auto net charge-offs, all US commercial banks**

- ▶ Auto net charge-offs typically rise in Q3 and peak in Q4.
- ▶ In Q3, NCOs rose by just 3 bps YoY and by 25 bps QoQ. Given the contrast with rising delinquencies YoY, lenders appear to be having more success with loan recovery efforts.

▶ **Consumer lending cont.**

Credit card balance growth remains moderate but healthy, with delinquency up slightly YoY for super-regional and universal banks; regional banks appear to be most cautious in the space, with the lowest growth in balances. As lenders are using new criteria for credit approvals, the effectiveness of these alternative risk indicators will be closely watched for what they reveal in a downturn.

**Credit card lending by composite (\$b)**

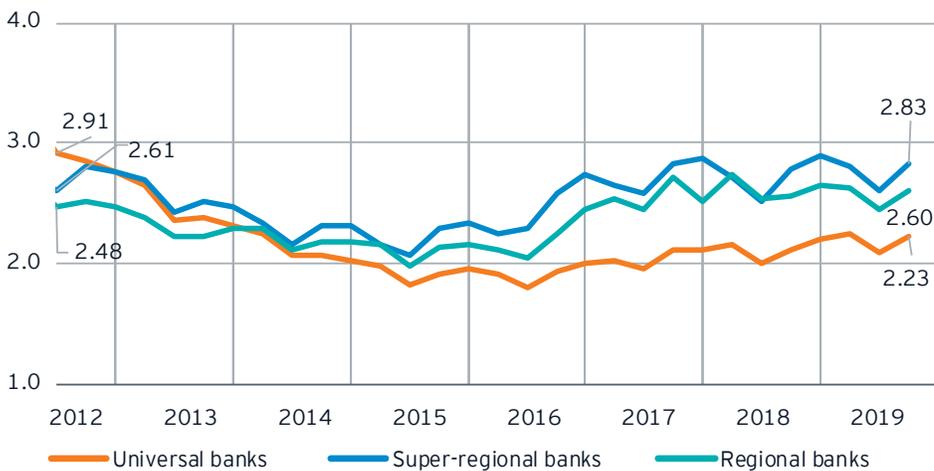


Source: S&P Global Market Intelligence

**Credit card lending, US composites**

- ▶ Following a typical seasonal pattern, credit card lending exposure increased across all bank segments in Q3 2019; QoQ, each composite group's balances rose between 1.1 and 1.4%.
- ▶ YoY, super-regional banks increased their card lending the most, with balances rising 5.4% in the composite. Credit card balances held by universal banks and regional banks rose 3.5% and 1.5% YoY, respectively.
- ▶ Given the lower YoY balance growth, regional banks may have tightened standards compared with their larger competitors.

**Credit card delinquency rate (%)**



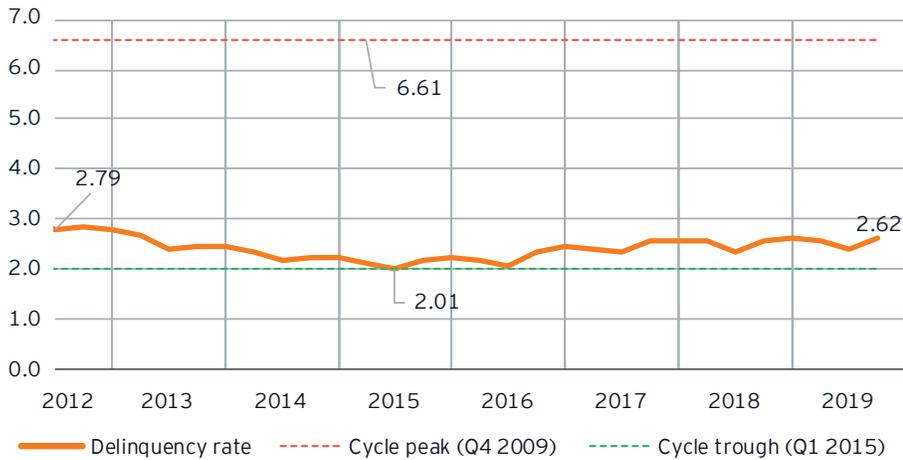
Source: S&P Global Market Intelligence

**Credit card delinquencies, US composites**

- ▶ In Q3 2019, credit card delinquency rates weakened across all bank segments QoQ, with increases of 14 bps, 21 bps and 14 bps for universal, super-regional and regional banks, respectively.
- ▶ Regional banks observed a YoY 3 bps increase in delinquencies, whereas universal and super-regional banks saw a YoY increases of 11 and 4 bps, respectively.

Delinquency and loss performance, while clearly above the cycle lows seen in 2015, remain relatively strong.

**Credit card delinquency rate vs. cycle peak and trough (%)\***

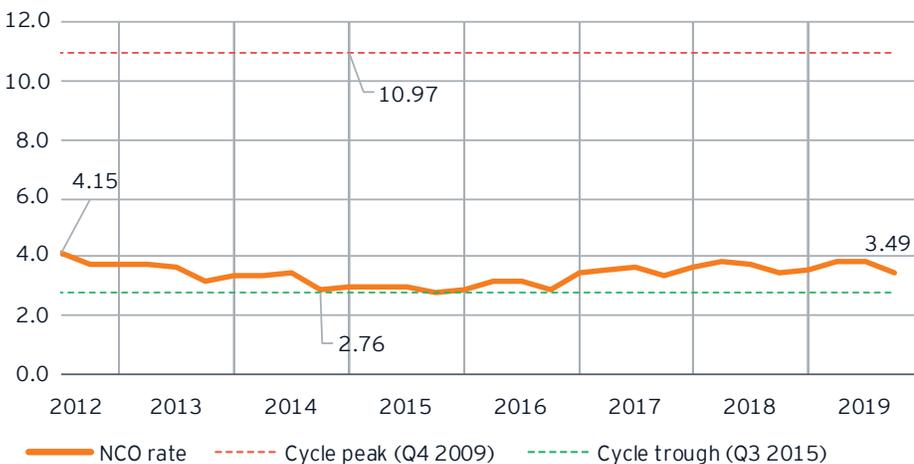


**Credit card delinquency rate, all US commercial banks**

- ▶ Following a typical seasonal pattern of delinquency rate reductions for credit cards in Q2, the delinquency rate rose 20 bps QoQ in Q3.
- ▶ YoY, the credit card delinquency rate is up 8 bps.

Source: Federal Reserve Economic Data

**Credit card NCO rate vs. cycle peak and trough (%)\***



**Credit card NCO rate, all US commercial banks**

- ▶ The net charge-off rate fell QoQ to 3.49%, after reaching the highest rate since Q2 2012.
- ▶ This higher rate may be highlighting struggles in subpopulations, particularly those with middle income but lower net worth and higher debt levels.

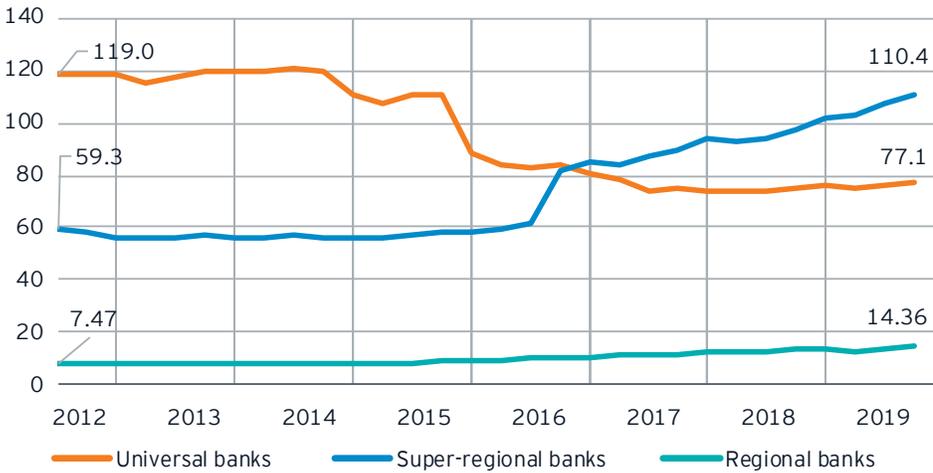
Source: Federal Reserve Economic Data

\*Data captures all US commercial banks

▶ **Consumer lending cont.**

Loan balances within "other consumer loans" continued their strong growth, particularly among super-regional banks. The decline in the universal composite was in part due to Citi's selling of its OneMain subsidiary in late 2015. In contrast, super-regional groups continue to push into this space. The rise of loan balances in the super-regional composite in 2016 was due to a reclassification of American Express's loan balances from 'other loans' to 'other consumer loans'.

