Bank Profits Strong amid Waning Growth and Weaker Sentiment

February 28, 2019
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District job growth decelerated in 4Q18, with mixed performance across District states. Year-over-year, nonfarm jobs grew by 2.2% in the 12th District (District), down slightly from 2.4% in 3Q18 and in contrast to a mildly accelerating growth rate of 1.8% nationally. Slowdowns in the retail trade and education and health services sectors were the main drivers of the overall deceleration, while the professional and business services sector gained momentum across most District states. In Idaho, Utah, and Hawaii, slower hiring in the leisure/hospitality and construction sectors, constrained in part by tight labor markets, contributed to decelerating job growth. Alaska’s job losses moderated, but a 4Q18 decline in oil prices may affect its future growth. Unemployment rates were relatively stable in most states, but ticked up in Oregon, Hawaii, and Arizona, where unemployment increased faster than the labor force. Of note, job figures remained subject to annual benchmark revisions in March 2018, which have been significant on occasion in the past.

Home price gains continued year-over-year in all District states, but signs of cooling were apparent. The pace of home price increases slowed across District states, most notably in California, where price appreciation trailed the national average for the first time since May 2012. In several District states, more expensive homes moderated in value, while more affordable homes registered gains. Separately, the National Association of Realtors reported that the volume of existing homes sold during 4Q18 declined 7.6% nationally and 13.9% in the West on a year-over-year basis. Another sign of possible weakness was a shift in lenders’ outlook. Fannie Mae noted in 4Q18 that 25% of surveyed mortgage lenders expected home prices to decline in the year ahead, up from 6% of lenders in 4Q17. Likewise, 33% anticipated price gains, down from 69% in 4Q17.

Commercial real estate (CRE) fundamentals were solid across property sectors, but CRE investor pessimism increased. In 2018, vacancy rates improved in the majority of District markets in every sector. Demand for office properties was particularly strong with large portions of new construction pre-leased by tech companies. Coworking operators were also an increasing source of office space demand; however, as detailed in a recent Real Estate Lending Risk Monitor, most of these firms are not yet recession-tested. Meanwhile, apartments continued to benefit from job growth and modest single-family construction. Retail properties maintained steady improvement, with most District markets posting lower vacancy rates amid low construction levels. In the industrial sector, several markets had weaker vacancy rates because of higher levels of supply, which was spurred by exceptional rent growth. CRE property prices generally increased year-over-year, but the pace of appreciation slowed for all but suburban office properties. Surveyed CRE investors noted that market conditions have cooled somewhat and that they had grown less sanguine about future CRE market conditions, property prices, and financing availability.

### Nonfarm Job Growth & Unemployment (%)

<table>
<thead>
<tr>
<th>State</th>
<th>Year-over-Year Job Growth 12 Mo.</th>
<th>Year-over-Year Job Growth 4Q18</th>
<th>Unemp. Rate Dec-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>NV</td>
<td>3.76%</td>
<td>4.40%</td>
<td></td>
</tr>
<tr>
<td>AZ</td>
<td>3.41%</td>
<td>4.80%</td>
<td></td>
</tr>
<tr>
<td>UT</td>
<td>3.13%</td>
<td>3.20%</td>
<td></td>
</tr>
<tr>
<td>WA</td>
<td>3.08%</td>
<td>4.30%</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td>2.22%</td>
<td>4.10%</td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>2.01%</td>
<td>2.60%</td>
<td></td>
</tr>
<tr>
<td>CA</td>
<td>1.75%</td>
<td>4.20%</td>
<td></td>
</tr>
<tr>
<td>HI</td>
<td>1.71%</td>
<td>2.50%</td>
<td></td>
</tr>
<tr>
<td>AK</td>
<td>-0.29%</td>
<td>6.30%</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>1.80%</td>
<td>3.90%</td>
<td></td>
</tr>
</tbody>
</table>

**Wider net interest margins and tax cuts benefitted full-year bank profits.** District banks’ average, year-to-date return on average assets (ROAA) ratio improved to 1.26%, up 2 bps from 3Q18 and 37 bps from 2017 (adjusted for Subchapter S tax filers). Year-over-year comparisons were magnified by large, one-time writedowns on deferred tax assets in 2017 and lower effective tax rates in 2018. Stronger net interest margins reflected the effects of higher interest rates on asset yields; however, deposit funding costs picked up steam as the year progressed and funding shifted slightly towards costlier time deposits and borrowings.

**Annual net loan growth eased further but loan performance remained strong.** The District’s average annual net loan growth rate closed 2018 just shy of 9.0%, down from 9.3% and 9.9% in the prior quarter and year, respectively. Meanwhile, the national average net loan growth rate decelerated to 5.9%. Compared with 2017, overall construction and land development and nonfarm-nonresidential real estate portfolios increased at a strong but slowing pace; concurrently, commercial and industrial and 1-4 family segments posted comparatively low but accelerating growth rates. Capital accreted more quickly than CRE loans, moderating the District’s average CRE loan-to-total capital ratio. Still, at 230% of capital, the average CRE loan concentration surpassed the national average by more than 100 percentage points. On average, the volume of delinquent loans increased, but from a low base and concurrent with loan growth, so past-due rates continued to be minimal (see chart on left). Although credit performance remained strong, Federal Reserve and third party surveys noted worsening banker optimism regarding future loan growth, credit quality, and economic conditions.

