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Hiring has become easier than it was early last year. Yet everywhere I go, from farms to factories to ballparks, I still hear that labor is in short supply. And the numbers back this up: In February 2020, 61.1 percent of the population was employed. Today, that number is down 0.9 percentage points — equivalent to nearly 2.3 million fewer workers.

If good workers remain hard to find, wages could rise further, pressuring margins and prices in turn. So it’s important to understand what’s happening in the labor market, and where it may go from here.

FROM LABOR ABUNDANCE TO SHORTAGE

The shrinkage in the number of employed workers relative to the country’s population has occurred at a time when economic activity has been expanding: Real GDP has increased more than 6 percent since before the pandemic. That gap helps explain why labor feels so short. It is.

Demographics play a role. Some decline in labor supply was predictable due to natural aging of the baby-boom generation. But the rest of the gap is almost entirely attributable to lower participation rates for those at or near retirement age, perhaps supported by stronger 401(k) plans or the desire to help with child care for grandkids.

Demographers have forecast this reduction in the workforce for a while. For decades, our economy operated with a growing labor force. We benefited from the baby boom, women more fully entering the workforce, increased educational attainment better preparing workers, improved health leading to longer careers, and historically high levels of immigration. All of that was supplemented by access to ever-growing pools of offshore, low-cost labor.

These tailwinds look like they are becoming headwinds. The growth of the working-age population is relatively straightforward to forecast, and the predictions aren’t good. Fertility rates are down. K-12 school enrollment is projected to decline by nearly 8 percent between 2019 and 2031. My generation is aging out of the workforce. Immigration policy looks unlikely to materially change soon. Offshoring has been complicated by increased awareness of the risk associated with dependence on foreign labor sources.

THE GREAT RESHUFFLING

But it’s more than the overall numbers that are discombobulating employers. It’s not just the level of supply but its distribution.

Over time, employers had become comfortable with where their jobs rated versus those offered by others. Think of it as a job hierarchy. They knew the level of investment in wages, benefits, and working conditions they needed to make to hire and retain workers in what was a relatively stable marketplace.

But the pandemic era seems to have reshuffled that hierarchy considerably, making the job market less predictable and leaving a number of employers scrambling. Three things happened during COVID-19. The first was a shift in relative compensation. Firms didn’t sit idly by as the pandemic created labor shortages. Growth sectors, like warehousing, filled their needs by offering high entry wages. Employers that found themselves short offered new perks or higher wages to convince workers to come. In leisure and hospitality, for example, wages have increased much faster than in the private sector overall. Segments that struggled to find the money to raise wages, such as state and local government, fell behind.

The second shift was that the COVID-19 experience made a number of jobs objectively less attractive. Whole sectors, like restaurants and theme parks, shut down for a time, sending a message that those sectors weren’t as secure as they had seemed. Supply chain challenges increased stress on those in manufacturing. And for some workers, like teachers, nurses, and child care providers who had historically earned points for the revered roles they hold in our society, the pandemic also crystallized that they face higher health risks, at least during a crisis.

Third, there was a shift in employee attitudes. The most obvious place is in a preference for remote work. Jobs that can provide days at home have rocketed up the hierarchy. But there seems to be an even broader change in employee willingness to trade off intangibles. My travels in the Fifth District drive this home. I talked to a coal company that in part can’t hire miners, despite high pay, because cell phones don’t work in the mine shaft. And I heard from a manufacturer in South Carolina that was losing workers to the Bojangles down the street.
the street. The pay gap between the two companies may have shrunk, yes. But the attrition seemed more linked to the ability to control work schedules and work in an indoor environment. Conditions taken in stride prior to the pandemic, such as last-minute overtime shifts or grueling physical labor, seem to require more of a premium now.

**HOW EMPLOYERS ARE REACTING**

Those employers caught short aren’t standing still.

Many are investing to increase the supply of labor. This is good for workers, good for growth, and good for reducing inflationary pressure. I hear of a number of efforts to bring in new workers off the sidelines, through training partnerships with community colleges, apprenticeships and internships, and investments to reduce barriers to work like transportation, child care, and access to housing. This investment in talent could be particularly important given the impact of the pandemic on the social and educational preparedness of those entering the workforce.

Others are investing to reduce demand for labor. You can see that clearly in hotels, where housekeeping is no longer always automatic every day, and many lounges are still closed. More fundamentally, wage and staffing pressure has made automation more economically compelling. McKinsey Global Institute estimates that automation, including AI, could replace tasks that account for about 30 percent of the hours worked in the United States by 2030. All else equal, these investments are also likely inflationary and increase capacity for growth. But, while the buzz around automation and AI is inescapable, most jobs won’t change overnight.

And, of course, we are seeing employers fight their way up the job hierarchy by adjusting wages, benefits, and the work environment. Some are doing so by improving working conditions, limiting overtime or last-minute scheduling, offering more flexible work arrangements, or installing air conditioning. But those who can afford to reprice are doing so, raising wages to remain competitive. After all, workers expect more now. The New York Fed’s Survey of Consumer Expectations suggests that the average reservation wage — the lowest wage someone would accept for a new job — has increased over 20 percent from its pre-pandemic level. This has been quite visible in recent labor negotiations between unions and parcel companies, airlines, and autos, but it’s true in nonunion environments, too.

It’s worth noting that these wage gains are unlikely to reverse. Simply put, nominal wages seldom decline — even in a recession. And in today’s environment of strong demand, employers who are losing out on workers eventually will raise their wages to match. We can expect the net effect to be inflationary, barring any adjustments to monetary policy.

**WHAT’S AHEAD?**

It is hard to know how this will balance out. Will labor supply come back even further as employers invest in training and retirees find themselves bored or squeezed? Will labor demand settle as automation rolls out or as the economy weakens? Will employees return to their pre-COVID-19 preferences? Or will employers bite the bullet and increase wages and then prices even further?

The range of potential outcomes, to me, is still pretty broad. That’s why I supported our decisions to hold rates steady at the last several Federal Open Market Committee meetings. We have time to see whether we’ve done enough. The path forward to me depends on whether we can convince ourselves inflationary pressures are behind us, or whether we see them persisting. I will be watching the labor market closely for those signals.

Tom Barkin
President and Chief Executive Officer

A longer version of this essay was delivered as an address to the Money Marketeers of New York University on Sept. 28, 2023.