**Other consumer lending by composite (\$b)**

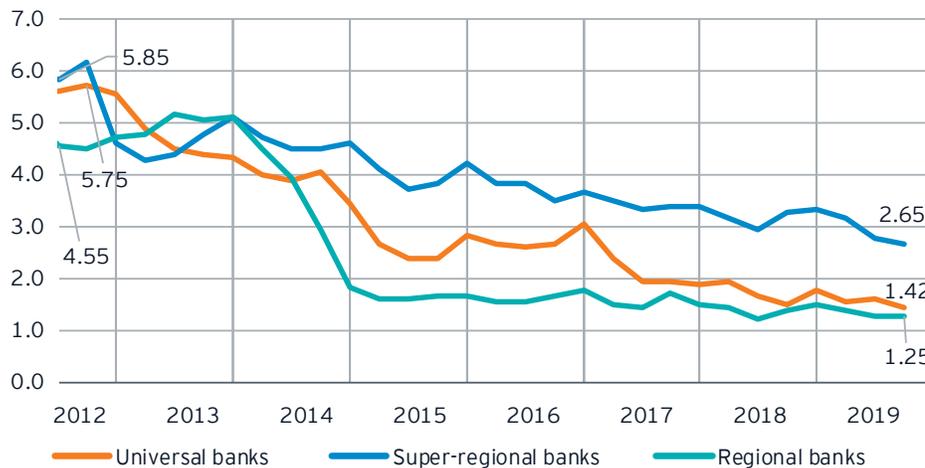


Source: S&P Global Market Intelligence

**Other consumer loans, US segment composites**

- ▶ All bank segments grew YoY. Super-regional banks had the highest growth at 13.0%, while universal and regional banks saw an increase in balances by 2.2% & 6.3%, YoY respectively.

**Other consumer delinquency rate (%)**



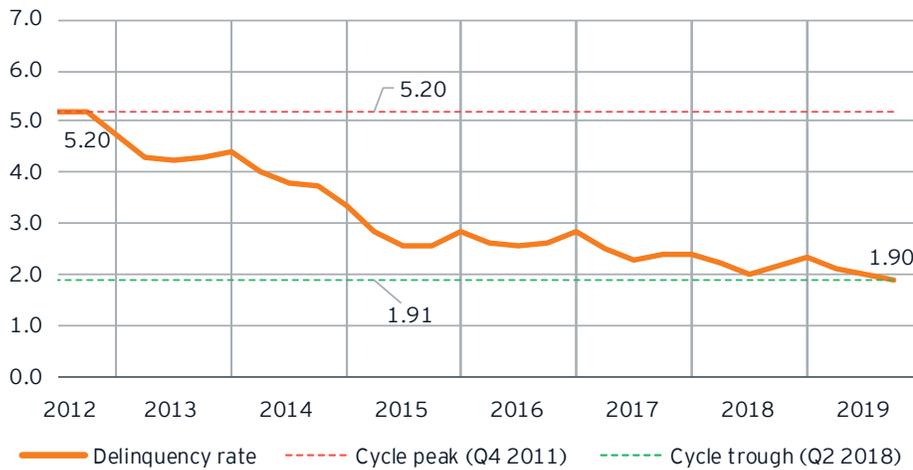
Source: S&P Global Market Intelligence

**Other consumer loan delinquencies, US segment composites**

- ▶ QoQ, each of the three composites declined.
- ▶ Delinquencies have improved most for super-regional and regional banks YoY, falling 41 bps and 10 bps, respectively, whereas the universal banks saw a smaller decline of just 7 bps.

Delinquency in the 'other consumer loan' category across all US commercial banks reached historic lows. Despite this positive, NCOs rose by 5 bps QOQ, and are up 22 bps YoY.

**Other consumer delinquency rate vs. cycle peak and trough (%)\***

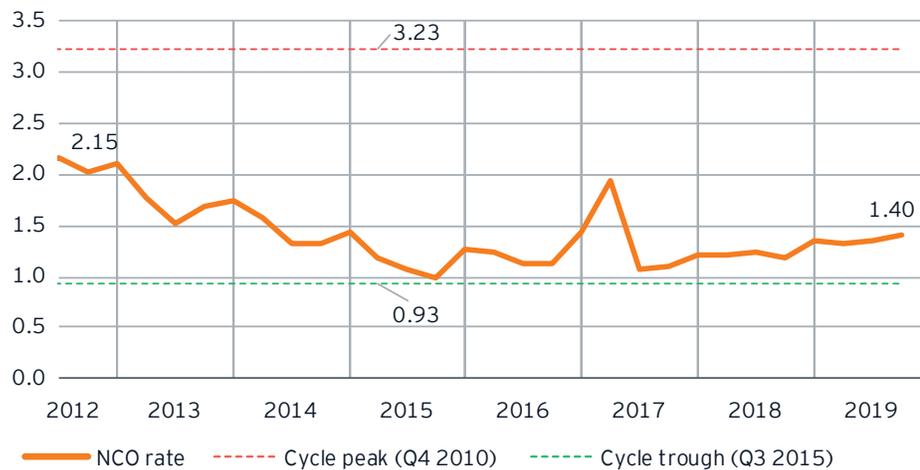


Source: S&P Global Market Intelligence

**Other consumer loan delinquencies, all US commercial banks**

- Other consumer loan overall delinquencies declined 26 bps YoY and 10 bps QoQ to 1.90%, a new low.

**Other consumer NCO rate vs. cycle peak and trough (%)\***



Source: S&P Global Market Intelligence

\*Data captures all US commercial banks

**Other consumer loan NCO rate, all US commercial banks**

- Net charge-offs have increased in other consumer lending by 5 bps QoQ and 22 bps YoY.
- Net charge-offs may continue trending upward, unless credit standards tighten or recovery rates increase.

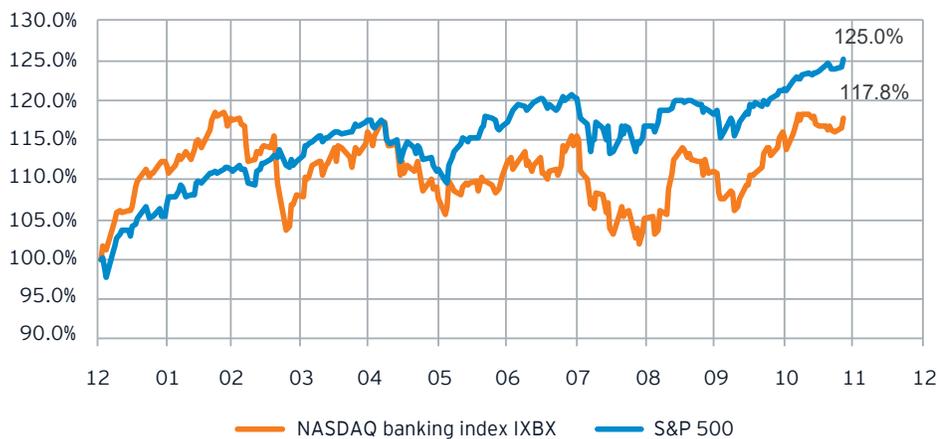
# Bank financial performance

## Executive summary

- ▶ Net interest margins (NIM), net incomes, RoAAs and RoAEs mostly fell in Q3, as rate changes and slowing loan growth took their tolls. The total net income of our universal bank composite fell nearly 8% YoY, its biggest drop in three years.
- ▶ Of the three bank composites covered in the CMB, the regional bank composite is performing the strongest, in part because of growth in CRE, residential mortgage and auto loans. Net interest incomes for our regional composite rose by 6.30% YoY, but fell by 1.63% for universal banks.
- ▶ With three rate cuts this year, lower short-term rates and a decline in longer rates have posed a repricing challenge for many banks.
- ▶ Continued trade tensions, as well as a slowdown in the global economy add additional pressure on near-term guidance.

The NASDAQ banking index has underperformed vs. the S&P 500 Index year-to-date through November 2019. US-China trade tensions, softening international and domestic economic data, curve flattening and the Fed's increasingly dovish stance towards interest rates have weighted more heavily on bank stocks than on nonbank stocks.

## NASDAQ bank index, S&P 500 Index



Source: NASDAQ

## NASDAQ bank index vs. S&P 500 index

- ▶ The NASDAQ bank index underperformed vs. the S&P 500 on a YTD and YoY basis. As of the end of November 2019, the NASDAQ bank index was up 17.8% year to date, vs. the S&P 500 being up 25.0%.
- ▶ Bank valuations, as measured by price-to-tangible book values of 327 public banks in the SNL Bank Index averaged 1.85x as of November, up from 1.63x at the beginning of the year.

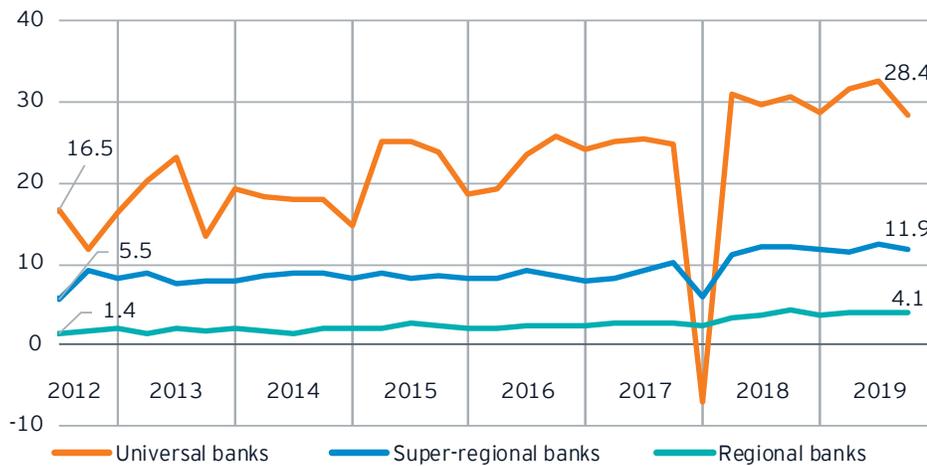
“

Long-duration loans have just been assigned a capital surcharge. And so we can't ignore that. We'd want to think about [CECL] as purely accounting, but it's not.

