

# ON POINT

ECONOMIC AND POLICY INSIGHT FROM THE OCC

## The Geography of Pandemic Stress and PPP Lending

In response to the COVID-19 pandemic, the federal government enacted the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), which provided significant fiscal stimulus to stem the economic distress arising from the shutdowns. The Paycheck Protection Program (PPP) was a key component of the stimulus. Under this program, employers with 500 or fewer employees<sup>1</sup> were able to obtain loans guaranteed by the Small Business Administration (SBA) to support their operations during the pandemic. If the loan proceeds were used for the wages and salaries of employees and other permitted expenses, the loan would be forgiven, thus creating an incentive for employers to maintain their payrolls despite the shutdowns.

Employers could apply for these loans through any existing SBA lender as well as through any federally insured financial institution. The program closed on August 8, 2020, and at that time, \$525 billion had been disbursed. Over 5,000 lenders participated in the program, with 36 percent of the funds lent by large institutions (with more than \$50 billion in assets), and 45 percent of the funds lent by small institutions (with less than \$10 billion in assets).<sup>2</sup>

Data from various sources demonstrate that financial institutions operating in the hardest hit local areas engaged in more PPP lending compared to peers elsewhere.<sup>3</sup>

### Concentrations of “High-risk” Sectors

Pandemic-induced local economic lockdowns affected all but the most essential businesses, causing unprecedented economic disruption, but the impact was not equal across economic

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<sup>1</sup> Under the CARES Act, there is an exception to the SBA affiliation rules for PPP loans made to business entities assigned a North American Industry Classification System (NAICS) code beginning with 72 (including hotels and restaurants). As a result, if each hotel or restaurant location owned by a parent business is a separate legal business entity, each hotel or restaurant location that employs not more than 500 employees is permitted to apply for a separate PPP loan provided it uses its unique Employer Identification Number (EIN).

<sup>2</sup> Source: U.S. Small Business Administration ([https://www.sba.gov/sites/default/files/2020-08/PPP\\_Report%20-%202020-08-10-508.pdf](https://www.sba.gov/sites/default/files/2020-08/PPP_Report%20-%202020-08-10-508.pdf))

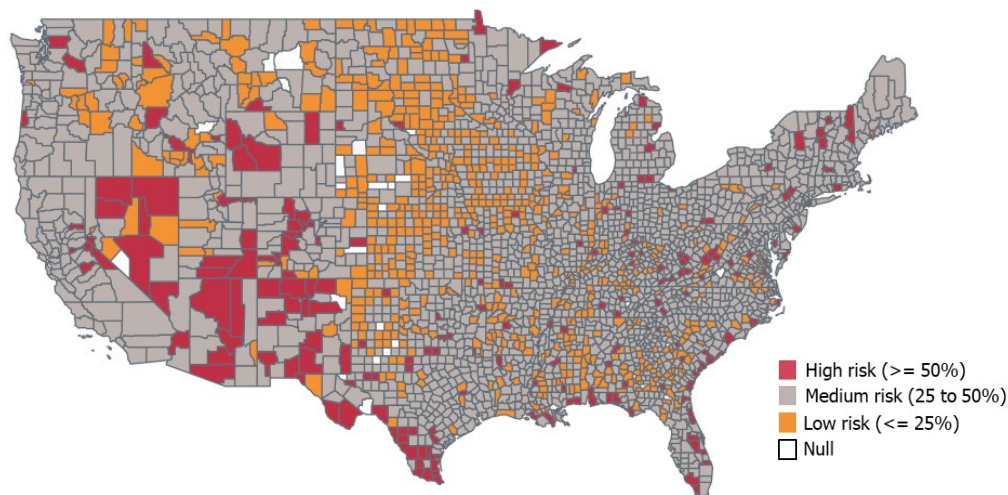
<sup>3</sup> The analysis presented here includes both rounds of PPP lending in total, but researchers have noted differences in lending patterns between the first and second rounds. See “Comparing Tranches 1 and 2 of the Paycheck Protection Program,” Economic Innovation Group, May 14, 2020, (<https://eig.org/news/comparing-tranches-1-and-2-of-the-ppp>)

sectors. “High-touch” industries,<sup>4</sup> particularly leisure and hospitality, transportation, and retail, which were directly affected by social distancing measures proved particularly vulnerable and experienced more stress than other industries in which remote work and other accommodations mitigated the adverse pandemic effects.