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**OUR RELATED RESEARCH**

“How Domestic Outsourcing Affects the Labor Market,” *Economic Brief* No. 23-36, November 2023

“A Penny for Your Thoughts? How Survey Comments Help Us Understand Our Region’s Labor Market,” *Regional Matters*, October 19, 2023

“A Look at the Impact of the Work-From-Home Revolution,” *Economic Brief* No. 23-28, August 2023

The labor market has been historically tight the past two years, and although wage growth estimates are above pre-pandemic levels, many firms in the Richmond Fed business surveys are finding it difficult to hire and retain workers with the necessary skill sets. Since the beginning of the year, both manufacturing and service-sector firms said it has become more difficult to hire mid- and high-skilled workers. Service-sector firms reported the same level of difficulty as before in retaining workers, whereas manufacturing firms have had more difficulty retaining workers at all skill levels. Looking ahead, most firms plan to hire for both new and replacement positions.

In response to the COVID-19 pandemic, higher education institutions ranging from large research universities to small community colleges received nearly $80 billion — $7.2 billion in the Fifth District — via the HEERF. The funds were generally distributed based on the number of students affected by the shift to online learning and the percentage of impacted students who were Pell Grant recipients. Community colleges, which experienced large enrollment declines during the pandemic, were able to use the HEERF funds they received to offset revenue losses, among other needs like technology and classroom upgrades and campus improvements. Some community colleges also spent HEERF funds on programs and positions, but with HEERF funds expiring, there is uncertainty whether these recurring expenditures can continue.

Sierra Latham. “From Good Bones to Healthy Homes: Housing Quality in the Rural Fifth District.”
Housing quality can affect residents’ well-being if left unaddressed, and housing repairs can be quite costly. Compared to higher-income households, low-to-moderate income households, which comprise 45 percent of rural Fifth District households, are more likely to live in manufactured homes that need repairs. Renters, who make up 26 percent of rural Fifth District households, are more likely to need a home repair, and landlords don’t always fulfill their obligation to carry out those repairs. Additionally, about 30 percent of rural Fifth District households live in homes built before 1970, which places these households at greater risk for repair needs.

Laura Dawson Ullrich and Matthew Wells. “Creating a STEM Employment Pipeline in Eastern North Carolina Schools.”
Rural areas of eastern North Carolina are facing population and demographic challenges. NC East Alliance, an economic organization representing 29 counties, is working with school districts and community colleges to develop and maintain the region’s workforce, both with existing employers and hoped-for future employers in STEM industries. One such program is “Industry in Schools,” which informs students of jobs in these industries and provides education pathways for these jobs. The strategy also includes the Teacher Leadership Institutes: two-day workshops with tracks for different STEM industries that give teachers more information and opportunities to develop partnerships to bring new technology into the classroom. Several school districts recently attended these pilot programs, which highlighted tracks in health science, smart agriculture, and aviation science. While the three recent pilot programs were successful, additional funding and government support would be necessary to implement such strategies on a larger scale.

Each month, the Richmond Fed business surveys highlight local business conditions, and participants’ comments are often particularly useful. For example, before the COVID-19 pandemic, a majority of Fifth District firms said it was a challenge to find workers with the right skills; that challenge persists today but to a lesser degree. A survey of human resources professionals recently complemented the Richmond Fed surveys of area businesses and found that businesses in the Richmond area have both raised wages and intensified recruitment (for example, through referrals, commercial job boards, and social media). The survey also asked about remote work and concluded that while some candidates wanted more remote days, it was not a primary recruitment challenge for most respondents. EF
Reserve Bank Boards of Directors

Directors are a key link between the Federal Reserve System and the communities it serves

The boards of directors of the 12 Federal Reserve Banks are not typical boards. To be sure, they carry out many of the usual responsibilities of corporate governance, such as approving a strategic plan and monitoring operations, auditing and risk, human resources, executive compensation, and the like. But unlike private sector boards that are primarily concerned with firms’ financial health and growth projections, Fed directors are also charged with a much broader task that makes them not just unique among institutional boards, but within American society at large: assisting in the formulation of monetary policy.

The Fed conducts its monetary policy with two legislatively mandated objectives in mind: price stability and maximum employment. To achieve these goals, it relies not only on the expertise of economists and banking and finance professionals, but also on the input and shared experiences of the institutions and communities across the country that experience the economy in real time. The Reserve Bank boards are one of the primary sources of such data points, as directors represent a wide range of interests, each of whom sees the economy in different ways. From executives at Fortune 500 companies such as IBM to leaders of organizations like the Paso del Norte Community Foundation, which works to expand and coordinate philanthropy in communities in and around El Paso, Texas, all are given equal voice, providing crucial information to Reserve Bank presidents as they grapple with how to best pursue the Fed’s mandated goals.

Who can serve as directors and the kinds of interests represented on the Reserve Bank boards have both changed over time, however, as has the model through which directors contribute to policymaking. This evolution has not been without controversy and has led to real changes in Reserve Bank operations and practices.

THE BOARDS’ CREATION AND EVOLUTION

The Federal Reserve framework established by Congress in 1913 was the country’s third effort to create a central bank system, following attempts in 1791 and 1816. (See “Jekyll Island: Where the Fed Began,” Econ Focus, First Quarter 2015.) The first two efforts were plagued by tensions over their constitutionality, as well as passionate disagreements about whether a national bank would benefit urban and moneymaking interests in the northeast at the expense of citizens in more rural and poorer areas of the expanding country. (See “The Bank War,” Econ Focus, Second Quarter 2023.) Political leaders exploring what a third effort might look like were also split over whether the banking system should be administered by the federal government in Washington or devolved to the states and regions.

The Federal Reserve Act of 1913 sought a middle path, accommodating the desires and concerns of both groups. In A History of the Federal Reserve, economist Allan Meltzer noted that, while there would be a central governing board in Washington, the system’s architects also set up a network of 12 regional or district-level banks that would “function cooperatively but independently... to achieve the advantages of central banking without acquiring the monopoly powers of a single central bank.” In truth, however, the regional banks carried more power than the board in Washington, as they were tasked with ensuring monetary stability within their districts, which meant that they established their own lending rates to banks within their jurisdictions. They also held their own gold reserves, which backed the paper dollar.

Each of the 12 regional banks was managed by a nine-member board of directors, which, in the words of one of the act’s primary authors, would be “thoroughly representative of the various interests and districts of the country” and capable of dealing with “broad questions of policy affecting the whole country.” The nine directors came from three classes: Class A directors were all bankers elected by member banks to provide expertise and represent banking interests; Class B directors were also elected by member banks but represented community and commercial interests; and those in Class C were chosen by the Fed Board in Washington for their ability to manage large corporations and were intended to represent the general public. Serving staggered three-year terms, all nine directors had a vote in appointing their Reserve Bank’s CEO, then known as a governor and now called a president.