– CFO of a US super-regional bank

Bank earnings declined in Q3 2019 in large part because of the challenging rate environment.

**Net income by segment (\$b)**



**Net income**

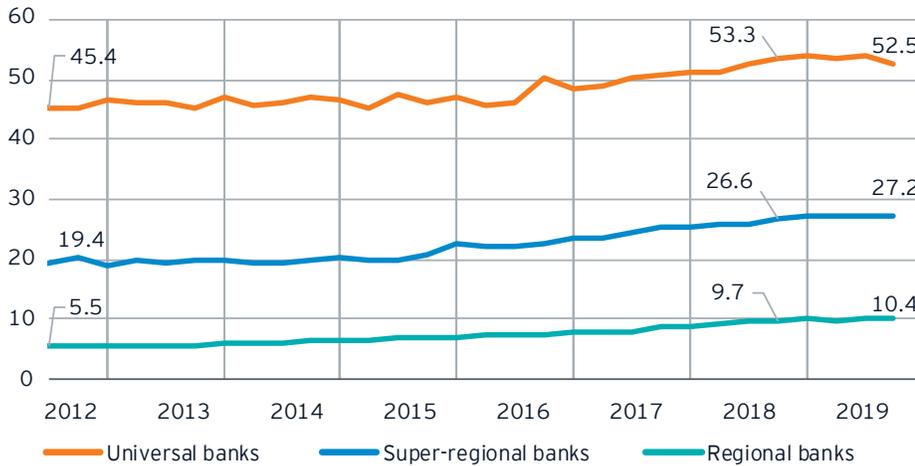
- ▶ Earnings mostly declined QoQ and YoY in Q3 2019. Universal banks' earnings fell sharply QoQ by 12.9% to \$28.4 billion, followed by super-regional banks, which fell 2.9% to \$11.9 billion, then regional banks, which fell 0.3% to \$4.1 billion.
- ▶ The drop in net income was driven by slowing originations and the impact of a challenging rate environment.

Source: S&P Global Market Intelligence

**▶ Bank financial performance cont.**

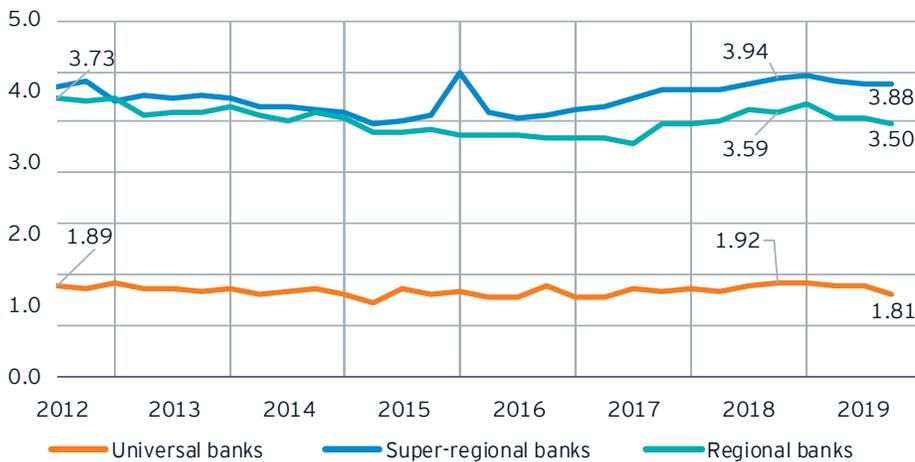
Seventy-one of the 100 largest banks by total assets at September 30 reported lower net interest margins on a QoQ basis. Yields on C&I loans were especially hard hit, falling 14 bps to 4.94%, according to S&P Global Market Intelligence.

**Net interest income by segment (\$b)**



Source: S&P Global Market Intelligence

**Net interest margin by segment (%)**



Source: S&P Global Market Intelligence

**Net interest income (NII)**

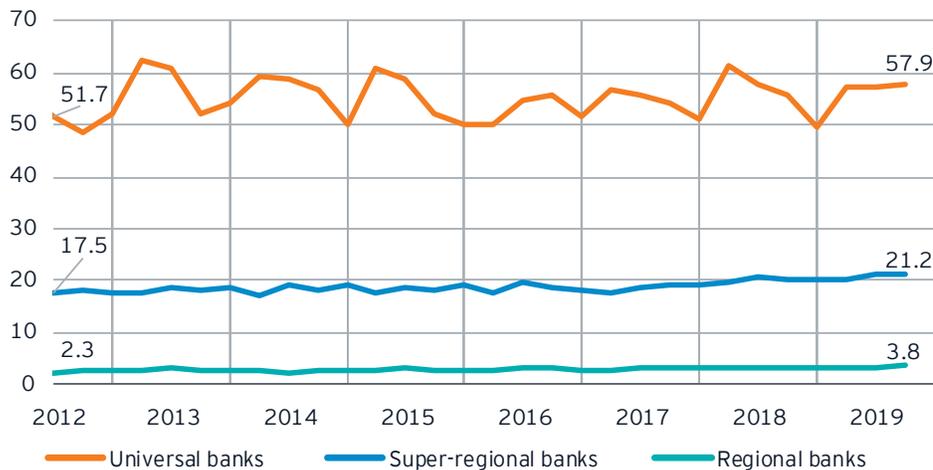
- ▶ NII fell by 2.70% QoQ for the universal bank composite, whereas the regional composite rose 2.96%, whereas the regional composite rose 2.96%.
- ▶ On a YoY basis, NII results were also mixed. Regional banks showed the strongest results, increasing NII by 6.30% YoY, followed by super-regional banks with a 2.90% increase, then universal banks, which experienced a 1.63% decline.
- ▶ The declines in interest rates, driven by the Fed's rate cuts, hurt C&I yields and residential mortgage yields, which was offset slightly by non-residential consumer loans holding their yields.

**Net interest margin (NIM)**

- ▶ NIMs declined YoY across all three bank composites for the period ending Q3 2019. NIMs of super-regional and regional banks shrank by 6 and 9 bps, respectively, while universal bank NIMs fell 11 bps.
- ▶ With the yield on interest-earning assets dropping and many banks not adjusting deposit costs lower quickly enough, NIMs suffered.
- ▶ "Lower-for-longer" is a material risk that is likely to keep pressure on earning asset yields and NIMs for the foreseeable future

Non-interest income at the universal banks was aided by strong fixed-income trading and underwriting activity in the quarter.

**Non-interest income by segment (\$b)**



Source: S&P Global Market Intelligence

**Non-interest income**

- Non-interest income increased YoY in Q3 2019 for super-regional and regional banks by 5.83% and 18.82%, respectively, while for universal banks, the increase was just 3.50%.
- Non-interest income for universal banks rose in part because of Wells Fargo's gain on revenue from the sale of its Institutional Retirement and Trust business; JP Morgan's and Morgan Stanley's results also aided the increases in YoY results.

**Non-interest expense by segment (\$b)**



Source: S&P Global Market Intelligence

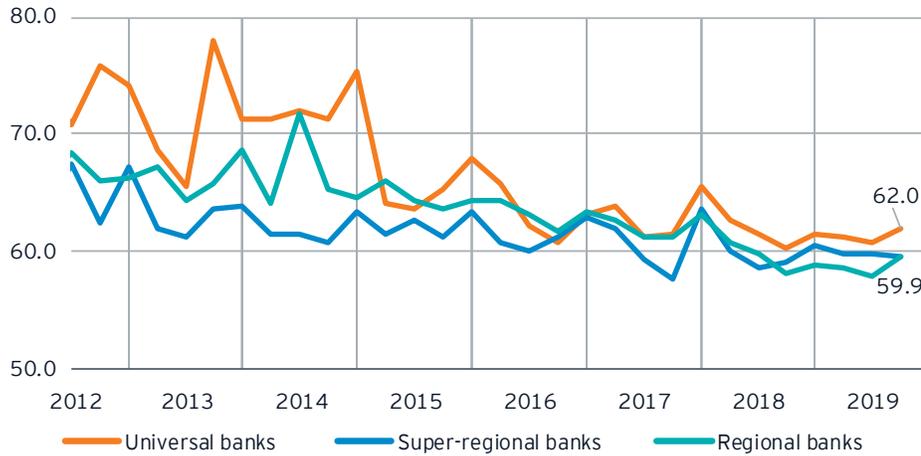
**Non-interest expense**

- In Q3 2019, non-interest expenses increased by 4.01%, 4.97% and 11.82% YoY for universal, super-regional and regional banks, respectively.
- Non-interest expense increases for super-regional and regional banks were mostly driven by higher salary and employee benefit expenses.
- Technology adoption and transformation such as process optimization and branch transformation continue across the US while firms make targeted investments in customer-facing and non-customer-facing technology (e.g., automation, artificial intelligence-enabled cost cuts).