**Liquidity risks edged higher, but stronger earnings boosted capital ratios.** Continuing an earlier trend, nonmaturity deposit gathering slowed, prompting an uptick in more costly time deposits and borrowings, especially among mid-sized and large banks. Technically, the average noncore funding ratio declined year-over-year, but this was led by legislative changes in the treatment of reciprocal deposits rather than a structural shift. Although on-balance sheet liquidity tightened, regulatory capital ratios improved. Capital accretion among mid-sized and large banks trailed that of small ones because of comparatively higher dividend payouts.

**Examination upgrades outpaced downgrades.** In the twelve months ending December, the share of safety and soundness examinations that resulted in upgrades continued to equal or exceed that of downgrades across component areas. Overall, nearly 93% of District banks were rated satisfactory or strong for safety and soundness. In addition, 95% and 98% were rated satisfactory or better for consumer compliance and Community Reinvestment Act performance, respectively.
Industry consolidation, financial crisis-driven failures, competitive cost pressures, and the proliferation of mobile and online banking have contributed to branch closures over the past decade. According to the FDIC’s annual *Survey of Deposits*, insured depositories operated nearly 12,400 full service brick and mortar and retail (BMR) banking offices in the District as of mid-2018, down 1.4%, 7.7%, and 9.6% during the past one-, five-, and ten-year periods, respectively. This trailed the nationwide pace of closures (see chart at right).¹ There were also roughly 200 other offices, including limited-service drive through (43%), trust (18%), administrative (15%), and mobile/seasonal (11%) facilities, as well as cyber offices (13%).

Within the District, the states with the largest build up in BMR offices prior to the financial crisis tended to have significant declines in the years following (see chart at bottom). For instance, counts in fast-growing Arizona and Nevada expanded more than 50% between 1998 and 2009, including by way of denovo formation, but these states also experienced high rates of bank and thrift failures and consolidation in the ensuing years. In contrast, insular markets like Alaska and Hawaii lost BMR offices for the better part of 20 years.

Because the District is home to a large number of major urban cores, 91% of BMR offices were located within metropolitan (metro) areas, another 6% were within micropolitan (micro) counties, and the remaining 3% were within other areas.² Nationwide, the mix tended to be slightly less urbanized, with 79%, 11%, and 10% of BMR offices within metro, micro, and other counties, respectively.

### BMR Indexed Office Count by District State *(1998 = 100)*

<table>
<thead>
<tr>
<th>District</th>
<th>98</th>
<th>99</th>
<th>00</th>
<th>01</th>
<th>02</th>
<th>03</th>
<th>04</th>
<th>05</th>
<th>06</th>
<th>07</th>
<th>08</th>
<th>09</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZ</td>
<td>153</td>
<td>129</td>
<td>124</td>
<td>124</td>
<td>119</td>
<td>117</td>
<td>120</td>
<td>107</td>
<td>111</td>
<td>94</td>
<td>90</td>
<td>79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NV</td>
<td>153</td>
<td>129</td>
<td>124</td>
<td>124</td>
<td>119</td>
<td>117</td>
<td>120</td>
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<td>94</td>
<td>90</td>
<td>79</td>
<td></td>
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</tr>
<tr>
<td>ID</td>
<td>133</td>
<td>109</td>
<td>117</td>
<td>108</td>
<td>108</td>
<td>107</td>
<td>111</td>
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<td>94</td>
<td>90</td>
<td>79</td>
<td></td>
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<tr>
<td>OR</td>
<td>125</td>
<td>109</td>
<td>117</td>
<td>108</td>
<td>108</td>
<td>107</td>
<td>111</td>
<td>107</td>
<td>111</td>
<td>94</td>
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<td>79</td>
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<tr>
<td>CA</td>
<td>120</td>
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<td>WA</td>
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<tr>
<td>UT</td>
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<td>107</td>
<td>111</td>
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<tr>
<td>AK</td>
<td>94</td>
<td>90</td>
<td>79</td>
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<tr>
<td>HI</td>
<td>79</td>
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</table>

¹ This analysis and most accompanying graphics include bank and thrift (but not credit union) full-service offices that are either “brick and mortar” or located within retail locations (e.g., supermarkets), and excludes single-office entities with deposits exceeding $3 billion. ² In general, metropolitan areas are those with one or more related counties containing an urbanized core with 50,000 or more people while micropolitan areas are those with one or more related counties containing an urbanized core with 10,000 to 50,000 people. Source: FDIC *Summary of Deposits* (June of each year).
Although non-metro areas were home to a relatively small share of BMR offices, they experienced slightly higher rates of closure. For instance, between 1998 and 2009, the District’s metro-area BMR count expanded by 23%, then contracted through 2018, but still ended the 20-year period 11% higher on net (see bottom left chart). In contrast, micro- and other-area office counts did not expand as strongly in the early 2000s and lagged 1998 levels by mid-2018. Of note, the districtwide net closure rate for non-metro BMR offices exceeded the national average.

Because of merger activity and corporate consolidations, the share of offices held by out-of-state institutions also shifted. In aggregate, roughly 40% of the District’s offices were controlled by institutions headquartered within the same state, down steadily from 77% in 1998. By mid-2018, in Arizona, Nevada, Oregon, and Idaho, at least three out of every four BMR offices were owned by depositories headquartered in other states (see map at right). In contrast, offices in Hawaii were rarely held by out-of-state institutions. This implies that the competitive landscape in the West differs from the central part of the nation, where offices of locally-owned banks are more dominant.