This original structure has evolved over time. The Reserve Banks’ ability to carry out their own monetary policies independent of the others proved problematic, as a lack of coordinated policy at the federal level may have accelerated the onset of the Great Depression. The fact that some Reserve Banks were more accommodative and willing to lend than others also created varying economic outcomes among regions. These problems led to the Banking Act of 1935, which turned monetary policy over to the modern Federal Open Market Committee (FOMC) structure.
still in place today. The Board of Governors’ powers also increased, as it was given the authority to veto Reserve Bank presidential appointments and appoint each board of directors’ chair and deputy chair, who came from Class C representatives.

More reforms came in 1977 with the Federal Reserve Reform Act, broadening the scope of what “representation” on the boards would look like. The 1913 Federal Reserve Act stated that Class B and C directors had to come from specific sectors of the economy, namely agriculture, commerce, or industry, but this requirement was amended to include the possibility that these directors could come from the services sector or organized labor, or could be representatives of consumers. These rule changes have had visible effects: The percentage of Reserve Bank board members across the country with formal banking affiliations dropped from 52 percent in 1920 to 36 percent in 2015, with directors from academia, nonprofits, medicine, and the service sectors largely filling those positions.

The 1977 reform legislation also stated that all directors would be appointed “without discrimination on the basis of race, creed, color, sex, or national origin.” This change occurred alongside the appointment of the first five women directors throughout the Federal Reserve System that same year, and by 2017, 31.5 percent of Reserve Bank directors nationwide were women. The Dodd-Frank reforms of 2010 also directed the banks of the Federal Reserve System to establish an Office of Minority and Women Inclusion, and as of January 2023, 43 percent of Reserve Bank board positions were held by women. The percentage of positions held by minorities also increased since 2017, rising from 30 to 42 percent. (See charts.)

**A UNIQUE BOARD MEETING AGENDA**

The nine-member Richmond Fed board meets in the 23rd floor boardroom of its headquarters overlooking the James River in Richmond — or sometimes virtually — eight times a year, typically in the week preceding the FOMC meetings in Washington. Similar meetings take place regularly across the country at the Fed’s regional Reserve Banks, as well as at their respective branch offices, although there is no set schedule that all of them must follow. The FOMC conducts monetary policy by setting a target range for the federal funds rate, which is the interest rate that banks charge when they lend money to other financial institutions. The behavior of this overnight interest rate is an important factor for the entire term structure of interest rates like those for home and business loans. Each Reserve Bank president participates in FOMC meetings every eight weeks, and they come equipped with data from a wide range
of sources, including economic intelligence gathered from the directors on their boards.

“As keen observers of local economies, the directors… contribute vitally to the formulation of monetary policy by offering important insights absent, by definition, from even the most careful analysis of aggregate data,” noted Alan Greenspan, then-chair of the Federal Reserve Board of Governors, in a December 2000 speech. “Most importantly, this singular system of broad and diverse representation, nurtured by close contacts at the regional and local levels, fosters a long-term perspective and a continuity.”

The Reserve Banks set their own meeting schedules and they all run a bit differently, although they end up in the same place: a rich roundtable discussion of the various dimensions of the economy at both the district and national levels. Jodie McLean is the CEO of EDENS, one of the country’s leading retail and mixed-use real estate companies, and she chairs the Richmond Fed board. In her preparations for board meetings, she focuses on providing Richmond Fed President Tom Barkin with new information that might not have shown up yet in the quantitative data the Fed has collected, just as Greenspan envisioned. To get those insights, she stays in constant communication with national and local retailers and restauranteurs to understand what they are seeing in terms of customer traffic, sales trends, and more. Noting that consumers make up 65 to 70 percent of GDP, she will ask restaurant owners not just if customers are still eating out, but what, if any, changes they’re making in their dining choices. “If consumers are still coming to restaurants, are they still ordering appetizers or desserts? If not,” she suggests, “this can be a real canary in the coal mine,” signaling that diners might still be willing to spend but not as much as before.

McLean also makes a point to speak with other commercial real estate sectors, including office and multifamily residential property owners, construction firms, and architectural firms. While primarily anecdotal, such data points inform Barkin’s discussions with the other Reserve Bank presidents and Federal Reserve governors on the FOMC as they deliberate on where to set the federal funds rate.

In Richmond, these discussions are usually preceded by a presentation of national economic conditions given to the members by an economist from the research department, which also provides a set of questions to each board member in advance of their meetings to address a specific dimension of the economy in their sector, whether prices, wages, or prospects for the coming year.

The same is true at the Cleveland Fed. Toby Trocchio is the corporate secretary in Cleveland, where he acts as the primary liaison between the board and the Bank’s executive leadership — that is, the president and the first vice president, Fed-speak for chief operating officer. He notes while these questions are helpful, “our directors always know that we want them to also bring their own economic intelligence from their own company and industry, even if we aren’t asking that particular question.” And like McLean who captures a wider picture beyond just real estate, Trocchio says that in Cleveland, “we’ll see a combination of company or local, right up through national and even global perspectives.”

The board meetings’ agendas also include a discussion of the discount rate, another key element of monetary policy. Known as the discount window, banks and other financial institutions in need of cash can access credit directly from the Fed when they need to manage their liquidity risks and ensure that they are able to provide credit to businesses and households. Under the decentralized system prior to the Great Depression, each Reserve Bank set its own interest rate — the discount rate — for these transactions, but responsibility for setting the rate moved to the Board of Governors in Washington at the same time the FOMC powers were established in 1935. But each Reserve Bank still votes on a recommendation every two weeks, either at a full meeting or during a separate conference call or electronic vote, and submits that recommendation to the Board of Governors.

These conversations in Richmond can be quite lively. Barkin will offer his perspective on the economy and a recommendation for the discount rate and then open the floor to discussion. “The directors don’t always agree with him,” says Jessie Romero, who is Trocchio’s counterpart in Richmond, adding that they may suggest an alternative rate if their information and experience suggests a different direction may be more appropriate. “He likes having his views challenged.”

“The data we look at during board meetings is typically just national averages. Those data mask a lot of instability, particularly for those living in poverty,” says Lisa Hamilton, the deputy chair in Richmond. Hamilton currently serves as the president and chief executive officer of the Annie E. Casey Foundation, a Baltimore-based philanthropy devoted to making sure that all children and youth in the United States have a bright future. Because she represents members of the community who historically have been left out of larger economic policy decisions, she believes she needs to bring that critical perspective to the conversation. “The impacts of different policies don’t fall equally on everybody. And if there are a lot of people who are low income and can’t participate in the economy, we don’t have the economy we want.”

Romero notes that Barkin really appreciates and values hearing a wide range of viewpoints. Similarly, Cleveland Fed President Loretta Mester “consistently makes an effort to ensure that the directors are aware of how much she values their contributions,” adds Trocchio. “She knows the directors put in a lot of time and do a lot of research leading up to the
meeting, so she always conveys sincere appreciation for those efforts.”

