

ON POINT

ECONOMIC AND POLICY INSIGHT FROM THE OCC

Banks' Rising Labor Costs Partly Reflect Industry-Specific Factors

Supply and demand imbalances have been a key feature of the economy since the sharp rebound in economic activity that began in mid-2020.¹ At the same time, compensation for workers has grown at a faster rate than its pre-pandemic trend,² as companies raise wages amid labor shortages and a record number of job openings. Banks are facing the same labor market pressures pushing compensation higher across other industries, affecting profitability.

Compensation in credit intermediation and related activities, which includes all depository institutions, has grown faster in recent quarters than private industries as a whole. Compensation for all private service-providing industries, as measured by the Employment Cost Index (ECI), grew just 3.5 percent at an annual rate from the fourth quarter of 2019 through the third quarter of 2021, while total compensation in credit-related activities, grew over 6 percent at an annual rate over this same period. Compensation in leisure and hospitality—the service-providing industry most affected by COVID-19 and one that has faced substantial wage pressures as a result—grew 5.8 percent over this same period.

Labor costs are the single largest expense for banks and an important driver of earnings, particularly as banks try to manage expenses and generate revenue in the current low interest rate environment. For banks with less than \$5 billion in assets (hereafter referred to as community banks), in particular, rising labor costs have been a key factor restraining earnings.³

Salary Pressures Greater at Community Banks Than at Larger Banks

In addition to facing a general shortage of workers and increasing wage pressures, banks must compete to attract a finite pool of unique talent, particularly community banks that compete with their larger commercial peers and fintech companies. As of the third quarter of 2021, noninterest

¹ Smith, Christine. "[Understanding Supply and Demand Shocks Amid Coronavirus](#)," *Open Vault Blog*, Federal Reserve Bank of St. Louis, March 2020.

² The OCC's Economic & Policy Analysis unit's calculations used total compensation (wages, salaries, and employer costs for benefits) for all civilian workers from the ECI. The "pre-pandemic" trend refers to the years 2010 through 2019.

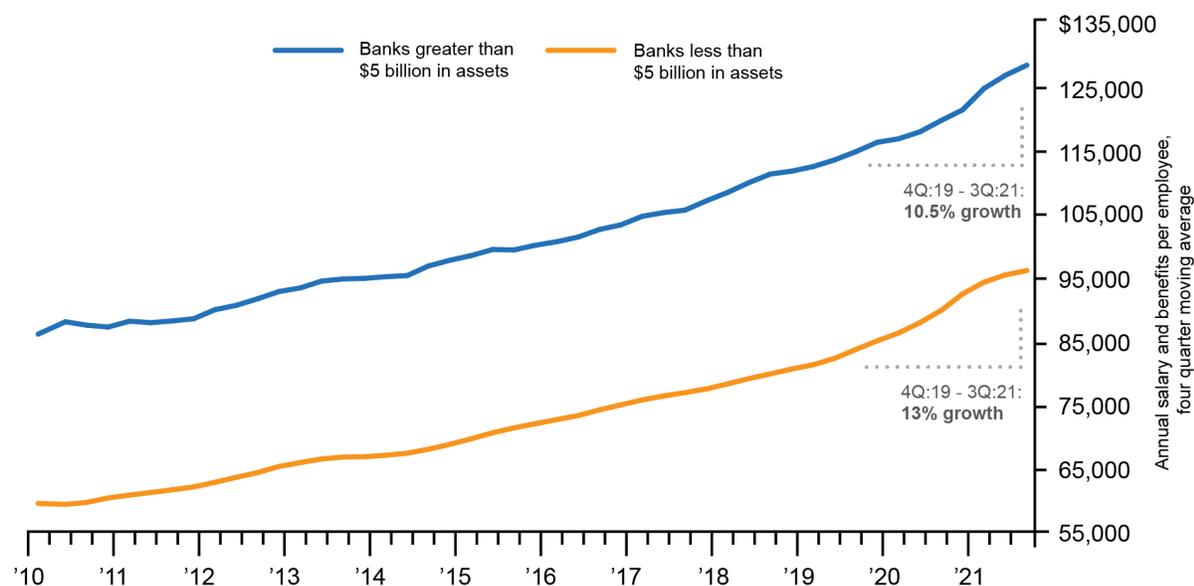
³ Throughout this article, "community banks" refers to Federal Deposit Insurance Corporation (FDIC)-insured commercial banks with less than \$5 billion in assets, excluding specialty banks such as credit card and trust banks.

expense for community banks grew 5 percent in the previous 12 months compared with 0.2 percent for banks with over \$5 billion in assets.