As office counts shrank, the median volume of deposits-per-office increased notably, even after adjusting for inflation (see bottom right chart). A state’s median volume of deposits per office correlated to factors such as how metro-centric the office mix was, the cost of doing business, and the amount of gross state product per BMR. California’s and Hawaii’s median office sizes ranked among the top five nationally alongside the District of Columbia (2nd), New Jersey (3rd), and New York (4th).
Prospectively, the pace of office consolidations will depend upon many factors, including customer migration to electronic channels, competition from bank and non-bank firms, and shifting demographics. Data from the Federal Reserve’s 2017 Survey of Household Economics and Decisionmaking showed that younger customers tended to embrace mobile banking, while older customers preferred tellers (see chart at right). As tech-savvy consumers age and account for a larger share of financial service business, physical offices and attendant staffing are expected to decline. Already, new technologies and office closures have fed a structural decline in teller jobs, which shrank 26% in the District between 2008 and 2017 (see chart at bottom right).

Community banks have adapted to meet customer demand to some degree. According to the CSBS/Federal Reserve 2018 National Survey of Community Banks, many banks offered or planned to offer certain technologies, but adoption of tools like interactive teller machines, automated underwriting, and online loan closings was less widespread (see chart at bottom left). Roughly two-thirds of bankers said it was important/very important to adopt new or emerging technologies to meet customer demand; however, only one-quarter felt it was as important to be a leader in adopting such capabilities. New technologies require upfront costs and pose operational risks. Other challenges include legacy system limitations, technology staffing, and privacy and data security.

PwC’s 2018 Digital Banking Survey of consumers found that branches may have some staying power for now: 65% of respondents felt it was important to have a local branch, and over 50% preferred to apply for a loan or deposit account in a physical office. In the near term, institutions may opt to modify the branch experience rather than eliminate it.
Section 1
Economic Conditions

Job Growth
Housing Market
Commercial Real Estate

For more information on the District’s real estate markets and economy, see:
*Real Estate Lending Risks Monitor*
(https://www.frbsf.org/banking/publications/real-estate-lending-risks-monitor/)
*Banks at a Glance*
(https://www.frbsf.org/banking/publications/banks-at-a-glance/)

For more information on the national economy, see:
*FRBSF FedViews*
(https://www.frbsf.org/economic-research/publications/fedviews/)
*FOMC Calendar, Statements, & Minutes*
(https://www.federalreserve.gov/monetarypolicy/fomccalendars.htm)
District hiring slowed, led by retail and education/health, but professional/business hiring accelerated.

Based on average nonfarm payroll levels over trailing three months; data are preliminary estimates; construction sector includes mining in Hawaii; information sector excludes Hawaii and Nevada. Source: Bureau of Labor Statistics via Haver Analytics.
Idaho, Nevada, and Utah led the nation for price gains; growth slowed from 3Q18 across most District states.

**Year-over-Year % Change in Home Price Index**

<table>
<thead>
<tr>
<th></th>
<th>Dec-17</th>
<th>Sep-18</th>
<th>Dec-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID</td>
<td>14.2%</td>
<td>11.7%</td>
<td>11.7%</td>
</tr>
<tr>
<td>NV</td>
<td>12.9%</td>
<td>10.8%</td>
<td>10.8%</td>
</tr>
<tr>
<td>UT</td>
<td>9.4%</td>
<td>8.7%</td>
<td>8.7%</td>
</tr>
<tr>
<td>AZ</td>
<td>7.5%</td>
<td>7.4%</td>
<td>7.4%</td>
</tr>
<tr>
<td>WA</td>
<td>6.1%</td>
<td>5.1%</td>
<td>5.1%</td>
</tr>
<tr>
<td>OR</td>
<td>4.3%</td>
<td>4.3%</td>
<td>4.3%</td>
</tr>
<tr>
<td>HI</td>
<td>6.8%</td>
<td>4.7%</td>
<td>4.7%</td>
</tr>
<tr>
<td>CA</td>
<td>1.8%</td>
<td>1.8%</td>
<td>1.8%</td>
</tr>
<tr>
<td>AK</td>
<td>5.3%</td>
<td>4.2%</td>
<td>4.2%</td>
</tr>
<tr>
<td>US</td>
<td>0.0%</td>
<td>2.0%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

HPI = home price index (includes all detached and attached homes, including distressed sales). Source: CoreLogic.

**Home Price Index (Re-indexed, Dec-14 = 100)**

- **All Tiers**
- **Low Tier (<75% of Median)**
- **High Tier (>125% of Median)**

**Versus Pre-Crisis Peak:**

- +17% -13%
- +25% -9%
- +30% +3%
- +25% +6%
- +19% +8%
- +7% +6%
- +8% +6%
- +6% +6%

HPI = home price index (includes all detached and attached homes, including distressed sales). Index values re-indexed to December 2014. Source: CoreLogic.

Housing affordability deteriorated further, but most areas were still more affordable than in 4Q06.

**Un-weighted Average Metro Housing Opportunity Index, December Each Year**

(% of Home Sales Deemed Affordable to Median Family Income; Lower Ratio = Less Affordable)

**Share of Lenders Expecting Change in Home Prices in the Next 12 Months:**

Lender size based upon 2017 total loan originations: Large = lenders in the top 15% of lending institutions (volume above $1.18 billion); Mid-Sized = lenders in the next 20% of lending institutions (volume between $400 million and $1.18 billion); Smaller = bottom 65% of lending institutions (volume less than $400 million); includes responses from nonbanks as well as banks, thrifts, and credit unions; data for "All Lenders" is an average of the three size groupings; responses generally collected early to mid-November of each year. Source: Fannie Mae Mortgage Lender Sentiment Surveys.