The Richmond Fed has branch offices in Charlotte and Baltimore, which also have their own boards made up of business and community leaders in those areas. The branch boards typically meet the week before the Richmond board and are another key input into the policymaking process. “Our branch directors are incredibly connected to their communities and regional economies, and they provide us with really valuable insights into economic conditions on the ground,” says Romero. Most of the other Reserve Banks also have regional offices managed by their own boards who make similar contributions.

SELECTING A BANK PRESIDENT … AND A WHOLE LOT MORE

While directors are connecting the communities and their districts to the FOMC’s work in managing the economy, many of them also have another important responsibility: selecting Reserve Bank presidents. Under the original framework enacted in 1913, all nine directors, regardless of their class designation, had a vote when it came to choosing a new president. Reserve Bank presidents are appointed to five-year terms, and they are limited to two terms if they are appointed after age 55. The Dodd-Frank reforms of 2010, however, forbid Class A directors — those from the banking industry — and any Class B directors affiliated with thrift holding companies from participating in the appointment process due to the potential for conflicts of interest from bankers who are subject to the federal bank supervision process that is run by the Reserve Banks. In other words, they cannot play a role in selecting the individuals who manage the supervision of their banking activities. (Also, these same directors are not allowed to vote on any supervision-related matters, such as approving the department’s budget or reviewing audit reports. And no director has access to any confidential supervisory information.)

The appointment process usually begins with the formation of a search committee made up of Class C and eligible Class B directors who may hire an outside search firm to assist in putting together a large pool of diverse and qualified candidates. (See “The Reserve Bank Presidential Search,” Econ Focus, Third Quarter 2022.) The directors will usually consult with the Board of Governors to establish the qualities that the Bank and the Fed as a whole are looking for in a new president. These qualities can vary across Reserve Banks and over time, depending on economic conditions or other factors. Transparency and public input are also hallmarks of the appointment process: When boards begin the search process, a website is usually set up that lets the public know the job profile and allows the public to stay informed as the process unfolds. The search committee will interview a range of candidates, and finalists are also interviewed by the Board of Governors. At the conclusion of the process, the Class B and C directors vote on a candidate who must then be approved by the Board of Governors.

Who these directors ultimately select as Reserve Bank presidents matters a great deal when it comes to policy. In the Federal Reserve’s first several decades, boards generally favored bankers for the position, but that began to shift in the 1960s, when board increasingly appointed Ph.D. economists. By 1980, eight of the 12 Reserve Bank presidents were Ph.D. economists, and that ratio remains similar today. A 2014 study by the St. Louis Fed argued that boards tend to select policymakers who favor monetary or price stability above other policy goals when making decisions on the FOMC. Specifically, they found presidents were significantly more likely to dissent in favor of tighter, less inflationary policy, while governors were more likely to dissent in favor of looser, more inflationary policy.

The Fed is tasked by Congress with the dual mandate to pursue price stability and maximum employment. The Reserve Banks’ boards of directors play a key role in that effort, ensuring that the Banks are operationally and financially sound and that their strategic objectives contribute to achieving the mandate. They also represent their communities and industries in the development of monetary policy. “We’re thinking big and thinking about the whole country. We’re thinking about policies that are going to affect people’s businesses and personal livelihood,” says Hamilton. “I can’t think of a better way to utilize the perspective and insight I have than to help our country make better decisions that can help everyone thrive.” McLean echoes this sentiment. “We have to listen and understand all points of view. It won’t work otherwise,” she says. “I’m so grateful for that exposure and how it changes my own way of thinking around what is best for this entire country.” EF

READINGS


For consumers, the prices of goods and services may seem to emerge from a black box. But behind those prices are complex judgments that firms are making about demand and about the competition, often based on limited information. Pricing decisions may also reflect uncertain assessments of the future costs of inputs. On top of that are seemingly irrational factors, like consumers’ common preference for prices ending in a “9,” perceiving $29.99 as markedly more appealing than $30.

While price-setting is challenging even in normal times, shocks during the past few years, such as the pandemic and inflation, have made it harder. How did these changes affect price-setting? And are these changes defining a new normal, or are firms trending back to their old ways?

ECON 101 MEETS REALITY

Many people have their first exposure to the process of price-setting through an introductory economics class in college. There, price-setting is commonly taught in the context of “perfect competition,” a world in which the process is almost mechanical: Price equals marginal cost, that is, the cost to make an additional unit.

But the world in which most firms operate is far different. For example, in perfect competition, numerous firms are selling identical products, so no individual firm is able to influence the market price. They are, in that sense, “price takers.” While these assumptions may hold true in some markets, such as those for agricultural products, a firm’s price-setting environment is often one in which it can influence prices. The market may be an oligopolistic one. The firm’s product may be differentiated from other firms’ offerings — whether in reality or simply in the perceptions of consumers, giving the firm some pricing power.

Moreover, the textbook model of perfect competition assumes that everyone in the market has complete information — about costs, competitors’ prices, and customer demand, among other things. In reality, a firm may face many unknowns. Prominent among these: Predicting how customers’ demand would change with different prices (known as price elasticity of demand) may require estimation and conjecture. The quest for information seems to be important in price-setting. University of Maryland economist Luminita Stevens found in a 2020 article in the Review of Economic Studies that a firm’s choice of how much price-related information to acquire is itself a major factor in how it sets prices in response to shocks.

In practice, firms often look backward to gauge price-elasticity — a flawed approach, says Ellen Kan, a pricing and market strategy partner with the consulting firm Simon-Kucher.

“The most common scenario is that you see firms asking themselves, ‘What happened in the past when we’ve changed prices?’” Kan says. “The issue with that is, obviously, you can only analyze the past to the extent that it covers ground of what has already been done before. A backward look is always going to be an extrapolation that may not necessarily hold true.”

More sophisticated firms, she says, supplement the lessons of history with quantitative surveys and — especially in online environments — by testing different prices in the shopping process.

Another assumption of perfect competition is that firms can adjust their prices quickly and at no cost in response to changes in conditions. In reality, prices are often “sticky”; that is, price changes may cost money to carry out — whether, for instance, from the cost of printing new restaurant menus or replacing price signage on supermarket shelves. Such costs, known by economists as “menu costs,” may in turn affect the frequency with which a firm changes its prices. Prices may also be rendered sticky by fixed-price contracts. (Price stickiness also has implications for monetary policy: Under most macroeconomic models, in the absence of sticky prices, changes in monetary policy affect only nominal values, such as nominal price levels and nominal interest rates, without affecting real economic activity.)