**▶ Bank financial performance cont.**

The perpetual effort to contain costs appears to have hit a resistance level as efficiency ratios edged higher across all three bank composites in Q3. Lenders are recognizing a need to invest in processes and technology for growth at least as much as doing so for cost-cutting.

**Efficiency ratio (%)**

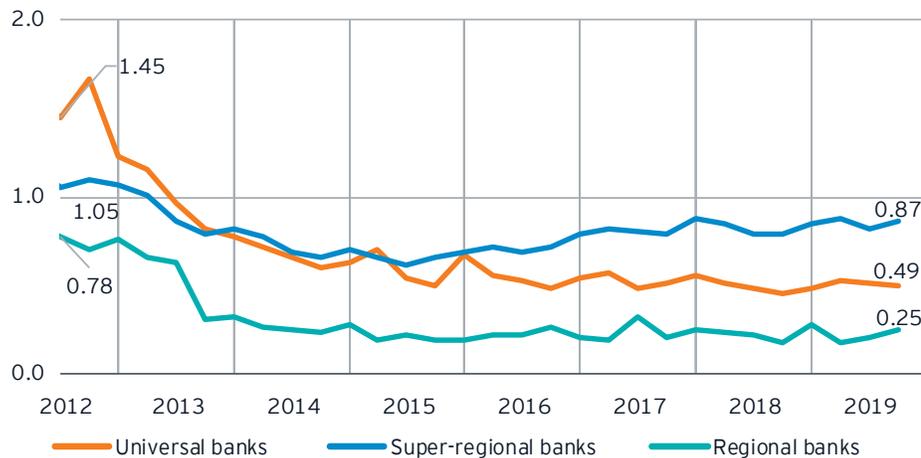


**Efficiency ratio**

- ▶ Since year-end 2014, the efficiency ratios of universal, super-regional and regional banks have improved by 1325, 377 and 506 bps, respectively, as banks have held the line on compensation and leveraged technology to improve efficiency.
- ▶ These improvements have begun slowing, however. YoY efficiency ratios weakened (increased) for each of the three bank composites by 183 (universal), 46 (super-regional) and 130 bps (regional). The weakening hints at the limited room for banks to further cut costs, even as earnings in the quarter dipped.

Source: S&P Global Market Intelligence

**Net charge-offs/average loans (%)**



**Net charge-offs/average loans**

- ▶ The net charge-off rate for universal, super-regional and regional banks rose by 3, 7 and 6 bps, respectively, YoY.
- ▶ Net charge-offs have only marginally risen for all three bank composites since 2014.

Source: S&P Global Market Intelligence

RoAA and RoAE have dipped from their post-crisis highs, a result of the declines in asset yields after the recent interest rate declines.

**Return on average assets by segment (%)**

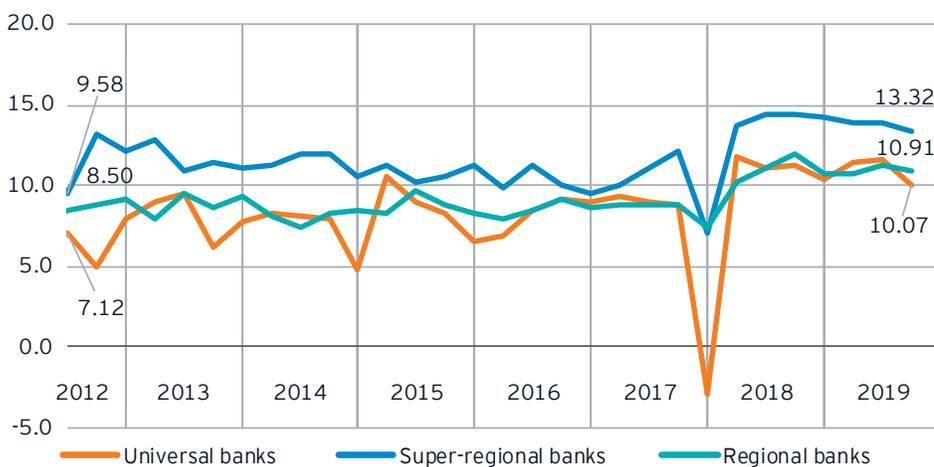


Source: S&P Global Market Intelligence

**Return on average assets**

- RoAAs for Q3 2019 dipped materially YoY by 14 and 11 bps for universal and super-regional banks, respectively, and fell by 9 bps for regional banks.
- A Q3 RoAA of 0.99% for universal banks is the lowest level since prior to corporate tax relief took effect at the end of 2017. Under 1.00% essentially returns the universal banks back to early 2017 levels.

**Return on average equity by segment (%)**



Source: S&P Global Market Intelligence

**Return on average equity**

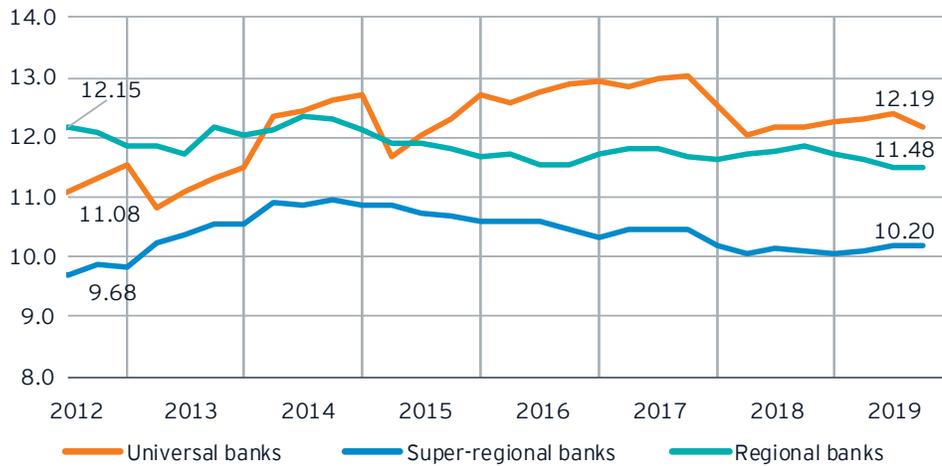
- RoAEs dropped YoY by 115 and 119 bps for universal and super-regional banks, respectively. Regional banks took less of a hit in the quarter, with the ratio falling just 34 bps QoQ and by 97 bps YoY.

# Capital and funding

## Executive summary

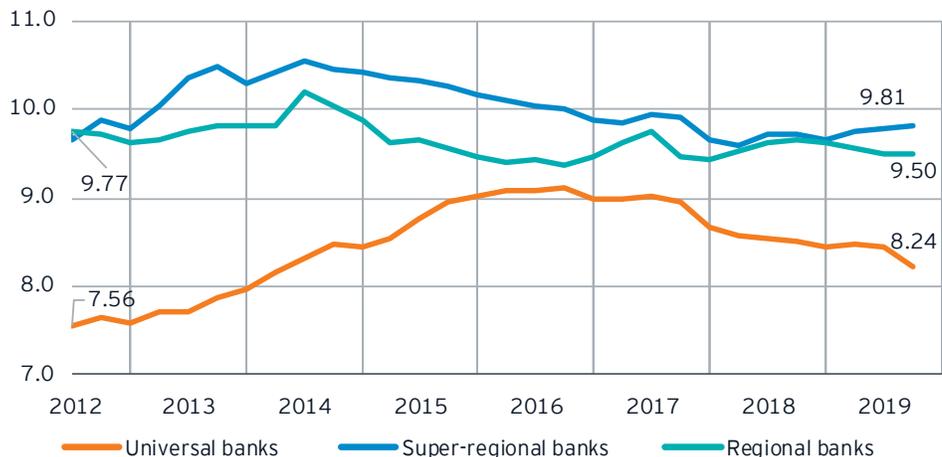
- ▶ Regulatory capital remains strong. The large US banks are well-capitalized with positive earnings-per-share growth aided by share buybacks.
- ▶ The recent simplification and changes to the Volcker Rule approved by the OCC and the FDIC streamlined focus on banks with high levels of trading activities and may provide more flexibility to banks to facilitate market liquidity.
- ▶ The Fed's outstanding Stress Capital Buffer (SCB) proposal as well as remaining uncertainties for capital management from impact from CECL, FRTB and the finalization of Basel III (Basel IV) may require some of the largest firms to reassess their capital strategies.

## CET1 ratio (%)



Source: S&P Global Market Intelligence

## Leverage ratio (%)



Source: S&P Global Market Intelligence

## Common equity tier 1 (CET1) capital ratio

- ▶ Universal, super-regional and regional banks reported CET1 ratios of 12.19%, 10.20% and 11.48%, respectively, in Q3 2019, well above their required minimums.
- ▶ The CET1 ratios for universal and super-regional banks increased by 2 bps and 8 bps, respectively, on a YoY basis. The composite CET1 ratio of our regional bank group declined by 39 bps YoY.
- ▶ A new community bank leverage ratio (CBLR) was finalized by regulators on October. 29. The rule goes into effect on January. 1, 2020, allowing US banks with under \$10 billion of assets and a Tier 1 ratio greater-than 9% to report only that single ratio, instead of four capital ratios as required by Basel III.