Assumes median income, 10% down payment, ratio of income-to-housing costs (principal, interest, taxes, and hazard insurance) of 28%, and a fixed-rate, 30-year mortgage; So. CA = Los Angeles, Orange, Riverside-San Bernardino, San Diego, and Ventura metros; SF Bay Area = San Francisco, Oakland, San Jose, Napa, Vallejo, and Santa Cruz metros. *AK series starts in 2007. Sources: National Association of Homebuilders/Wells Fargo via Haver Analytics, FRB-SF calculations.

Per Fannie Mae, a growing share of mortgage lenders expect prices to stabilize/decline in the coming year.
District permit activity continued to shift to 1-4 family; multifamily declined year-over-year in 3Q18 and 4Q18.

Homebuilder sentiment remained positive on net, but optimism weakened during 2018.

CRE vacancy rates improved in most District markets; industrial vacancies showed signs of deterioration.

CRE rents strengthened in most District markets; industrial properties saw the largest rent growth.
West Region capitalization rates were stable-to-higher for some CRE types, dipped for office and industrial.

Western U.S. CRE Capitalization Rates (Trailing 12-Month Average %)

<table>
<thead>
<tr>
<th>CRE Type</th>
<th>Dec-06</th>
<th>Dec-09</th>
<th>Dec-12</th>
<th>Dec-15</th>
<th>Dec-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>5.1%</td>
<td>5.3%</td>
<td>5.4%</td>
<td>4.4%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Industrial</td>
<td>6.1%</td>
<td>6.4%</td>
<td>4.9%</td>
<td>3.0%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Retail</td>
<td>5.1%</td>
<td>4.4%</td>
<td>5.0%</td>
<td>6.0%</td>
<td>7.0%</td>
</tr>
<tr>
<td>Apartment</td>
<td>5.9%</td>
<td>5.4%</td>
<td>5.4%</td>
<td>5.4%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Suburban</td>
<td>5.1%</td>
<td>5.3%</td>
<td>5.4%</td>
<td>5.4%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Flex</td>
<td>4.1%</td>
<td>4.4%</td>
<td>4.7%</td>
<td>4.0%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Shopping Centers</td>
<td>6.2%</td>
<td>6.4%</td>
<td>6.4%</td>
<td>6.4%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Warehouse</td>
<td>5.1%</td>
<td>5.3%</td>
<td>5.3%</td>
<td>5.3%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Garden</td>
<td>4.1%</td>
<td>4.4%</td>
<td>4.7%</td>
<td>4.0%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Mid-/High-Rise</td>
<td>4.4%</td>
<td>4.4%</td>
<td>4.4%</td>
<td>4.4%</td>
<td>4.4%</td>
</tr>
</tbody>
</table>

Includes transactions in the West (AK, CA, HI, ID, MT, NV, OR, UT, WA, and WY, but not AZ); property sales > $2.5 million with available capitalization rate data. Source: Real Capital Analytics.

CRE prices appreciated across sectors, but gains were often low for retail and scant for CBD office properties.

Year-over-Year % Change in Commercial Property Price Index – Nation

<table>
<thead>
<tr>
<th>Sector</th>
<th>Dec-15</th>
<th>Dec-16</th>
<th>Dec-17</th>
<th>Dec-18</th>
</tr>
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<tbody>
<tr>
<td>Apartment</td>
<td>5.1%</td>
<td>5.1%</td>
<td>5.1%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Office</td>
<td>8.9%</td>
<td>8.9%</td>
<td>8.9%</td>
<td>8.9%</td>
</tr>
<tr>
<td>Industrial</td>
<td>8.2%</td>
<td>8.2%</td>
<td>8.2%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Retail</td>
<td>7.9%</td>
<td>7.9%</td>
<td>7.9%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Suburban</td>
<td>7.7%</td>
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<td>7.7%</td>
</tr>
<tr>
<td>CBD</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

Average Cumulative Change in CPPI

<table>
<thead>
<tr>
<th>Period</th>
<th>Apartment</th>
<th>Office</th>
<th>Industrial</th>
<th>Retail</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-Year</td>
<td>70.6%</td>
<td>45.2%</td>
<td>54.1%</td>
<td>26.9%</td>
</tr>
<tr>
<td>10-Year</td>
<td>94.2%</td>
<td>27.9%</td>
<td>36.1%</td>
<td>18.2%</td>
</tr>
</tbody>
</table>

CPPI = Commercial Property Price Index; CBD = central business district (downtown); based upon repeat-sales transactions. Source: Real Capital Analytics.

CRE investor sentiment shifted notably in the second half of 2018 according to one survey.