Salaries and employee benefits, which comprise almost 55 percent of noninterest expense for all commercial banks, grew considerably since the end of 2019.⁴ While this compensation expense per employee for FDIC-insured commercial banks with greater than \$5 billion in assets grew 10.5 percent from the fourth quarter of 2019 through the third quarter of 2021, growth was even more rapid among community banks. As shown in figure 1, annual compensation expenses per employee at community banks grew 13 percent since the fourth quarter of 2019, nearly 3 percentage points faster than at their larger peers. Higher labor costs per employee at community banks were driven primarily by higher salaries and benefits, not a shrinking workforce. While the number of full-time employees has trended down since 2010 at banks with greater than \$5 billion in assets, the number of full-time employees at community banks has risen.

An accelerating pace of compensation growth since the fourth quarter of 2019—even after accounting for inflation—suggests that pandemic-related factors have driven recent increases, at least in part.⁵

Figure 1: Annual Salary and Employee Benefits per Employee by Bank Asset Size



Sources: OCC Integrated Banking Information System (IBIS), OCC Economics & Policy Analysis (E&PA) calculations

Note: FDIC-insured commercial banks, excluding specialty banks such as credit card and trust banks, with assets greater than \$5 billion (224 banks) and assets less than \$5 billion (3,978 banks). Data are merger-adjusted for banks in continuous operation from the first quarter of 2010 through the third quarter of 2021.

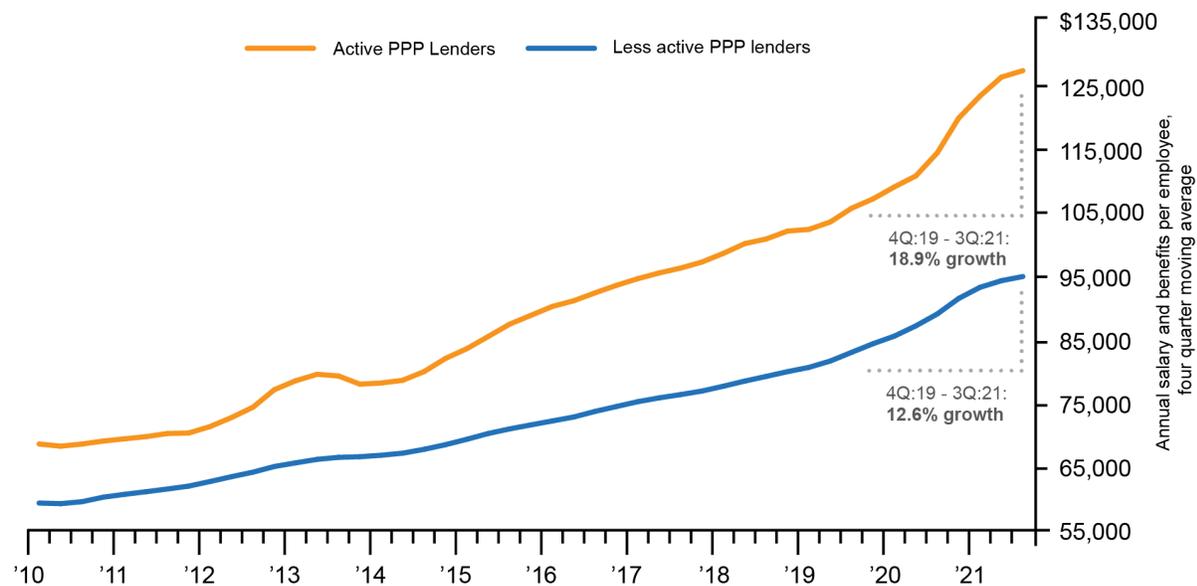
⁴ Salaries and employee benefits data for banks are from the Federal Financial Institutions Examination Council (FFIEC) Call Report data in the OCC Integrated Banking Information System (IBIS) database and are not directly comparable to ECI data presented above.