## Leverage ratio

- ▶ Universal banks' leverage ratios fell 27 bps YoY. Ratios remained mostly flat in 2016 and 2017 before going on a slight downward path.
- ▶ Since early 2018, the ratio has remained in a tight 20 bps range for super-regional and regional banks.

“

I would advocate for revisiting the Counter Cyclical Buffer (CCyB) to be more closely integrated into our overall capital framework, allowing greater scope for dynamic adjustments.

– Fed Vice Chair for Supervision,  
Randal K. Quarles

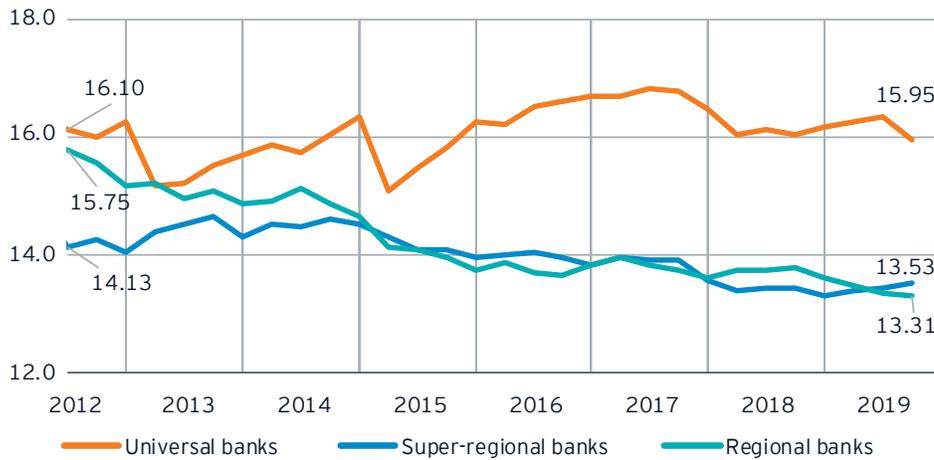
“

Banks are safer, but I don't think they are safe enough. You can see the instability growing. There is too much leverage in the system. Whether the capital is there to absorb those losses is an open question. In 2008 and 2009, everyone said that risk had moved off banks' balance sheets. But it hadn't. It always comes back.

– Sheila Bair, former FDIC Chairwoman, September 12, 2019

Total capital ratios have been steadily declining for regional bank group, whereas for super-regionals, ratios have trended higher through most of 2019. Universal banks saw a 37 bps drop in their total capital ratios in Q3.

### Total capital ratio (%)

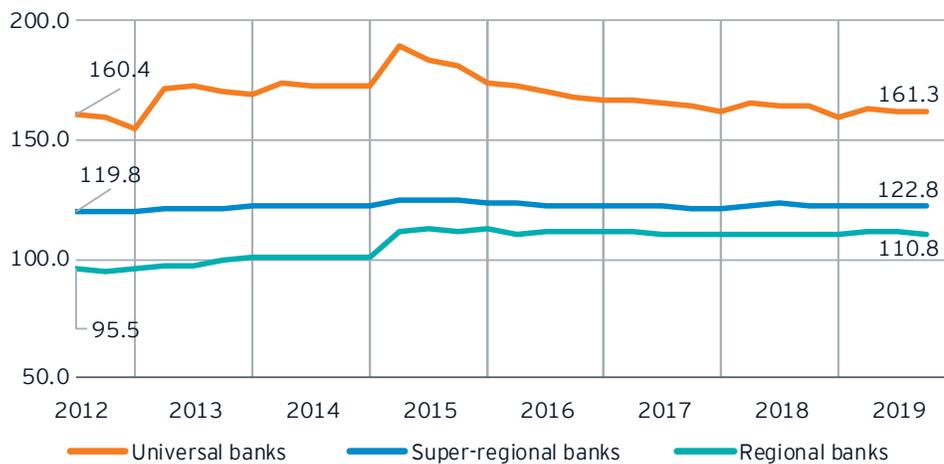


Source: S&P Global Market Intelligence

### Total capital ratio

- ▶ Over the past five years, total capital ratios have been steadily declining for super-regional and regional banks as firms focus on capital efficiency. The total capital ratio of super-regional banks slightly increased QoQ in Q3 and Q2 2019.
- ▶ Universal banks' total capital ratios, however, have remained relatively elevated at around 16%, which is in because of to their higher capital requirements.

### Credit RWAs to loans and leases by composite (%)



Source: S&P Global Market Intelligence

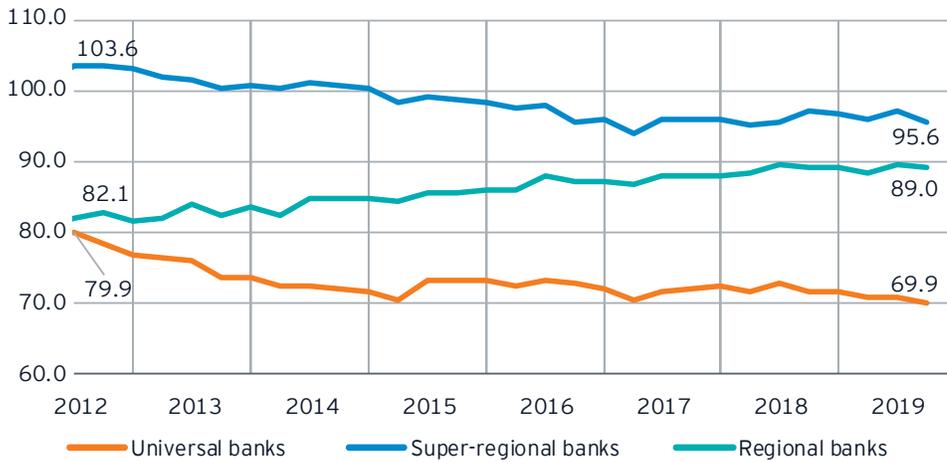
### Credit risk-weighted asset (RWAs) to loans and leases

- ▶ The ratio of credit risk-weighted assets (RWA) to loans and leases looks at trends in credit risk relative to par loans, as measured by regulatory standards. The flatness of the ratios over time tends to indicate that loan portfolio mixes are fairly steady. In other words, there isn't much evidence banks are choosing to move into loan types that would drive credit RWAs higher (or lower).

► **Capital and funding cont.**

Reserve balances in relation to nonperforming loans (NPLs) showed a significant increase YoY for universal banks and regional banks, driven by the decline in NPLs.

**Loan-to-deposit ratio (%)**

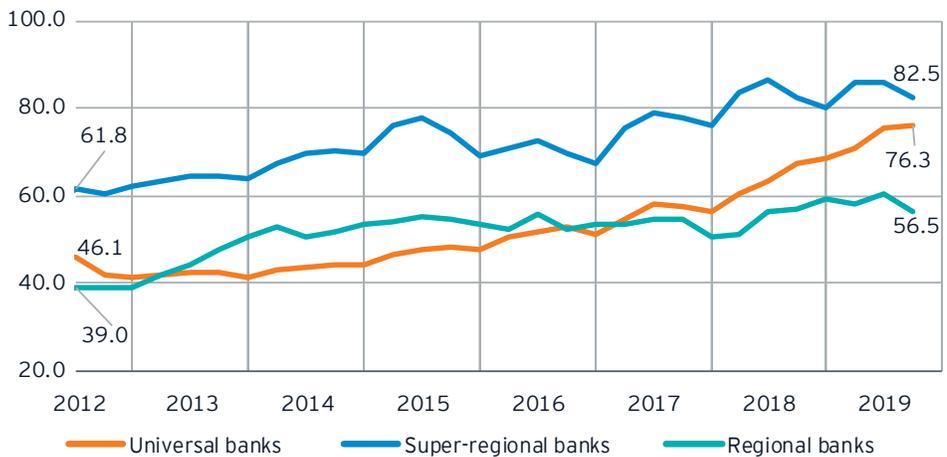


Source: S&P Global Market Intelligence

**Loan-to-deposit ratio**

- On a QoQ basis, loan-to-deposit ratios dropped for universal, super-regional and regional banks by 84, 150 and 47 bps, respectively.
- Higher loan-to-deposit ratios reflect higher levels of earning assets, which in theory should help returns on assets and equity.
- Longer-term trends show that super-regionals have eased away from the near or above 100% ratio level to a more normalized level in the mid-90% range. While universal banks, over the last five years, have remained fairly stable within a band of 70%-74%. Regional banks have gradually increased from around 84% to near 90%.

**Reserves/NPLs (%)**



Source: S&P Global Market Intelligence

**Reserve-to-NPL ratio**

- Reserve balances in relation to nonperforming loans (NPLs) showed a significant increase YoY for universal banks (by 896 bps) as reserves held steady but NPLs declined.
- For super-regional and regional banks, NPLs rose faster than reserves in Q3, causing the ratios to drop by 346 and 381 bps, respectively.

# Uniform Bank Performance Report

Uniform Bank Performance Report (UBPR) data provides a stratified view of bank performance by asset size.