National Real Estate Market Conditions Today vs. One-Year Ago (% of Respondents)

<table>
<thead>
<tr>
<th>YE</th>
<th>4Q15</th>
<th>4Q16</th>
<th>4Q17</th>
<th>4Q18</th>
<th>4Q19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>7%</td>
<td>19%</td>
<td>15%</td>
<td>16%</td>
<td>14%</td>
</tr>
<tr>
<td>Industrial</td>
<td>46%</td>
<td>11%</td>
<td>14%</td>
<td>11%</td>
<td>14%</td>
</tr>
<tr>
<td>Retail</td>
<td>7%</td>
<td>19%</td>
<td>15%</td>
<td>16%</td>
<td>14%</td>
</tr>
<tr>
<td>Suburban</td>
<td>7%</td>
<td>19%</td>
<td>15%</td>
<td>16%</td>
<td>14%</td>
</tr>
<tr>
<td>Flex</td>
<td>46%</td>
<td>11%</td>
<td>14%</td>
<td>11%</td>
<td>14%</td>
</tr>
</tbody>
</table>

CRE Investor Sentiment Compared with Year Ago or Next Year (% of Respondents)

<table>
<thead>
<tr>
<th>Market Conditions</th>
<th>4Q15</th>
<th>4Q16</th>
<th>4Q17</th>
<th>4Q18</th>
<th>4Q19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much Better</td>
<td>46%</td>
<td>11%</td>
<td>14%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>Somewhat Better</td>
<td>46%</td>
<td>11%</td>
<td>14%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>About the Same</td>
<td>46%</td>
<td>11%</td>
<td>14%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>Somewhat Worse</td>
<td>46%</td>
<td>11%</td>
<td>14%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>Much Worse</td>
<td>46%</td>
<td>11%</td>
<td>14%</td>
<td>14%</td>
<td>14%</td>
</tr>
</tbody>
</table>

*4Q19 reflects expectations for the next 12 months; survey was conducted by FPL Advisory Group on behalf of The Real Estate Roundtable and measures the views of chief executives, presidents, and other top CRE industry executives regarding conditions in the past 12 months and expectations for the next 12 months; 4Q surveys were typically conducted in October. Source: Real Estate Roundtable Sentiment Index Reports.
Section 2
Commercial Bank Performance

Earnings
Loan Growth and Concentrations
Credit Quality
Liquidity and Interest Rate Risk
Capital

Note: Bank size groups are defined as very small (< $1B), small ($1B - $10B), mid-sized ($10B - $50B), and large (> $50B) banks. The large bank group covers nationwide banks (a larger statistical population), while the other three groups cover 12th District banks.
Wider margins and lower taxes more than offset higher noninterest expenses during 2018.

Interest expense growth accelerated from a low base, and outpaced increases in interest income and assets.

On average, overhead expenses also increased faster than assets during 2018.
Rising personnel expenses contributed heavily to overhead trends.

Average YTD Overhead Expense / Average Assets

District
Nation

Personnel
All Other
Net Occupancy

Dec-06
Dec-08
Dec-10
Dec-12
Dec-14
Dec-16
Dec-18

0.00%
0.30%
0.60%
0.90%
1.20%
1.50%
1.80%

1.71%
0.86%
0.30%
1.60%
0.88%
0.32%
0.00%
0.30%
0.60%
0.90%
1.20%
1.50%

Average = trimmed mean; overhead = noninterest expense.

In isolation, 4Q18 net loan growth matched pace with 4Q17 and 4Q16, but full-year 2018 growth trailed 2017.

Average Year-over-Year
Net Loan Growth

District
Nation

Dec-06
Dec-08
Dec-10
Dec-12
Dec-14
Dec-16
Dec-18

17.5%
16.5%
8.1%
4.9%
2.5%
0.3%
-3.5%
-7.0%
-12.9%
9.9%
6.5%
5.9%
2.5%
0.3%

Average = trimmed mean; growth rates are not merger-adjusted; includes loans and leases held for sale and for investment, net of allowances for loan and lease losses.

Average annual net loan growth decelerated across several District states, weighing on the District average.

Average Year-over-Year Net Loan Growth (%), Faster ↑ / Slower ↓ Rate vs. 3Q18

Nation = 5.9% District = 9.0%

Construction and multifamily remained among the fastest-growing major portfolio segments.

Average Year-over-Year Loan Growth, Selected Loan Categories

District
Nation

Dec-10
Dec-12
Dec-14
Dec-16
Dec-18
Dec-10
Dec-12
Dec-14
Dec-16
Dec-18

20%
12%
13%
13%
9%
9%
9%
6%
4%

Average = trimmed mean; growth rates are not merger-adjusted; C&LD = construction and land development; nonfarm-nonresidential includes mortgages with owner-occupied collateral.
Earnings-fueled capital accretion outpaced increases in CRE loans, reducing concentrations to capital.

Per MBA, CRE mortgage originations eased on average in 2018 at banks, but surged at GSEs because of multifamily.

Surveyed lenders indicated modest signs of credit tightening during 4Q18 versus the same period in 2017.

Based on a sample of 70+- loan officers at domestic banks (number varies by period and loan type); C&LD = construction and land development; *includes all CRE loans prior to Oct-13; **includes all residential mortgages prior to Apr-07, "prime" mortgages Apr-07 to Oct-14, and GSE-Eligible starting Jan-15; ***includes "nontraditional" mortgages Apr-07 to Oct-14 and Non QM Jumbo mortgages starting Jan-15. Source: Federal Reserve (FR) Senior Loan Officer Opinion Survey, https://www.federalreserve.gov/data/sloos.htm via Haver Analytics.
Versus Jan. 2018, more lenders expected tighter and fewer expected easier standards in the coming year.