⁵ On an inflation-adjusted basis, community bank salary and benefits expense growth nearly tripled over the most recent seven quarters, growing 8.4 percent in real terms from the fourth quarter of 2019 through the third quarter of 2021; average growth over a seven-quarter period from 2010 through 2019 was 3.1 percent.

Payroll Protection Program Lending Drove Higher Labor Costs at Community Banks

A reasonable hypothesis for rising community bank labor costs is that active participation in the Payroll Protection Program (PPP), a key feature of the Coronavirus Aid, Relief, and Economic Security (CARES) Act, led to greater demand for staff and additional labor costs. Among community banks, growth in overall compensation expense since the fourth quarter of 2019 was considerably higher for banks that actively participated in the PPP than for banks less active in that program.⁶ For the active banks, compensation expense since the fourth quarter of 2019 grew 18.9 percent, versus 12.6 percent for their less active peers, as shown in figure 2. Active PPP lenders, faced with a surge in small business lending, likely incurred additional labor costs to attract and retain workers to process the additional loan applications.

Figure 2: Annual Salary and Employee Benefits per Employee by PPP Activity for Community Banks



Sources: OCC IBIS, OCC E&PA calculations

Note: FDIC-insured commercial banks with assets less than \$5 billion, excluding specialty banks such as credit card and trust banks. Active PPP lenders are defined as banks that hold at least 10 percent of assets in PPP loans (183 banks). Less active PPP lenders refer to banks that hold less than 10 percent of assets in PPP loans (3,795 banks). Data are merger-adjusted for banks in continuous operation from the first quarter of 2010 to through third quarter of 2021.

Bank Location and Residential Lending Also Led to Higher Labor Costs

While PPP lending appears to be a major factor driving higher labor cost over the last seven quarters, other community banks also saw rising labor expenses. As seen in figure 2, compensation expense per employee for banks less active in the PPP also saw a noticeable

⁶ Active PPP lenders are defined as banks with a ratio of PPP loans to assets greater than or equal to 10 percent in the second quarter of 2021.

shift up in trend from 2019.⁷ To isolate other drivers of rising labor costs distinct from PPP lending, we next focus on the sample of community banks less active in the program (those that held less than 10 percent of assets in PPP loans).

Wage Differential Between Urban and Rural Banks Widened

As shown in figure 3, which excludes banks that were active PPP lenders, compensation expense per employee at banks in urban areas rose 13.9 percent since the fourth quarter of 2019, compared with 10.9 percent for their rural peers.^{8 9} The compensation growth differential between urban and rural banks also widened considerably since 2019, from 0.9 percentage points on average between 2010 and 2019 to 3 percentage points. This widening suggests that conditions introduced during the pandemic accelerated the wage and benefit growth differential for urban banks in the most recent six quarters. Densely populated urban areas were more adversely affected by the pandemic, and as a result faced tighter labor market conditions.¹⁰ Although not distinctly related to PPP activity, banks in urban areas likely faced greater challenges in attracting and retaining workers for reasons related to the pandemic.