Size group		>\$100b	\$10b-\$100b	\$3b-\$10b	\$1b-\$3b
Banks in group		26	91	141	394
<b>Profitability</b>					
	9M19	10.61	10.89	11.09	11.48
<b>RoAE (%)</b>	2018	11.31	11.04	11.75	11.72
	2017	8.72	8.46	8.85	9.26
	3Q19	1.20	1.39	1.28	1.28
<b>RoAA (%)</b>	2018	1.28	1.36	1.34	1.24
	2017	1.00	0.99	0.99	0.97
<b>Yield on assets and cost of funds</b>					
	9M19	3.57	4.08	4.27	4.38
<b>Interest income (% avg. assets)</b>	2018	3.33	3.96	4.07	4.14
	2017	2.92	3.57	3.74	3.90
	9M19	0.95	0.81	0.88	0.88
<b>Interest expense (% avg. assets)</b>	2018	0.70	0.61	0.64	0.63
	2017	0.41	0.37	0.40	0.43
<b>Non-spread income</b>					
	9M19	1.56	0.85	0.83	0.88
<b>Non-interest income (% avg. assets)</b>	2018	1.63	0.86	0.92	0.83
	2017	1.62	0.90	0.93	0.86
<b>Efficiency</b>					
	9M19	58.90	53.36	58.13	61.88
<b>Efficiency ratio (%)</b>	2018	58.58	54.70	57.71	61.83
	2017	60.47	56.31	58.80	62.07
<b>Funding</b>					
	9M19	70.96	89.59	88.92	86.73
<b>Net loans lease/total deposits (%)</b>	2018	70.40	88.24	89.59	86.90
	2017	69.83	87.16	89.35	85.00
<b>Asset quality</b>					
	9M19	0.80	0.54	0.6	0.63
<b>90+PD non-accruals loans (%)</b>	2018	0.81	0.59	0.62	0.63
	2017	0.97	0.71	0.62	0.66
<b>Capitalization</b>					
	9M19	12.52	12.69	13.31	13.48
<b>CET1 ratio (%)</b>	2018	12.65	12.52	13.27	13.26
	2017	12.91	12.45	12.95	12.96

Source: Federal Financial Institutions Examination Council, UBPR

## Notable points

- ▶ Net interest margins have been pressured as rate drops had little effect on interest expenses and the yield curve remains challenging.
- ▶ Efficiency ratios appear mostly stuck, although banks in the \$100b-\$10b range have seen some improvements relative to full-year 2018 results.
- ▶ Banks greater-than \$100b in assets saw material performance slippage in returns on average equity (RoAE) in Q3 2019, relative to full year 2018. The causes were a combination of weaker spread income and slowing loan growth.
- ▶ Late-stage delinquencies have edged slightly lower for all bank groups except the \$1b-\$3b group

# The Canadian market

“

Over the past few months we have had a significant decline in bond yields around the world, and that has been transmitted into our bond markets and many of our borrowing rates, such as mortgage rates.

– Stephen S. Poloz, Governor of the Bank of Canada

## Executive summary

- ▶ Canada's real GDP growth slowed to an annualized rate of 1.3% in Q3 from 3.5% in Q2. The news was not all bad, however, as higher business investment and household spending remained good.  
Housing investment rose 3.2% in Q3, the fastest pace since Q1 2012. The increase was driven by new home construction and higher ownership transfer costs from increased resale activities in British Columbia and Ontario.
- ▶ Export volumes declined 0.4% after rising 3.1% in Q2. Despite strong growth in business lending, uncertainties related to the Canadian oil industry and global trade continue to put pressure on the business sector.
- ▶ According to a report from TransUnion, over the last 12 months, the number of consumers with access to credit grew, up 1.7% year-on-year (YoY) in Q2 2019.

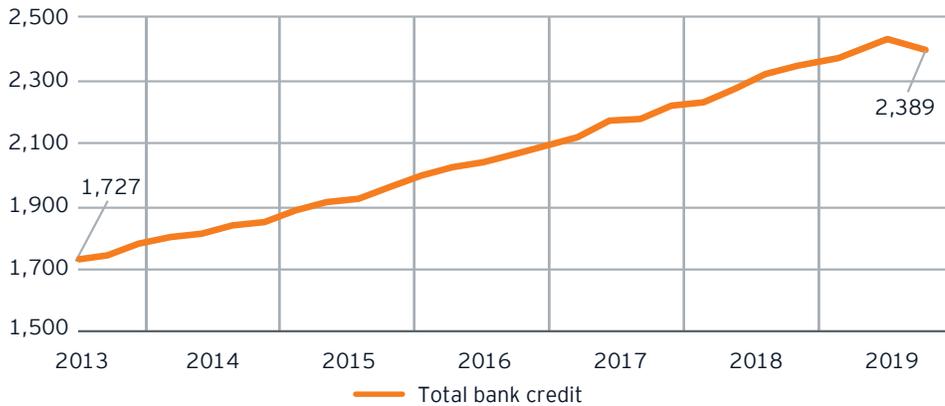
Wholesale lending growth showed signs of slowing in Q3, after five quarters of high growth.



# Overview

Total bank credit, an aggregation of all credit extended in Canada, experienced its first meaningful QoQ drop since the financial crisis period.

## Total bank credit\* (CA\$b)

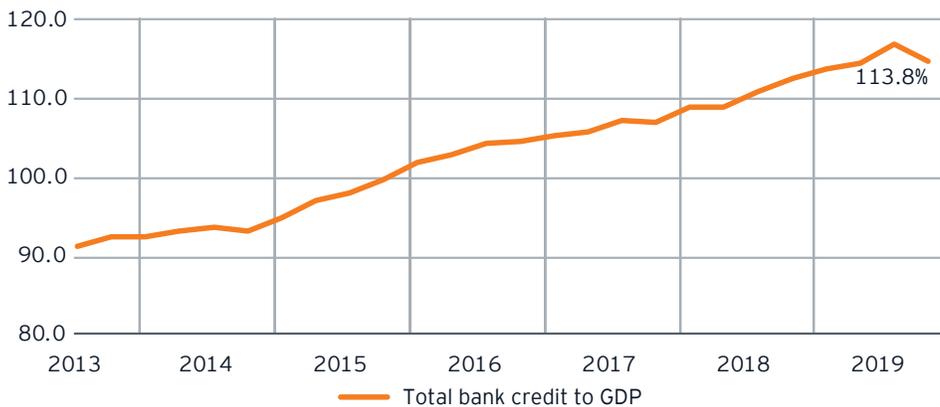


Source: Bank of Canada

## System-wide leverage

- ▶ Total bank credit fell 1.2% QoQ, but was still above last year's level by 3.5%.
- ▶ Favorably, declining interest rates and lower home prices have helped buyers to return to the market.
- ▶ A pick up in housing investment gives the Bank of Canada another reason – along with robust job gains and stronger than expected output growth – to hold interest rates steady.

## Total bank credit\* to GDP (%)



Source: Bank of Canada; Statistics Canada

\*Includes only domestic exposure

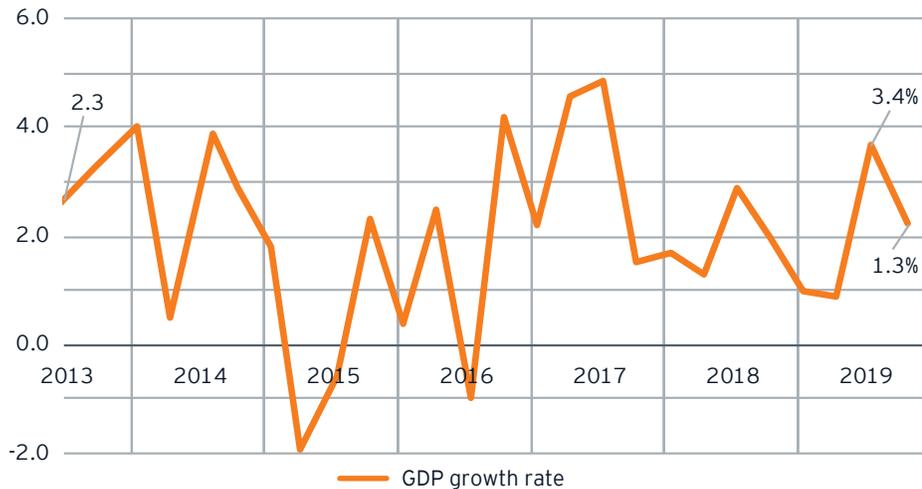
## Bank credit-to-GDP ratio

- ▶ The bank credit-to-GDP ratio is up 219 bps compared with last year and flat QoQ.
- ▶ Credit growth continues to outpace GDP. A combination of record low unemployment and interest rate stability boosted spending and fueled the credit market, as Canadian credit consumers continue to grow and build debt.

# The macro view

GDP growth slowed Q3 2019 to an annualized rate of 1.3%. The gross operating surplus of corporations fell 2.4% (nominal terms) in Q3, after rising 4.1% in Q2. Export volumes declined 0.4%, after rising 3.1% in Q2. Prices of exported crude oil dropped nearly 11% in the quarter.

## GDP growth rate (%)



## GDP

- ▶ GDP expanded at an annualized rate of 1.3% in Q3 2019, compared with 3.4% in Q2 2019.
- ▶ The 1.3% GDP growth in Q3 2019 missed some expectations but was aided by fair business investment and household spending.
- ▶ Bank of Canada is expecting GDP growth to average 1.8% between 2019 and 2022.

Source: Statistics Canada. GDP changes are based on the expenditure approach. QoQ changes have been multiplied by 4 to provide an annualized estimate.