Expectations for Lending Standards in Coming Year

% of Senior Loan Officers Reporting

<table>
<thead>
<tr>
<th></th>
<th>Tighter</th>
<th>Same</th>
<th>Easier</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>January 2018</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multifamily</td>
<td>21%</td>
<td>77%</td>
<td>1%</td>
</tr>
<tr>
<td>C&amp;LD</td>
<td>21%</td>
<td>78%</td>
<td>1%</td>
</tr>
<tr>
<td>Nonfarm-Nonresid.</td>
<td>10%</td>
<td>87%</td>
<td>3%</td>
</tr>
<tr>
<td>Credit Cards</td>
<td>17%</td>
<td>73%</td>
<td>10%</td>
</tr>
<tr>
<td>Small C&amp;I</td>
<td>4%</td>
<td>90%</td>
<td>6%</td>
</tr>
<tr>
<td>Jumbo 1-4 Family</td>
<td>5%</td>
<td>80%</td>
<td>15%</td>
</tr>
<tr>
<td>Mid-Large C&amp;I</td>
<td>4%</td>
<td>81%</td>
<td>14%</td>
</tr>
<tr>
<td>Auto Loans</td>
<td>11%</td>
<td>81%</td>
<td>9%</td>
</tr>
<tr>
<td>GSE-Elig. 1-4 Fam.</td>
<td>2%</td>
<td>81%</td>
<td>17%</td>
</tr>
<tr>
<td><strong>January 2019</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multifamily</td>
<td>30%</td>
<td>70%</td>
<td></td>
</tr>
<tr>
<td>C&amp;LD</td>
<td>27%</td>
<td>73%</td>
<td></td>
</tr>
<tr>
<td>Nonfarm-Nonresid.</td>
<td>24%</td>
<td>77%</td>
<td></td>
</tr>
<tr>
<td>Credit Cards</td>
<td>16%</td>
<td>80%</td>
<td>4%</td>
</tr>
<tr>
<td>Small C&amp;I</td>
<td>12%</td>
<td>87%</td>
<td>2%</td>
</tr>
<tr>
<td>Jumbo 1-4 Family</td>
<td>11%</td>
<td>86%</td>
<td>3%</td>
</tr>
<tr>
<td>Mid-Large C&amp;I</td>
<td>11%</td>
<td>89%</td>
<td></td>
</tr>
<tr>
<td>Auto Loans</td>
<td>5%</td>
<td>91%</td>
<td>4%</td>
</tr>
<tr>
<td>GSE-Elig. 1-4 Fam.</td>
<td>3%</td>
<td>94%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Based on a sample of loan officers at 50-72 domestic banks (count varies by loan type and year); C&LD = construction and land development; C&I = commercial and industrial; GSE = government sponsored enterprise. Source: Federal Reserve Senior Loan Officer Opinion Survey (http://www.federalreserve.gov/BoardDocs/snloansurvey/).
By 2019, a growing share of senior lenders forecasted weakening performance across most loan categories.

Expectations for Loan Performance in Coming Year

<table>
<thead>
<tr>
<th>Loan Category</th>
<th>January 2018</th>
<th>January 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small C&amp;I</td>
<td>6% 84% 9%</td>
<td>27% 71% 3%</td>
</tr>
<tr>
<td>Mid-Large C&amp;I</td>
<td>2% 88% 11%</td>
<td>24% 75% 1%</td>
</tr>
<tr>
<td>C&amp;LD</td>
<td>6% 94% 3%</td>
<td>24% 75% 2%</td>
</tr>
<tr>
<td>Multifamily</td>
<td>4% 93% 3%</td>
<td>20% 80%</td>
</tr>
<tr>
<td>Credit Cards*</td>
<td>39% 57% 4%</td>
<td>18% 82%</td>
</tr>
<tr>
<td>Jumbo 1-4 Fam.</td>
<td>7% 88% 5%</td>
<td>17% 80% 3%</td>
</tr>
<tr>
<td>Auto Loans*</td>
<td>18% 75% 7%</td>
<td>17% 81% 2%</td>
</tr>
<tr>
<td>Nonfarm-Nonresid.</td>
<td>5% 95%</td>
<td>16% 84%</td>
</tr>
<tr>
<td>GSE Elig. 1-4 Fam.</td>
<td>9% 86% 5%</td>
<td>11% 86% 3%</td>
</tr>
</tbody>
</table>

Based on a sample of loan officers at 46-71 domestic banks (varies by loan type and year); C&I = commercial and industrial; C&LD = construction and land development; GSE = government sponsored enterprise; *2019 data excludes subprime.

Source: Federal Reserve Senior Loan Officer Opinion Survey (http://www.federalreserve.gov/BoardDocs/snloansurvey/).
Past due ratios remained low; delinquencies among C&I and 1-4 family often exceeded other major categories.