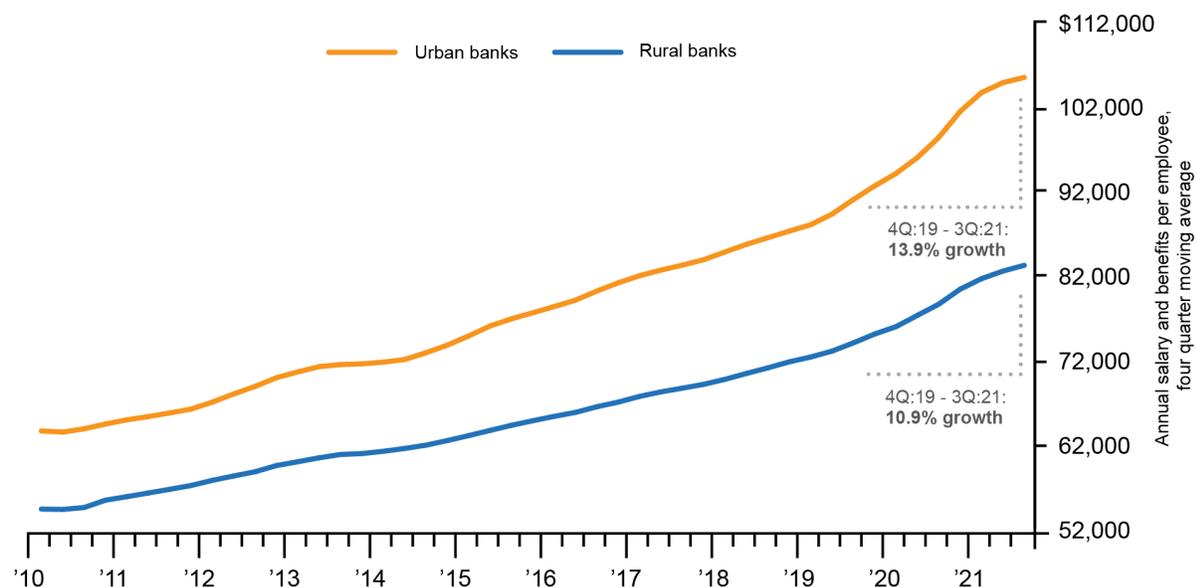
⁷ On an inflation-adjusted basis, salary expense per employee for banks less active in the PPP increased 8.0 percent in real terms from the fourth quarter of 2019 to the third quarter of 2021; average growth over a seven-quarter period from 2010 to 2019 was 3.0 percent.

⁸ Banks in urban areas are in metropolitan statistical areas (MSAs). According to the U.S. Census Bureau, an [MSA](#) has "at least one urbanized area of 50,000 or more population, plus adjacent territory that has a high degree of social and economic integration with the core as measured by commuting ties."

⁹ Labor cost growth for banks in urban areas was even higher for the sample of community banks that includes active PPP lenders; other OCC research has shown that banks headquartered in urban areas, with a greater need and demand for PPP lending, had higher origination volumes of these loans ("[PPP Lending Provides Boost to Metro Area Small Banks and Businesses](#)," OCC On Point, April 6, 2021).

¹⁰ "[The Geography of Pandemic Stress and PPP Lending](#)," OCC On Point, December 7, 2020.

Figure 3: Annual Salary and Employee Benefits per Employee by Bank Geography for Community Banks