## Unemployment rate (%)



## Unemployment rate

- ▶ The unemployment rate fell by 30 bps compared to last year, and rose 10 bps QoQ in Q3 to 5.6%.
- ▶ The labor market continues to be healthy with unemployment at a near all-time low and the participation rate of workers at near all-time highs.

Source: Statistics Canada

# Loan exposure

The indexes below and on the following pages reflect an aggregate of eight of the largest banks in Canada, including their non-Canadian exposure.

## Retail loans\* (\$b, CAD)



Source: S&P Global Market Intelligence

\* Includes retail mortgages and HELOCs

## Retail exposure

- ▶ Consumer loan exposure is up 4.2% YoY. On a QoQ basis, the increase was 1.8%.
- ▶ According to the Bank of Canada's household lending survey, mortgage lending conditions eased in early 2019, while non-mortgage lending conditions remained mostly unchanged.
- ▶ Factors driving these changes include interest rates, economic and labor market conditions, and consumer confidence, which remain favorable.

## Wholesale loans\* (\$b, CAD)



Retail and wholesale loan exposure includes exposure to Canada, the US and other countries

Source: S&P Global Market Intelligence

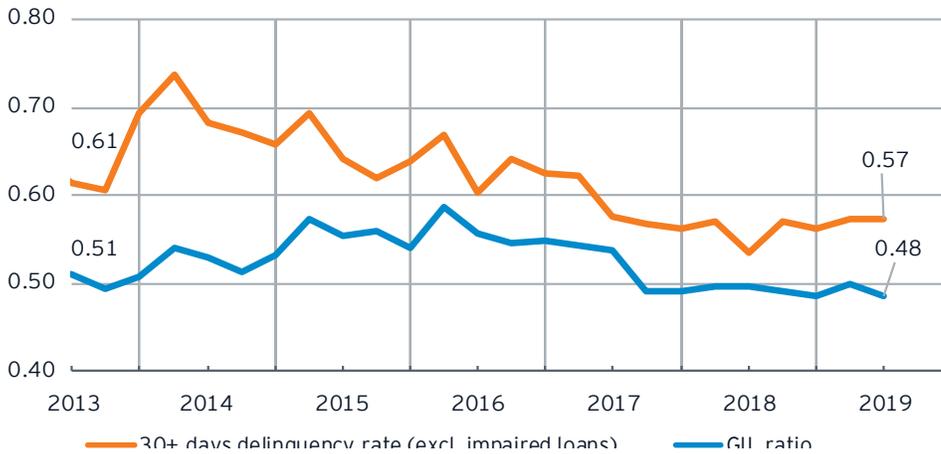
## Wholesale exposure

- ▶ Wholesale lending exhibited an increase of 13% compared to last year, but just a 1.1% rise compared to last quarter, its slowest rise since early 2018.
- ▶ Business activity continues to be overall steady; however, uncertainties related to the Canadian oil industry and global trade are driving a cautious outlook for commercial lending in Canada

# Loan credit quality

While slowing global economic growth has led some central banks to ease rates, the Bank of Canada as of October 2019 has held rates at 1.75%. Long-term bond yields have dropped, inverting Canada's yield curve since midyear.

## Retail loans\* – Delinquency rate and GIL ratio\*\* (%)



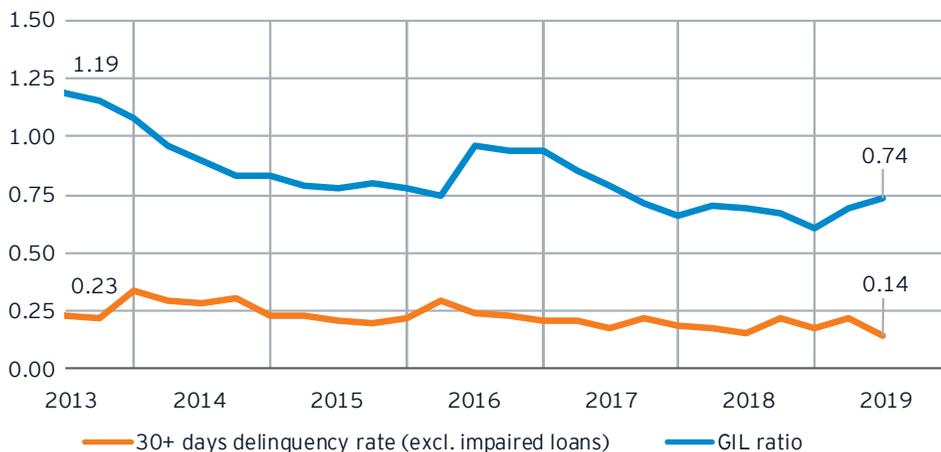
Source: Bank Investor Relations; last data points: Q2

\* Includes retail mortgages and HELOC

## Retail loans credit quality

- ▶ The 30-day-plus days delinquency rate and gross impaired loans ratio are staying flat YoY and QoQ in Q2.
- ▶ Delinquency rates in Canada edged higher, as consumers piled on more debt. According to report from TransUnion, over the last 12 months, the number of consumers with access to credit grew 1.7% YoY.
- ▶ In Alberta and Saskatchewan, there were YoY increases in consumer-level non-mortgage delinquency rates to 6.6% (+21 bps) and 6.8% (+37 bps), respectively, in Q2 2019 due to volatility in the oil sector.

## Wholesale loans – Delinquency rates and GIL ratio\*\* (%)



Source: Bank Investor Relations; last data points: Q2

\*\*Gross impaired loans (GIL) as a percentage of gross loans and acceptances

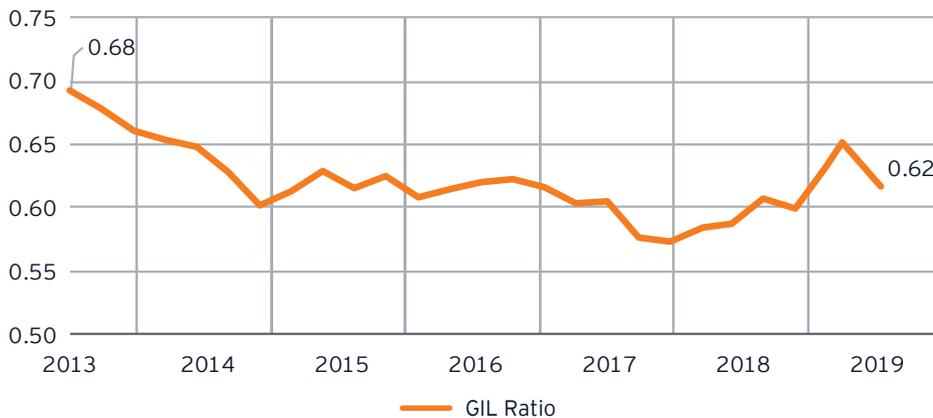
## Wholesale loans credit quality

- ▶ The 30-day-plus days delinquency rate for the wholesale portfolio dropped 5 bps in Q2, while gross impaired loans ratio gained 5 bps relative to Q1 2019.
- ▶ As a result of increased regulations (i.e., the B-20 guideline imposed by the OSFI early last year), the mortgage market has faced headwinds.

# Bank credit performance

While the slowing economy and cooling housing market earlier in 2019 drives some concerns, credit quality remains strong.

## GIL ratio\* (%)



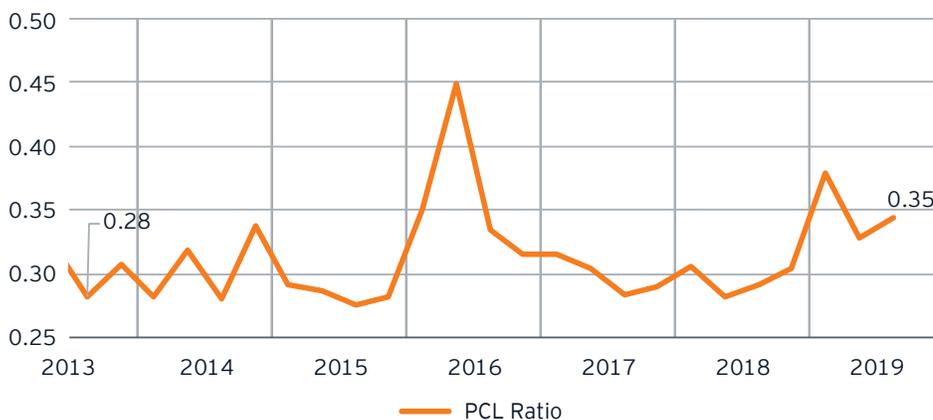
## Gross impaired loans (GIL)

- ▶ The YoY in GIL was about steady at 0.62%, recovering from its jump up to 0.65% in Q2.
- ▶ The Q2 jump in the GIL ratio was attributed to the effects of a sharply slowing economy and cooling housing market in Q2 2019.
- ▶ Banks continue to state that the credit quality and performance of their portfolio is strong. They also express confidence about the medium-term outlook of their positions in mortgage markets.

Source: Bank Investor Relations

\*GIL as a percentage of gross loans and acceptances

## PCL ratio\*\* (%)



## Provision for credit losses (PCL)

- ▶ The provision for credit loss ratio rose by 2 bps QoQ and 6 bps YoY.
- ▶ For most banks, the YoY increase in PCL is primarily attributable to the energy sector and the adoption of the IFRS9 standard.