To evaluate the pandemic’s varied geographic impacts, the OCC Economics Department adapted a Bank for International Settlements (BIS) methodology that identifies high-risk industries using local labor market information.<sup>5</sup> In addition to high-touch industries, the BIS definition of high-risk industries includes energy-related sectors, because of the massive reduction in transportation fuel demand that resulted from the pandemic lockdowns and heightened fears about air travel. This list is further supplemented with industries that experienced severe job losses in April of 2020. In total, 25 three-digit North American Industry Classification System (NAICS) industries<sup>6</sup> were identified as high-risk. Counties are then considered high risk if at least 50 percent of their total employment is in these high-risk industries, and low risk if the share is no more than 25 percent of total employment in these industries. Figure 1 below illustrates the geographic distribution of counties of various risk levels.

As shown in figure 1, higher risk counties take a few forms. They include larger counties that have greater shares of leisure and hospitality; areas reliant on tourism and travel on the coasts and in other popular vacation spots; and energy-heavy areas in the Southwest.

**Figure 1: Employment in High-Risk Industries as Percent of Total Employment**



Source: County Business Patterns, 2018 United States Census, OCC Economic and Policy Analysis calculations

<sup>4</sup> High-touch industries are those that are most reliant on interpersonal customer interaction (as validated by data from Google trends). Refer to “Identifying regions at risk with Google Trends: the impact of Covid-19 on US Labour markets,” <https://www.bis.org/publ/bisbull08.htm>

<sup>5</sup> See “Identifying regions at risk with Google Trends: the impact of Covid-19 on US Labour markets,” <https://www.bis.org/publ/bisbull08.htm>

<sup>6</sup> The first two digits of a NAICS code designate the sector (e.g., Manufacturing), and the third indicates the subsector (e.g., Chemical Manufacturing).

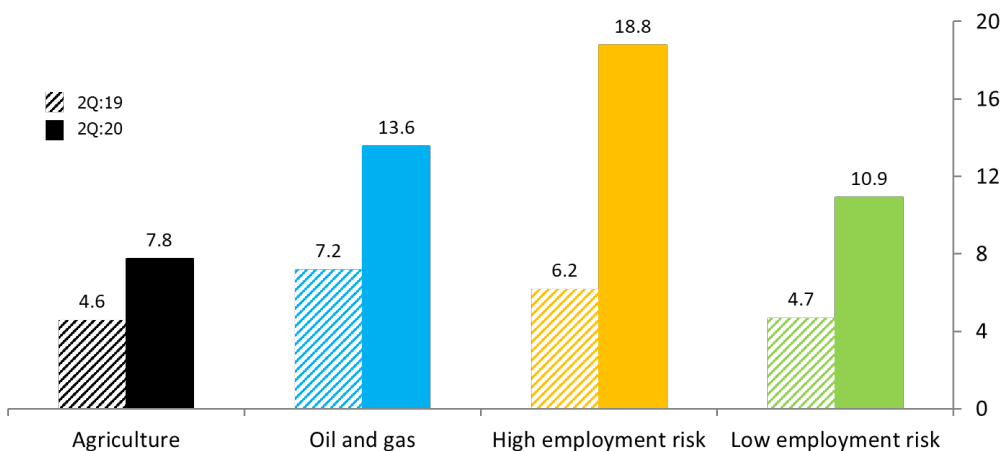
## Pandemic Geography’s link to PPP and Total Loan Growth

A study of smaller banks (with less than \$5 billion in assets) is instructive in evaluating how the demand for PPP loans and lending patterns overall were affected by the localized effects of the pandemic since their geographic operating footprint is expected to be most closely aligned with and influenced by local economic conditions. Figure 2 shows recent loan growth patterns at four types of banks, defined as follows:

- Agriculture: Banks with loan concentrations of at least 25 percent in agricultural real estate or agricultural production
- Oil and gas: Banks located in counties with at least 3.5 percent of total employment in oil and gas industries, representing the top 25 percent of counties with the highest concentration of employment in this industry<sup>7</sup>
- “High employment risk:” Banks located in high-risk counties, as defined above
- “Low employment risk:” Banks located in low-risk counties

As shown in figure 2, total lending increased across all types of banks, but especially at banks serving the high employment risk areas. The annual loan growth rate tripled for these banks, while at other types of banks, the increases in loan growth rate were noticeable, but not of the same magnitude.