Moreover, the effect of a price increase on a firm’s demand may be magnified by the fact that it may drive some customers away entirely. In a 2019 article in the International Economic Review, economists found evidence of this phenomenon, and they also noted that the effect was more pronounced for products with higher price elasticities.

How the Pandemic Era Changed Price-Setting

After years of facing resistance to price increases, firms found consumers learning to accept them — unhappily

BY DAVID A. PRICE, TIM SABLIK, AND MATTHEW WELLS
Review, Richmond Fed economist Nicholas Trachter, together with Luigi Paciello and Andrea Pozzi of the Einaudi Institute for Economics and Finance, looked at this question using data from a major U.S. supermarket chain and found that firms often refrain from fully passing through cost increases for this reason; they suggested that according to theory, the most productive firms have the greatest ability to pass through cost increases.

The cumulative effect of these complexities is that firms generally don’t make price changes mechanically in response to changes in their costs. They must proceed under uncertainty about elasticity of demand and about their competitors’ marginal costs—or even their own. They may engage in price discrimination—finding tactics for charging more to customers with a higher willingness to pay—or other pricing strategies. They may engage in strategic product differentiation, as in the case of a carmaker that charges disproportionately more for a trim level that is only modestly costlier to produce. They must weigh the possible benefits of frequent price changes against their menu costs—and the possible effects of price changes that cause customers to search for new suppliers.

And in March 2020, a pandemic added a new level of complexity to the process.

**PRICING IN THE PANDEMIC**

The COVID-19 pandemic and its aftermath presented a challenging price-setting environment for firms. Supply shocks from disruptions to global trade raised the cost of key inputs, such as semiconductors. (See “Supply Chain Disruptions, Inflation, and the Fed,” *Econ Focus*, Third Quarter 2022.) Consumer demand swung wildly. In the beginning of the pandemic when many in-person activities were suspended, households shifted spending (boosted by fiscal stimulus) from services to durable goods. Once the economy reopened, demand for services took off as households unleashed “revenge spending” on all the travel, dining out, and entertainment they had missed during lockdown. And inflation, which had been so low for years that it rarely factored into most businesses’ pricing decisions, surged to levels not seen in four decades.

How did firms respond to these developments? Hugh Montag, an economist at the Bureau of Labor Statistics (BLS), and Daniel Villar, a senior economist at the Fed Board of Governors, examined this question in a recent *FEDS Notes* article. They used data from the BLS’ CPI Commodities and Services Pricing Survey, which collects prices on roughly 94,000 products and services each month. Montag and Villar found that as inflation started rising in 2021, firms began updating their prices more often. By the first part of 2022, firms were changing prices about twice as often as they had before the start of the pandemic. Unsurprisingly, most of those changes were price increases.

“Firms were decreasing their prices about as often as they were before the pandemic, but they began increasing their prices a lot more frequently,” says Montag.

At the same time, the absolute size of price changes during this period remained relatively stable. One of the potential costs of higher inflation if firms adjust prices infrequently is that prices drift further from their optimal level, leading to a less efficient allocation of resources through the price system. A sign of this inefficient price dispersion would be an increase in the absolute size of price changes, meaning firms change prices by larger amounts when updating in order to return to optimal levels. Montag and Villar’s findings suggest that the inflation of recent years did not lead to more inefficient price dispersion, which is consistent with the findings of a 2018 article in the *Quarterly Journal of Economics* that examined price dispersion during the Great Inflation of the 1970s and 1980s.

Surveys support Montag and Villar’s findings that firms updated prices more frequently during the runup of pandemic-era inflation. The Richmond Fed surveys manufacturing and service-sector firms in the Fifth District every month about business conditions, including changes in their prices.
Before the pandemic, a little more than two-thirds of businesses said they changed their prices annually or less frequently. In 2022, the share of firms that changed prices twice a year nearly doubled and the share adjusting prices quarterly nearly tripled compared to pre-pandemic behavior. (See chart on previous page.)

During the years leading up to the pandemic, it was “very tricky to get a price increase across,” says Kan. “A lot of consumer goods manufacturers, for example, were getting pressure from large retailers not to move their prices.” But once costs started rising in the pandemic, some large firms succeeded in raising prices without driving customers away — inspiring other firms, Kan says. “It created a follow-on effect where others decided, ‘Wait, they’re doing it, so we probably can, too.’ That definitely was a shift. It almost made pricing an easier decision in some ways.”

Did some firms increase prices beyond their costs, taking advantage of the environment to increase their profits? This is a much harder question to answer. Markups — the difference between the prices charged for goods or services and their marginal costs — are hard to measure, and the results depend heavily on the assumptions researchers make. In a 2022 working paper, Mike Konczal and Niko Lusiani of the Roosevelt Institute, a progressive think tank, reported that corporate profits and markups soared in 2021 to their highest levels since the 1950s. They also found that larger firms with more market power before the pandemic were more likely to increase markups during the pandemic.

But other researchers have reached different conclusions. Berardino Palazzo, a principal economist at the Fed Board of Governors, argued in a recent FEDS Notes article that much of the growth in profit margins can be explained by the large fiscal and monetary stimulus enacted in response to the pandemic, rather than by price increases. Businesses, particularly small businesses, were the recipients of several subsidies in 2020 and 2021, significantly reducing their costs and boosting profits. At the same time, the Fed pushed interest rates to near zero, decreasing interest expenses for corporate borrowers.

“Corporate profit margins were not abnormally high in the aftermath of the COVID-19 pandemic, once fiscal and monetary interventions are accounted for,” Palazzo concluded.

HAS THE PRICING FEVER BROKEN?

When inflation is low and stable, it is likely to be only a minor factor among the many factors firms might consider when
setting prices, along with strength of demand, wages and labor costs, competitors’ prices, and maintaining steady profit margins. And given that inflation remained stable and averaged around 2 percent since the mid-1990s, it might be reasonable to assume that it had little bearing on prices for decades.

Is it possible that the U.S. economy will get back to an environment where businesses can make pricing decisions without considering inflation to the extent they have been in recent years? The answer, in part, depends on those firms’ expectations about the future path of inflation. If they believe that it will slow and return to normal levels, businesses may no longer need to account for it in their pricing decisions, allowing them to focus their attention on the factors most immediate to them.

Indeed, economists Bartosz Maćkowiak of the European Central Bank and Mirko Wiederholt of Northwestern University argued in a 2009 American Economic Review article that when conditions that are unique to the firm are more variable or important than aggregate conditions — inflation, for example — pricing behavior will be based more on the idiosyncratic, firm-specific factors that firms can more readily observe.

This idea highlights a crucial relevant dimension of the Fed’s ongoing commitment to return to its 2 percent inflation target: It signals to businesses that they can expect reduced inflation over time, weakening the aggregate upward pressure on prices.