Source: Bank Investor Relations

\*\*Provision for credit losses (PCL) as a percentage of average net loans and acceptances

# Bank financial performance

The slowdown in net income growth reflects declining long-term rates and competitive conditions among banks, along with a slight increase in PCL compared with last year.

## Net income (\$b, CAD)



## Net income

- ▶ Net income is up by 3.7% on YoY basis, and about flat on a quarterly basis.
- ▶ Most banks struggled with net income growth in Q3 as the rate environment pressured asset yields.

Source: S&P Global Market Intelligence

## Net interest margin (%)



## Net interest margin

- ▶ Net interest margin was down 1 bps QoQ in Q3 and 16 bps YoY.
- ▶ Slowing macroeconomic conditions and trade uncertainties increase lending risk and weighed on profit margins for Canadian banks, reducing net interest margin.

Source: S&P Global Market Intelligence

# Capital and funding

A moderate increase in CET1 ratios was in part a result of OSFI's increase in the domestic stability buffer for systematically important banks to 2% on June 4, 2019.

## Common equity tier 1 (CET1) ratio (%)

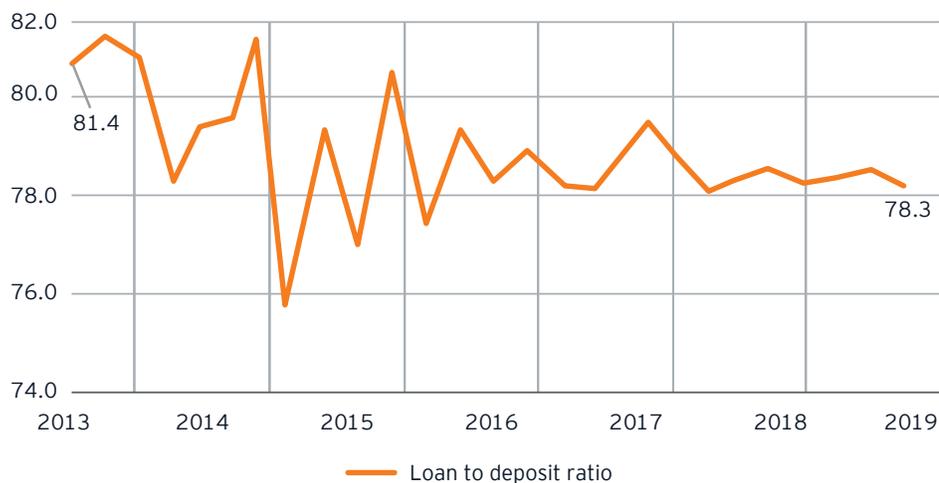


Source: S&P Global Market Intelligence

## Tier 1 capital ratio

- ▶ The combined CET1 capital ratio of the eight banks in our composite was up 8 bps QoQ in Q3. On an annual basis, the increase was 27 bps.
- ▶ On June 4, 2019, OSFI's increased domestic stability buffer from 1.75% to 2%. The move may induce banks to be more conservative in their short-term capital allocations.

## Loan-to-deposit ratio (%)



Source: S&P Global Market Intelligence

## Loan-to-deposit ratio

- ▶ The loan-to-deposit ratio was down 39 bps QoQ to 78.3%, generally reflecting Canadian banks' ample liquidity cushions and lending capacity.

# Regulatory snapshot

## Environmental, social and governance obligations

### Disclosures and cash flows

The House Financial Services Committee advanced a bill on September 20, 2019, requiring public companies to disclose certain environmental, social and governance (ESG) metrics. The bill requires the Securities and Exchange Commission to establish rules that require publicly traded companies to disclose in their annual proxy statements the company's views on the affects of ESG metrics on business performance over the long term. The bill also requires companies to disclose the processes used to determine the impacts.

Several influential international bodies have already made climate-related financial disclosure recommendations over the past few years. For example:

- ▶ The Financial Stability Board's Task Force on climate-related Financial Disclosures (Task Force) issued a status report in June 2019. The report found that disclosure of climate-related financial information has improved but remains insufficient. The Task Force noted that companies need to improve the reported linkage between climate-related issues and financial impact.
- ▶ The Network for Greening the Financial System, which is a group of 36 central banks and supervisors, noted that financial risks arising from climate change are "within the mandates of central banks and supervisors." This group highlighted the importance of climate-related disclosures.

In addition to disclosures, as economies begin to transition from carbon to alternatives, it is important to recognize, and quantify, the potential impacts on company business models and cash flows. The Prudential Regulatory Authority in the UK issued a paper last year that grouped climate-related impacts into two categories: physical and transition. Physical risks relate to weather-related events that can cause direct financial impacts. Transition risks result from a rapid and disorderly shift to a low-carbon economy. The PRA found that 60% of firms consider "climate change as a financial risk over the three to five year time horizon."

Certain industries will be directly affected, including energy, agricultural, forestry and real estate. Other industries may be impacted through general operations as economies transition to a low-carbon economy. Credit analysts should to recognize this trend and identify areas of potential ESG risk in company financial statements. Bank should recognize the risks in their Risk Appetite statements and adjust exposure limits, risk-based pricing and loan loss reserves, as appropriate.

While the prospects of success for the US bill are highly uncertain given the divided House and Senate, the direction of travel seems apparent. The political and social pressures on companies to address climate change continue to increase. Financial institutions should acknowledge both the direct effects on cash flows and credit quality, and the indirect effects on reputation, social standing and internal culture. The impacts will be real.

# Appendix



# Bank composites used in this report

## US bank composites

## Canadian bank composite

### Universal banks

- ▶ Includes six universal banks domiciled in the US
- ▶ Measurements made at holding company level; data includes global footprint
- ▶ Highest assets: \$2.6 trillion
- ▶ Lowest assets: \$850 billion
- ▶ Average assets: \$1.8 trillion
- ▶ Minimum asset threshold for inclusion: \$500 billion

### Super-regional banks

- ▶ Includes 16 large regional banks domiciled in the US
- ▶ Measurements made at holding company level
- ▶ Highest assets: \$460 billion
- ▶ Lowest assets: \$66 billion
- ▶ Average assets: \$183 billion
- ▶ Minimum asset threshold for inclusion: \$50 billion

### Regional banks

- ▶ Includes 45 regional banks domiciled in the US
- ▶ Measurements made at holding company level
- ▶ Highest assets: \$54 billion
- ▶ Lowest assets: \$5 billion
- ▶ Average assets: \$26 billion
- ▶ Minimum asset threshold for inclusion: \$5 billion

### Canadian banks

- ▶ Includes eight of the largest banks domiciled in Canada
- ▶ Measurements made at holding company level; data includes global footprint
- ▶ Highest assets: \$1.3 trillion CAD (\$1.0 trillion USD)
- ▶ Lowest assets: \$28 billion CAD (\$23 billion USD)
- ▶ Average assets: \$638 billion CAD (\$519 billion USD)
- ▶ Minimum asset threshold for inclusion: \$20 billion CAD







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# Contacts

#### **Adam Girling**

Principal – Ernst & Young LLP (US)  
[adam.girling@ey.com](mailto:adam.girling@ey.com)

#### **Preston Thompson**

Managing Director – Ernst & Young LLP (US)  
[preston.thompson@ey.com](mailto:preston.thompson@ey.com)

#### **Mario Schlener**

Principal – Ernst & Young LLP (Canada)  
[mario.schlener@ca.ey.com](mailto:mario.schlener@ca.ey.com)

#### **Scott Waterhouse**

Managing Director – Ernst & Young LLP (US)  
[scott.waterhouse@ey.com](mailto:scott.waterhouse@ey.com)

#### **Nigel Gault**

Managing Director – Ernst & Young LLP (US)  
[nigel.gault@ey.com](mailto:nigel.gault@ey.com)

#### **Tom Sebekos**

Principal – Ernst & Young LLP (US)  
[tom.sebekos@ey.com](mailto:tom.sebekos@ey.com)

#### **Matthew Noll**

Senior Manager – Ernst & Young LLP (US)  
[matthew.noll@ey.com](mailto:matthew.noll@ey.com)

#### **Govind V. Iyengar**

Senior Manager – Ernst & Young LLP (US)  
[govind.iyengar@ey.com](mailto:govind.iyengar@ey.com)

#### **Joseph Owen**

Manager – Ernst & Young LLP (US)  
[joseph.owen@ey.com](mailto:joseph.owen@ey.com)

#### **Michael R. Fraulo**

Manager – Ernst & Young LLP (US)  
[michael.fraulo@ey.com](mailto:michael.fraulo@ey.com)

#### **Mandy Kuo**

Manager – Ernst & Young LLP (US)  
[mandy.kuo@ey.com](mailto:mandy.kuo@ey.com)

#### **Eugene Kudko**

Senior – Ernst & Young LLP (Canada)  
[eugene.kudko@ca.ey.com](mailto:eugene.kudko@ca.ey.com)

#### **Paulson Paul**

Senior – EY Global Delivery Services  
India Private Limited  
[paulson.paul@gds.ey.com](mailto:paulson.paul@gds.ey.com)