**Average Past Due or Noncurrent / Gross Loans & Leases**

<table>
<thead>
<tr>
<th>Loan Type</th>
<th>Dec-17</th>
<th>Sep-18</th>
<th>Dec-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&amp;I</td>
<td>0.59</td>
<td>0.67</td>
<td>0.66</td>
</tr>
<tr>
<td>1-4 Family</td>
<td>0.65</td>
<td>0.60</td>
<td>0.59</td>
</tr>
<tr>
<td>Consumer</td>
<td>0.27</td>
<td>0.26</td>
<td>0.32</td>
</tr>
<tr>
<td>Credit Card</td>
<td>0.57</td>
<td>0.71</td>
<td>0.85</td>
</tr>
<tr>
<td>Auto</td>
<td>0.20</td>
<td>0.20</td>
<td>0.20</td>
</tr>
<tr>
<td>Other</td>
<td>0.21</td>
<td>0.16</td>
<td>0.15</td>
</tr>
<tr>
<td>Agriculture</td>
<td>0.26</td>
<td>0.23</td>
<td>0.20</td>
</tr>
<tr>
<td>NFNR</td>
<td>0.31</td>
<td>0.31</td>
<td>0.28</td>
</tr>
<tr>
<td>Owner-Occ</td>
<td>0.38</td>
<td>0.36</td>
<td>0.35</td>
</tr>
<tr>
<td>Other</td>
<td>0.11</td>
<td>0.11</td>
<td>0.07</td>
</tr>
<tr>
<td>C&amp;LD</td>
<td>0.19</td>
<td>0.16</td>
<td>0.16</td>
</tr>
<tr>
<td>All Loans</td>
<td>0.64</td>
<td>0.65</td>
<td>0.64</td>
</tr>
</tbody>
</table>

Annual growth in delinquencies outpaced gross loans, which could lift past due ratios in future periods.

**Average Year-over-Year % Change in Dollar Volume**

- Gross Loans: 12.3%
- Noncurrent: 5.8%
- Total Past Due: 7.7%
- Past Due 30-89 Days: 10.0%
- Past Due 90+ Days or Nonaccrual: 12.8%

Average net chargeoff ratios tended to be higher at mid-sized and large banks.

**Average YTD Provision Expenses and Net Chargeoffs / Average Loans & Leases**

<table>
<thead>
<tr>
<th>Category</th>
<th>Dec-08</th>
<th>Dec-10</th>
<th>Dec-12</th>
<th>Dec-14</th>
<th>Dec-16</th>
<th>Dec-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provisions</td>
<td>2.73%</td>
<td>3.16%</td>
<td>3.66%</td>
<td>3.36%</td>
<td>3.76%</td>
<td>3.86%</td>
</tr>
<tr>
<td>Net Chargeoffs</td>
<td>1.99%</td>
<td>2.11%</td>
<td>2.51%</td>
<td>2.81%</td>
<td>2.51%</td>
<td>2.53%</td>
</tr>
</tbody>
</table>

Losses at mid-sized and large banks were led by larger holdings of and losses on C&I and/or consumer loans.

**Average YTD Net Chargeoffs / Average Loans by Category**

<table>
<thead>
<tr>
<th>Category</th>
<th>Dec-08</th>
<th>Dec-10</th>
<th>Dec-12</th>
<th>Dec-14</th>
<th>Dec-16</th>
<th>Dec-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer</td>
<td>3.45%</td>
<td>3.44%</td>
<td>3.48%</td>
<td>2.98%</td>
<td>2.85%</td>
<td>2.83%</td>
</tr>
<tr>
<td>C&amp;I</td>
<td>2.61%</td>
<td>2.61%</td>
<td>2.61%</td>
<td>2.61%</td>
<td>2.61%</td>
<td>2.61%</td>
</tr>
</tbody>
</table>

Memo: Average Concentration to Total Capital, Dec-18

<table>
<thead>
<tr>
<th>Category</th>
<th>Dec-08</th>
<th>Dec-10</th>
<th>Dec-12</th>
<th>Dec-14</th>
<th>Dec-16</th>
<th>Dec-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer</td>
<td>4.70</td>
<td>8.75</td>
<td>11.45</td>
<td>14.95</td>
<td>18.45</td>
<td>21.95</td>
</tr>
<tr>
<td>C&amp;I</td>
<td>81.46</td>
<td>71.69</td>
<td>114.95</td>
<td>148.25</td>
<td>181.55</td>
<td>214.85</td>
</tr>
</tbody>
</table>

Average = trimmed mean; YTD = year-to-date (annualized); C&I = commercial and industrial; consumer includes credit cards, auto loans, and other loans to individuals for household, family, and other personal expenditures.
41. **Per Promontory, bankers’ outlooks for loan demand and the economy dimmed notably in 4Q18.**

**Expectations in Next 12 Months – West Area**

- **Deposit Competition:**
  - **Note:** 2018 data based on a nationwide survey of bank chief executive officers, chief financial officers, and presidents at 447 institutions, queried between January 3 and January 16, 2019; West = Kansas City/San Francisco Districts; Midwest = Chicago/Cleveland/Minneapolis/St. Louis Districts; South = Atlanta/Dallas/Richmond Districts; Northeast = Boston/New York/Philadelphia Districts. Source: Promontory Interfinancial Network Bank Executive Business Outlook Surveys.

**Bank Confidence Index**

- **Above 50 Considered Expansionary**
  - **Districts:**
    - Midwest
    - Northeast
    - South
    - West

**Average ALLL Coverage of Loans not HFS (%) and Noncurrent Loans (X)**

- **District**
  - Dec-06: 1.25%
  - Dec-08: 2.70%
  - Dec-10: 1.38%
  - Dec-12: 1.27%
  - Dec-14: 1.35%
  - Dec-16: 1.27%
  - Dec-18: 1.26%

- **Nation**
  - Dec-06: 1.24%
  - Dec-08: 2.70%
  - Dec-10: 1.38%
  - Dec-12: 1.27%
  - Dec-14: 1.35%
  - Dec-16: 1.27%
  - Dec-18: 1.26%