Recent survey research suggests that businesses are responding, adjusting their inflation expectations downward for the longer term. The Richmond Fed’s monthly business survey found that as far back as October 2022 — seven months after the Fed began raising interest rates to curb inflation — they expected average inflation over a horizon of five years to be lower than what they expected in the coming 12 months. Also, recent waves of the survey have shown that firms that followed inflation closely as it rose are now paying less attention to it as it comes down.

Expectations of price growth — the percentage increase in prices that businesses receive from customers for goods and services — are also declining from their peak levels of 2021 and 2022. (See upper chart.) The most recent Richmond Fed survey fielded between late September and mid-October 2023 reports that within the Fifth District, average yearly price growth expectations in the manufacturing sector have fallen back to pre-pandemic levels. Expectations in the services sector have also dropped off but still remain elevated, perhaps due to lingering pent-up demand. The survey further showed that actual price growth is slowing in much the same fashion, with manufacturing price growth returning to pre-pandemic levels and with growth in services pricing dropping but remaining elevated. (See lower chart.)

Firms, however, are still reporting elevated costs. InUnison, a retailers’ association in Richmond, fielded a small survey of local businesses in October: Around 82 percent of respondents reported increased costs of goods over the past three months, while nearly 77 percent stated that their general business expenses had increased over that period. Despite these increases, less than half — around 47 percent — of firms surveyed indicated that they had raised prices during that time. More broadly, a June 2023 report by the Atlanta Fed, the Cleveland Fed, and the New York Fed showed that between December 2022 and January 2023, firms passed on about 60 percent of their increased costs, absorbing the remaining 40 percent.

This reluctance to continue raising prices is echoed in the conversations Richmond Fed leaders are having throughout the Fifth District. Matthew Martin is the Bank’s regional executive for the Carolinas, and based on his conversations with firm leaders, he suggests, “Price growth is still higher than it was before the COVID pandemic, but we’re past this era where firms are able to put through big price increases.”

His counterpart in Maryland, Andy Bauer, has had similar discussions, although he notes that “firms are raising prices in order to restore margins or in some cases, they are still managing cost increases.” Still, Bauer observes that “in many cases, cost pressures have settled and firms are holding steady on prices and are reluctant to consider price declines even when input costs moderate.”

Consumer spending has remained elevated, but personal consumption expenditures may be slowing, as businesses are reporting that more customers are complaining about price increases, delaying purchases, and looking at receipts — all signs of their increasing sensitivity to prices.

In such an environment, deciding whether to raise prices to recover lost margins, manage costs, or create a cushion in the face of future uncertainty can be difficult, if not agonizing, for businesses that must balance those needs with the need to maintain a customer base.

“Managing pricing is really hard,” lamented one Richmond retailer interviewed by InUnison. “When we raise prices, we’re raising prices on our neighbors.” EF

READINGS


Assessing Unemployment Insurance


Unemployment insurance (UI) programs assist unemployed workers but can also reduce their incentive to search for a new job. This trade-off has led to multiple studies about whether the benefits of UI programs outweigh the costs. Most microeconomic analyses of these programs have determined that these programs do benefit society. In contrast, many macroeconomic analyses disagree, noting that unemployment benefits often tend to reduce production, reduce private savings, and increase prices. Recent research by Richmond Fed economist Nicholas Trachter, along with Facundo Piguillem of the Einaudi Institute for Economics and Finance and Hernán Ruffo of Universidad Torcuato Di Tella, attempts to reconcile these views by incorporating sources of wealth inequality into their model.

The authors noted that it is often difficult to match real-world wealth distributions in macroeconomic models. To combat this, they used a life-cycle model to track workers and their earnings over their careers. In their model, workers accumulate assets and human capital as they work, then receive UI for a specified amount of time if they become unemployed. While workers are unemployed, they actively search for a job, incurring some cost. At the end of their careers, the workers retire and receive a pension from the government.

This model contains numerous mechanisms that make evaluating the efficacy of welfare programs much easier. First, younger workers are typically not able to save enough money to finance their unemployment due to their limited work history. Additionally, workers in this model must also save money for their retirement, rather than simply building a “rainy day” fund in case they lose their job. This allows the authors to generate a wealth distribution that is much more consistent with the actual data.

The authors then searched for the UI system that would maximize workers’ lifetime utility under this framework. They found that the optimal policy under standard supply-and-demand analysis has the same potential duration as the current system in the United States (approximately six months). But they found the optimal replacement ratio (the percentage of the claimant’s weekly wage that is paid in benefits) to be slightly higher — 63 percent compared to the current 50 percent. The benefits of such a program are substantial, with the authors estimating that the difference between an optimal program and no program would be equivalent to a 4 percent decrease in workers’ lifetime consumption.

When this model is expanded to allow for macroeconomic effects, the findings are largely unchanged. This is primarily due to the life-cycle aspects of the model. If a standard framework assumes people live forever and constantly face a risk of losing their jobs, they have strong incentives to save money when they are unemployed, and they have infinite time periods in which to do so. Thus, these models typically lack workers with few or no assets, and therefore have substantially fewer low-wealth individuals than what is observed in the data. Another important factor to consider is that UI will affect aggregate capital and labor only proportionally to each other, such that the capital-labor ratio (and therefore the effect on prices) will barely change as benefits increase.

To demonstrate the effects that the life-cycle approach can have on the wealth distribution, Piguillem, Ruffo, and Trachter moderated many components that were more directly linked to age — including human capital and pensions. When they did this, the optimal solution saw a replacement ratio of only 5 percent for six months with very little overall benefits arising from changing the current policy. This is because without the life-cycle effects in the model, individuals have fewer incentives to save for retirement, hence their savings are much more responsive to the availability of UI. Furthermore, given the intergenerational linkages within the model, the drop in savings is amplified over time, gradually changing the asset distribution of future generations. This shows that the life-cycle components of the model environment end up being crucial to the results.

The authors also considered whether unemployment programs act as a method to transfer wealth to younger generations, as younger workers have a much larger risk of becoming unemployed. To address this, the authors laid out two scenarios. In the first, the UI budget is balanced by age, with workers within a certain age group paying a tax to finance unemployment benefits for workers of the same age. In the second, they set age-dependent taxes as a way of flattening the overall income curve. The optimal policy does not change much in either scenario, and the replacement ratio is still above 50 percent of income in both cases.