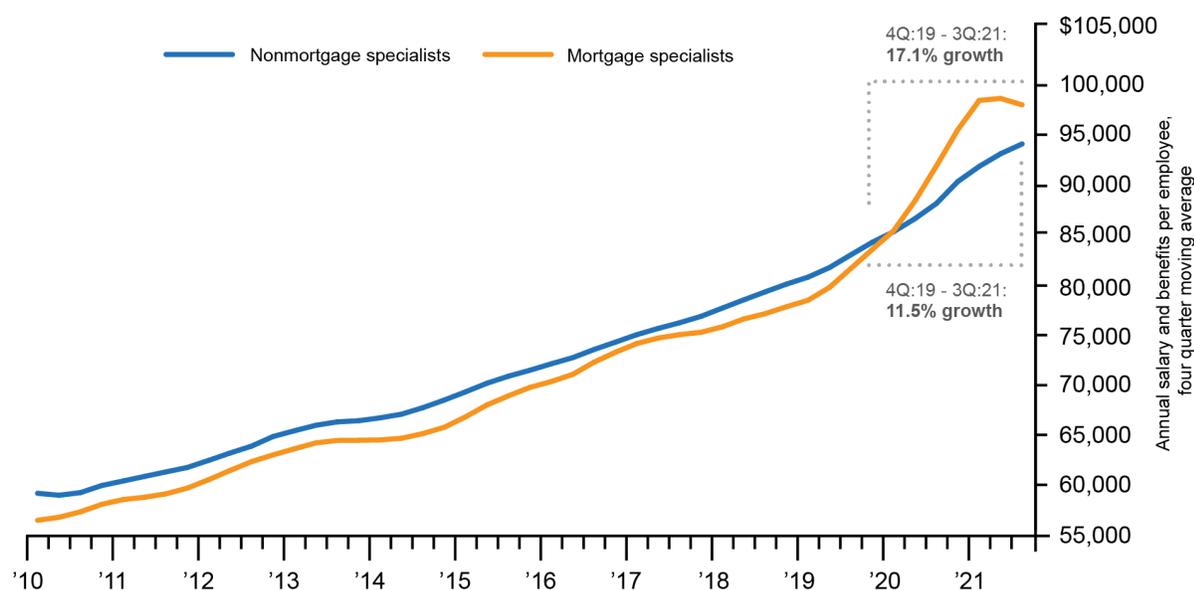
Sources: OCCIBIS, OCC E&PA calculations

Note: FDIC-insured commercial banks with assets less than \$5 billion and less than 10 percent of assets in PPP loans, excluding specialists such as credit card and trust banks. Urban banks (1,409 banks) are located in MSAs; rural banks (2,386 banks) are located in non-metro areas. Data are merger-adjusted for institutions in continuous operation from the first quarter of 2010 to the third quarter of 2021.

Residential Lending Activity Also Drove Higher Labor Costs

Among community banks that were less active PPP lenders, banks that were mortgage specialists also had higher labor costs since the fourth quarter of 2019. Figure 4, which excludes banks that were active PPP lenders, shows the growth in salary and benefit expense for these mortgage specialists in the second quarter of 2021. Compensation expense grew 17.1 percent for this group since the fourth quarter of 2019, more than 5 percentage points higher than other community banks that were not active PPP lenders. Since the onset of the pandemic, a convergence of factors such as low interest rates and a rise in remote work have fueled demand for both refinance and purchase mortgages. Similar to those banks that originated more PPP loans, banks actively involved in residential real estate lending needed to increase their workforce to meet loan demand.

Figure 4: Annual Salary and Employee Benefits per Employee by Mortgage Activity for Community Banks



Sources: OCCIBIS, OCC E&PA calculations

Note: FDIC-insured commercial banks with assets less than \$5 billion and less than 10 percent of assets in PPP loans, excluding specialty banks such as credit card and trust banks. Mortgage specialists are defined as banks holding more than a third of their assets in residential loans and mortgage-backed securities (722 banks). Non-mortgage specialists refer to other banks with assets less than \$5 billion, that were neither active PPP lenders nor mortgage specialists (3,062 banks). Data are merger-adjusted for banks in continuous operation from the first quarter of 2010 to the third quarter of 2021.