**Average Net Unrealized Gains (Losses) on AFS Securities / AFS Securities 10-Yr. UST Yield**

- **District**
  - Dec-06: 4.04%
  - Dec-08: 3.04%
  - Dec-10: 3.04%
  - Dec-12: 3.04%
  - Dec-14: 3.05%
  - Dec-16: 3.05%
  - Dec-18: 2.69%

- **Nation**
  - Dec-06: 4.04%
  - Dec-08: 3.04%
  - Dec-10: 3.04%
  - Dec-12: 3.04%
  - Dec-14: 3.05%
  - Dec-16: 3.05%
  - Dec-18: 2.69%

---

42. **Loan loss allowances continued to lag loan growth and dipped as a multiple of noncurrent loans.**

43. **On-balance sheet liquidity tightened, continuing an earlier trend, but was stronger than pre-crisis levels.**

44. **Although lower, net unrealized losses within securities portfolios also crimped on-balance sheet liquidity.**
Overall Nonmaturity Deposits / Assets

Average Nonmaturity Deposits / Assets

District
Nation

Average Nonmaturity Deposits / Assets

Average % of Total Assets

Average % of Total Assets

Average % of Total Assets

Average % of Total Assets

Average % of Total Assets

Average % of Total Assets

Average % of Total Assets

Average % of Total Assets

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**Dividend payout ratios eased among District C-corp. banks; tax reform created denominator effects.**

Average YTD Cash Dividends / Net Income

- 2017 net income was depressed by one-time deferred tax asset write-downs, but 2018 profits benefitted from tax cuts.

Subchapter S Tax Filers Non Subchapter S Tax Filers

<table>
<thead>
<tr>
<th>Year</th>
<th>District</th>
<th>Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec-06</td>
<td>64%</td>
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<tr>
<td>Dec-07</td>
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<tr>
<td>Dec-08</td>
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<td>51%</td>
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<td>31%</td>
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<tr>
<td>Dec-11</td>
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<td>Dec-16</td>
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<td>60%</td>
</tr>
<tr>
<td>Dec-17</td>
<td>36%</td>
<td>31%</td>
</tr>
</tbody>
</table>

**Average Regulatory Capital Ratios by Bank Size**

- Average trimming mean; new risk-based capital (RBC) rules that became effective March 2015 for most banks (March 2014 for some larger/more complex banks) included the phase out of some capital instruments and higher risk weights on some asset and off-balance sheet commitment categories; beginning with the June 2018 Call Report, banks could opt to implement changes to the definition of high volatility commercial real estate (per the Economic Growth, Regulatory Relief, and Consumer Protection Act of 2018), which may have reduced risk weightings for a generally small subset of assets previously weighted at 150%.

**Improvements in capital ratios were more pronounced among smaller banks.**

Average Regulatory Capital Ratios

- Tier 1 Leverage
- Tier 1 Risk-Based
- Total Risk-Based

- Improvements in capital ratios were more pronounced among smaller banks.

**Average YTD Dividends and Retained Earnings / Avg. Equity – 12th District**

- Smaller banks achieved greater capital accretion in part because of lower dividend impacts on equity.

- Dividends
- Retained Earnings

- Average trimming mean (12th District banks only); YTD = year-to-date (annualized); as of 4Q18, roughly 17% of District very small, 7% of District small banks, and none of the mid-sized or large banks were Subchapter S tax filers.
Appendices

Summary of Institutions

Technical Information
Appendix 1: Summary of Institutions

<table>
<thead>
<tr>
<th>Area</th>
<th>Commercial Banks (De Novos)</th>
<th>Industrial Banks (De Novos)</th>
<th>Savings Institutions (De Novos)</th>
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</thead>
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<tr>
<td></td>
<td>Dec-17</td>
<td>Dec-18</td>
<td>Dec-17</td>
</tr>
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<td>4 (0)</td>
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</tr>
<tr>
<td>AZ</td>
<td>15 (0)</td>
<td>15 (0)</td>
<td>-</td>
</tr>
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<td>CA</td>
<td>152 (1)</td>
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<tr>
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<td>12L</td>
<td>281 (1)</td>
<td>262 (2)</td>
<td>23 (0)</td>
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<tr>
<td>U.S.</td>
<td>4,890 (7)</td>
<td>4,685 (12)</td>
<td>25 (0)</td>
</tr>
</tbody>
</table>

Based on preliminary fourth quarter 2018 data.

Appendix 2: Technical Information

**General:** This report focuses on the financial trends and performance of commercial banks headquartered within the 12th Federal Reserve District (“12L”). 12L includes nine western states: AK, AZ, CA, HI, ID, NV, OR, UT, and WA, as well as Guam.

**Banking Statistics:** Unless otherwise noted, all data are for commercial banks based upon headquarters location. Averages are calculated on a “trimmed” basis by removing the highest 10% and lowest 10% of ratio values prior to averaging to prevent distortion from outliers. Earnings figures are presented on an annualized year-to-date or quarterly basis, as noted. Growth rates are not adjusted for mergers. The latest quarter of data is considered preliminary. Other than the table to the left, most graphics exclude “De Novo” banks (banks less than five years old) and industrial banks and savings institutions (which have different operating characteristics).

**Groups by Asset Size:** “Very Small,” “Small,” and “Mid-Sized” bank groups are based on total asset ranges of <$1 billion, $1-$10 billion, and $10-$50 billion, respectively. The “Large” bank group uses banks with assets >$50 billion nationwide because these banks typically operate beyond the District’s geographic footprint and a larger statistical population is needed to construct trimmed means.