The authors' approach, they noted, ultimately serves to reconcile various schools of thought pertaining to the optimal unemployment policy, as well as emphasizing the role that savings elasticity, wealth distribution, and human capital play in evaluating UI programs. These factors, and many associated externalities, can be used to evaluate other questions relating to an individual’s job search in future research. EF
Taking Back Bankers’ Compensation

For several years, leaders at Silicon Valley Bank made a series of bets that contributed, along with poor risk management, to the ultimate failure of that institution. Subsequently, almost up to the very hour federal regulators took over the failing bank, its top leaders were receiving significant bonuses. If bank executives are found to be responsible for the failure of their institution, should those executives be able to keep the profits they earned while leading the bank into ruin? As part of its efforts to prevent future bank failures, Congress has been examining the authorities granted to regulators to discourage bank leaders from taking excessive risks and profiting from bank mismanagement. Leaders within the Senate have arrived at a bipartisan proposal, known as the Recovering Executive Compensation Obtained from Unaccountable Practices (RECOUP) Act, that attempts to address these concerns.

Under current law, the Federal Deposit Insurance Corporation (FDIC) can claw back compensation from banking leaders when it takes over a bank using the Orderly Liquidation Authority (OLA). OLA is a special administrative process, created by the Dodd-Frank Act of 2010, that regulators can invoke when they feel that a failing institution presents a systemic risk to the financial system. If the leaders are found to be “substantially responsible” for the failure, the FDIC can recoup compensation paid out in the two years running up to an institution’s failure. In the case of Silicon Valley Bank, the FDIC did not pursue a resolution using OLA, meaning that those clawback provisions were not applicable only to firms with over $250 billion in assets, representing the largest, most complex financial institutions — a small fraction of the total number of insured banks.

As proposed, the RECOUP Act would alter this authority by allowing the FDIC to take back compensation from a wider range of senior executives of institutions that are taken over by the FDIC due to failure or expected failure. This expanded authority is limited to institutions with more than $10 billion in assets, which excludes almost all community banks. The types of compensation under this provision include not only standard compensation such as salary, stock options or equity awards, severance pay, and bonuses, but also proceeds from any stock sale or purchase of company stock in the two years preceding the failure. Additionally, the bill expands the regulators’ authority to ban executives from working in the banking sector if they have been found responsible for the failure of an institution, increases civil penalties for executives found responsible for “reckless” violations of the law, and requires institutions with assets above $10 billion to include new standards and penalties in their charters for managing risks and complying with regulatory instructions.

After much negotiation, the RECOUP Act was brought before the Senate Banking Committee in June. Ranking Member Tim Scott, R-S.C., who negotiated the compromise with committee Democrats, described the proposal as “important and timely.” Chair Sherrod Brown, D-Ohio, stated that the bill will ensure executives face real accountability: “Bank executives who take on too much risk and crash their banks shouldn’t get to land on their feet.”

The idea of expanding punishment for negligent executives was not without dissent. Sen. Tom Tillis, R-N.C., has expressed concern that the legislation does not effectively deal with the root causes of the 2023 bank failures and creates the wrong incentive structures for private sector leaders. “We’re not making the distinction between bad management decisions and management malpractice,” Tillis said. “And if we’re not careful here, you’re going to stifle innovation.”

Despite these concerns, the RECOUP Act was voted out of the Senate Banking Committee by a comfortable bipartisan margin of 21 to 2 and is awaiting consideration by the full Senate. Should it eventually pass the Senate, there is no guarantee that it will become law: Leadership in the House of Representatives has said that the Senate’s proposal is under review but has not made a commitment to take up the topic at this time. The process of responding to the 2023 bank failures will likely continue for some time as both regulators and legislators look to ensure that the financial system remains on stable footing. EF
Boosting the Supply of Rural Rental Housing

Rental housing has become less affordable across the country, but rural markets face additional difficulties

The housing market has emerged as one of the sectors of the economy where post-pandemic price pressures are most visible. The combination of a long-running slump in new construction following the Great Recession and the huge shocks to supply and demand stemming from the COVID-19 lockdowns have contributed to growing housing affordability challenges across the country. In the span of just two years, from June 2020 to June 2022, the S&P/Case-Shiller U.S. National Home Price Index increased by nearly 40 percent. The cost of the average 30-year fixed-rate mortgage has also increased at a fast pace, more than doubling from 2.67 percent interest at the end of 2020 to 7.79 percent in October 2023.

Policymakers concerned about housing affordability have tended to focus their attention on the ownership market. There are good reasons for doing so, as homeownership is widespread and is one of the most common ways to build wealth over time. But renting is also an important piece of the overall housing picture and can be attractive for a variety of households. Renters are largely spared maintenance hassles and may have access to amenities in the rental community. Individuals just starting out in their careers may rent while saving for a down payment on a home. Indeed, in the current environment, the cost of buying a home is rising faster than the cost of renting. According to a recent report from commercial real estate firm CBRE, the average monthly payment for new mortgages was 52 percent higher than the average apartment rent — a wider gap than during the real estate run-up before the Great Recession of 2007-2009.

Although renters make up a smaller share of households in rural places compared to cities — in the Fifth District, 31 percent of rural households rent compared to 35 percent of urban households — the rental market still plays a key role in meeting the housing needs of rural residents. And there are some indications that demand for affordable rural rental housing is poised to grow in the coming years, even as the supply faces serious headwinds. Signs of supply problems are evident in the Fifth District. Between 2011 and 2016, nearly every state in the district added rural rental units, but from 2016 to 2021, all states saw a decline. (See chart.)

THE RURAL RENTAL MARKET

According to Richmond Fed research, rural renters in the Fifth District are much more likely to be low-to-moderate income (LMI) than rural homeowners. In a September Regional Matters blog post, senior research analyst Sierra Latham found that 63 percent of rural renters in the Fifth District earn 80 percent or less of the area median income. In contrast, 25
percent of rural homeowners with a mortgage meet the same criterion. Incomes in rural places are typically lower than incomes in metropolitan areas to begin with, and the median income of rural renters is less than half that of rural homeowners with a mortgage in each Fifth District state.

This highlights the important role the rental market plays for LMI households in rural places, and demand from these households is projected to grow. A 2016 report by the Urban Institute estimated that as rural households age, the need for affordable rental housing will increase. Seniors facing mobility or other health challenges may prefer to downsize from their single-family-owned homes to smaller apartments. Because many seniors face diminished income in retirement, the report predicted that the number of LMI rural renters will increase by 20 percent between 2014 and 2040.

At the same time, researchers also expect more middle- and higher-income households to turn to renting due to the rising cost of purchasing a home. As higher-income households enter the market, rents will rise, shrinking the availability of units affordable to lower-income households. According to a 2022 report by the Joint Center for Housing Studies of Harvard University, higher-income households accounted for nearly 70 percent of total renter growth between 2010 and 2019. Over the same period, units renting for less than $600 a month fell from 32 percent of the total rental stock to 22 percent — a decline of 3.9 million units.