**Figure 2: Year-Over-Year Loan Growth by Lender-Risk Type**



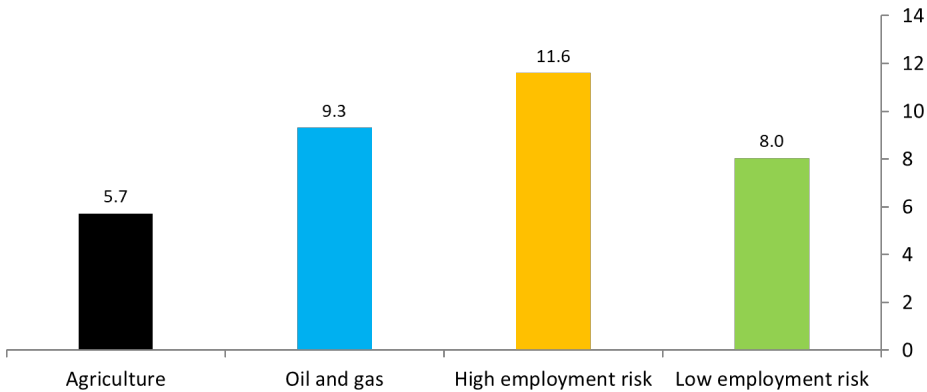
Sources: OCC Integrated Banking Information System, County Business Patterns, 2018 United States Census, OCC Economic and Policy Analysis calculations

To what extent did the PPP program contribute to these increases in small bank lending?

It turns out that the PPP program did indeed facilitate loan growth across all types of banks. Figure 3 shows that the share of PPP lending was the largest in banks serving the high employment risk areas, at nearly 12 percent of total loans. Banks serving areas with concentrations in oil and gas employment also had a substantial share of PPP lending.

<sup>7</sup> Note that in figure 2 and the subsequent discussion, banks headquartered in oil and gas reliant counties are grouped as “oil and gas,” but employment in these industries is still included in the criteria for subsequently identifying banks in high-risk counties.

**Figure 3: SBA PPP Share of Total Loans by Lender-Risk Type, Second Quarter of 2020**

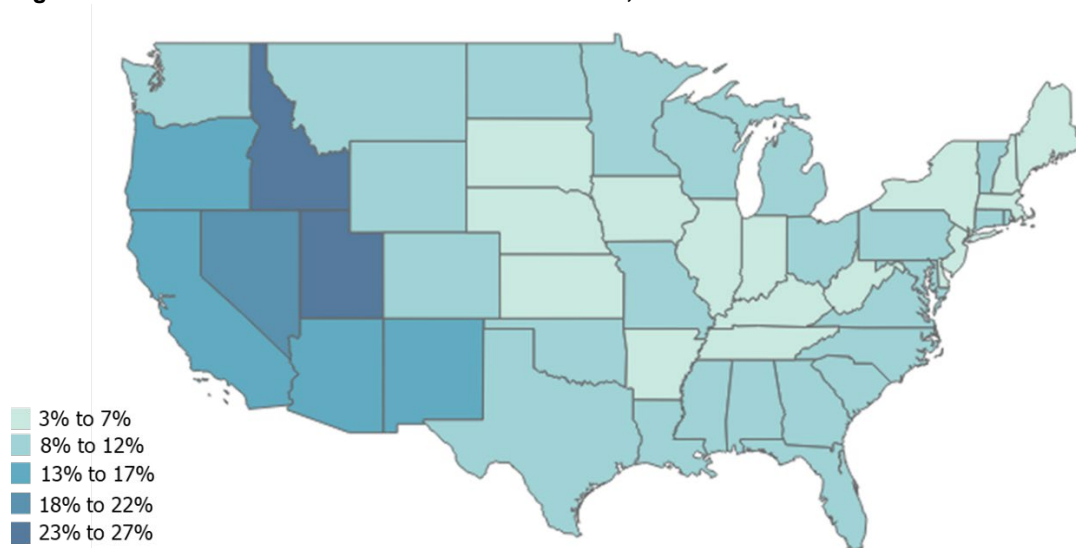


Sources: OCC Integrated Banking Information System, County Business Patterns, 2018 United States Census, OCC Economic and Policy Analysis calculations

In other words, not only did the banks serving the areas with the highest employment risk experience the greatest acceleration in total loan growth, but the share of PPP loans to total loans was the highest among these banks.

Geographic distribution of the PPP loans tells the same story. As shown in figure 4 below, banks with the highest shares of PPP lending are concentrated in roughly the same geographic areas (at a state level) as the areas with localized high employment risk, providing further evidence that PPP lending was most active in areas more adversely affected by the pandemic.

**Figure 4: SBA PPP Share of Total Loans in Each State, Second Quarter of 2020**



Source: OCC Integrated Banking Information System

## The Point?

The pandemic's effects stressed small business cash flows, particularly in areas with high employment risk, increasing their need to supplement cash flow by borrowing from local banks; the PPP program played a big role in meeting that demand.