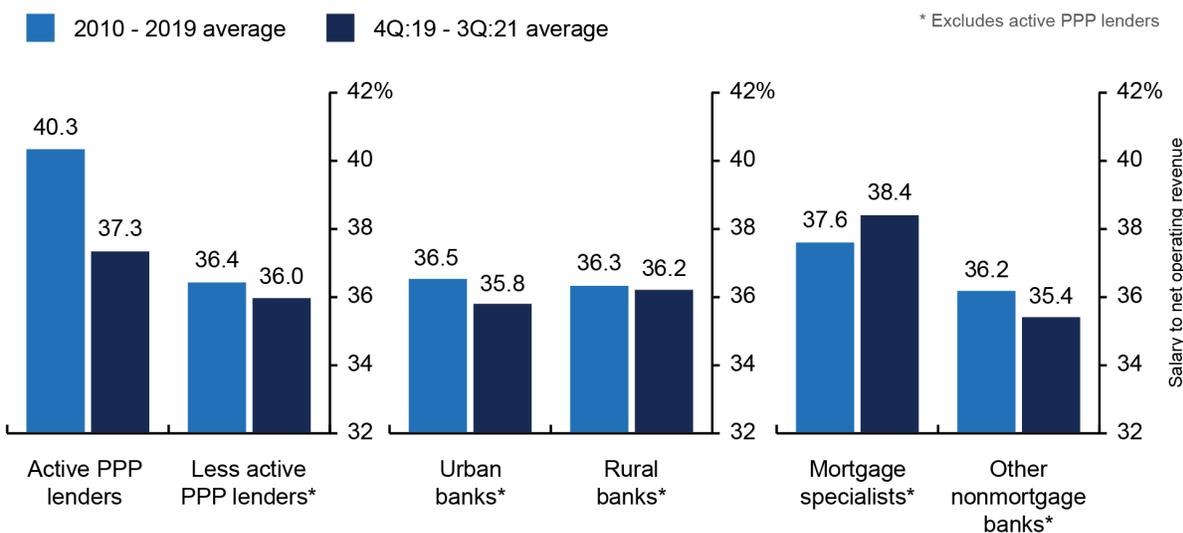
Some Banks Offset Higher Compensation Expense with Higher Revenue

While active PPP lenders, mortgage specialists, and banks in urban areas saw significant growth in salary and benefit expenses since the fourth quarter of 2019, they also saw greater revenue growth over this period relative to their peers.

For active PPP lenders, net operating revenue grew 49.7 percent from the first quarter of 2019 to the third quarter of 2021; for community banks less active in the PPP, it grew by only 18.5 percent.¹¹ As a result, the ratio of compensation expense to net operating revenue for active PPP lenders fell from an average rate of 40.3 from 2010 to 2019 to an average rate of 37.3 since the fourth quarter of 2019, as shown in Figure 5. For PPP activity, the revenue generated far outweighed the marginal labor costs to produce it. Since 2015, this ratio of compensation expense to net operating revenue had fluctuated near 40 percent; but beginning in the second quarter of 2020, the ratio began to decline, falling over 5 percentage points since the fourth quarter of 2019.

¹¹ Net operating revenue is the sum of net interest income and noninterest income.

Figure 5: Salaries and Benefits to Net Operating Revenue for Community Banks



Sources: OCC IBIS, OCC E&PA calculations

Note: FDIC-insured commercial banks with assets less than \$5 billion and less than 10 percent of assets in PPP loans, excluding specialists such as credit card and trust banks. Net operating revenue is the sum of net interest income and noninterest income. Data are merger-adjusted for banks in continuous operation from the first quarter of 2010 through the third quarter of 2021.

Banks operating in urban areas similarly saw improvement in the compensation cost to revenue measure; figure 5 shows that the average labor cost to net operating revenue fell 0.7 percentage point to 35.8 percent since the fourth quarter of 2019.¹² For PPP lenders, the recent improvement appears to be due to increased activity through the program. Yet banks in urban areas had lower compensation-to-revenue ratios compared with their rural peers before 2019. Since 2015, this ratio has been lower for urban banks, and both groups experienced a similar decline in the ratio since the fourth quarter of 2019.

Banks specialized in mortgage lending, by contrast, saw a slight rise in their average labor cost per dollar revenue since 2019 (0.8 percentage point).¹³ Those banks did, however, recognize substantial growth in net operating revenue since the end of 2019, 22.5 percent (compared with 17.6 percent for their community bank peers). Though the level of this ratio since the fourth quarter of 2019 is slightly above its average since 2010 (due mostly to 2020 trends), beginning in fourth quarter of 2020, as housing market activity picked up, the ratio began to improve and has fallen 2.4 percentage points since end of 2019, on par with the decline seen by other community banks.

The Point?

Industry-specific factors drove recent revenue gains and labor cost pressures at community banks; but if labor costs remain elevated, they could become more difficult to offset in a low-interest rate environment without new revenue lines.

¹² As before, the mortgage and urban/rural subsets exclude active PPP lenders, so this result is not due to the impact of PPP lending.

¹³ Among this group of mortgage specialists, nearly 40 percent are in urban areas.