While these figures include both urban and rural markets, there is evidence of the same trend playing out specifically in rural places. According to the 2022 Statewide Housing Study commissioned by the Virginia General Assembly, the supply of apartments in rural markets renting for less than $600 a month fell between 2010 and 2019. At the same time, prevailing incomes for rural renters have remained low. Nearly half of renters in small and rural places in Virginia earned less than $25,000 a year, compared to under a quarter of renters in large markets.

In addition to meeting the demands of their existing residents, rural communities hoping to grow also need rental housing for new arrivals. Although it is true that rural places in general have grown more slowly than cities in recent decades or have even lost population, some small towns may be looking to reverse population decline. A lack of affordable rental housing can impede those goals.

“There are places where there’s just no rental, everything is owned. So, if you want to come there for work and see if it’s somewhere you want to put down roots before buying a home, you don’t have that opportunity,” says Mel Jones, co-director of the Virginia Center for Housing Research at Virginia Tech. The center conducts research and helps Virginia communities address housing challenges, with much of its rural work focused on the Appalachian region.

**BARRIERS TO ENTRY**

In general, multifamily rental projects are rare in rural places. The 2022 Harvard Joint Center for Housing Studies report found that only 4 percent of new multifamily permits issued in 2020 were in nonmetro areas. Some of this has to do with lower population density. The expected return on investment for a multifamily project rises with the number of rentable units, assuming the property manager can keep most of those apartments occupied by paying tenants. It’s harder to fill a large apartment complex in rural areas with smaller populations.

Still, a lack of supply of multifamily rental housing doesn’t always mean there’s no demand for it. “It’s hard to measure demand when there’s no supply,” says Michael Rocks, president of Allen & Rocks Inc. and Rocks Engineering Company, a family-owned developer and builder of residential and commercial properties that primarily operates along the Baltimore, Washington, D.C., and Richmond corridor. His company is currently developing Lakeside at Trappe in Talbot County, a rural county of about 38,000 people on the Eastern Shore of Maryland. The project will include single-family homes for rent and purchase, apartments, and 40 acres of mixed-use commercial space. Rocks says they’ve garnered interest from in-state and out-of-state residents attracted by the natural amenities of Talbot County and its proximity to both the Eastern Shore and the Baltimore-Washington metro area. But even with indications of demand and financing in place, developers face plenty of additional hurdles.
“Permitting and zoning are a huge barrier to development,” says Rocks. “In rural communities, it can be a challenge to achieve the density to support all the development costs associated with new housing construction.”

The current economic environment is affecting builders in all markets, not just rural. The pandemic disrupted supply chains, raising the cost of materials. Higher interest rates have made financing more expensive. And a tight labor market has affected the supply of construction workers, a sector that never fully recovered from the Great Recession.

“We took an industry that was already unable to respond to demand and then we kicked it again with COVID,” says Jones. In a world of scarcer and costlier resources, builders are even likelier to choose more lucrative projects in urban markets over smaller developments in rural places.

**STRAINED SUPPORT**

Another factor that makes it difficult to produce affordable rural rental is the income of households in those markets. Affordability is typically measured by the share of income households spend on housing, and median incomes in rural places are lower than in cities. If prevailing incomes are sufficiently low, it may simply be impossible for a developer to make a profit on a new property with rents that would be considered affordable.

In a 2020 report examining rural counties with persistent poverty, government-sponsored lender Freddie Mac found that a disproportionately high share of the multifamily rental market in those areas was comprised of units built with support from the Low-Income Housing Tax Credit (LIHTC) program, which provides a credit for developers of LMI rental housing.

“Part of the reason for this is that household income in these regions is very low; LIHTC is often the only economically viable way of providing affordable housing,” the report’s authors wrote.

Securing subsidies, and funding in general, can be a challenge for small communities. LIHTCs are administered at the state level and are not limited to rural jurisdictions, so those communities must compete with urban developers of LMI housing as well. Some states do set aside a portion of LIHTC funding for rural and tribal lands, but even so, local developers may find it exceedingly difficult to piece together sufficient funding to get projects off the ground. For example, a recent project to redevelop two empty buildings in downtown Pulaski, Va., into commercial and retail spaces with apartments on the upper floors took a combination of loans from multiple lenders, financing through Virginia Housing’s REACH Virginia Program, and a state historic tax credit to complete.

In places that do have affordable rental housing, age also poses a problem for federal support. According to data from the Census Bureau’s American Community Survey, 50 percent of rental units in the Fifth District were built between 1970 and 1999, anywhere from about a quarter century to more than a half century ago, and only about 13 percent were built after 1999. (For metro counties in the Fifth District, those shares were 46 percent and 23 percent, respectively.)

In addition to increasing the likelihood of repairs, age can affect whether a property is subject to rent caps that the developer had signed on for. The U.S. Department of Agriculture’s Section 515 Rural Rental Housing Loans have 50-year terms at 1 percent interest for developers building multifamily rental units specifically for rural LMI households. Since the program’s start in the 1960s, it has funded the construction of over half a million affordable rental units in rural markets.

But federal funding for the program has declined in recent years. Practically no new Section 515 units have been built since 2011. Moreover, once the loans on existing units mature or are paid off, property owners are no longer obligated to abide by affordability standards. The National Low Income Housing Coalition, an advocacy group, estimates that between 2028 and 2032, more than 16,000 Section 515 rental homes will move outside these affordability rules as their loans mature. That number is projected to rise to 22,000 annually after 2032.

This looming crisis has spurred bipartisan support to reform federal programs and preserve these sources of affordable housing. Sen. Tina Smith, D-Minn., and Sen. Mike Rounds, R-S.D., introduced the Rural Housing Service Reform Act of 2023, which would make it easier for nonprofits to acquire Section 515 properties and would allow residents to maintain eligibility for other forms of assistance tied to Section 515 even if the units exit that program.

**FINDING SOLUTIONS**

In the face of these challenges, what can rural communities do to preserve and expand their supply of rental housing?
A crucial first step is building local support for growth. Not every small town is necessarily looking to grow, and a growth mindset is one of the first things developers like Rocks consider.

“There are places that are really excited about more development. They want more people, they want to expand, because with development comes amenities like grocery stores, drug stores, restaurants, all of which need a critical mass of people,” he says. “Pro-growth areas are where developers can focus on meeting the housing demand and challenges.”

The pandemic has presented a unique opportunity for rural communities to attract teleworkers from metropolitan areas with their scenic natural amenities and lower cost of living. The Ascend West Virginia program, which launched in April 2021, offers incentives to out-of-state workers looking for a change of scenery. (See “Paid to Relocate,” Econ Focus, Third Quarter 2022.) Of course, without a plan in place to expand the housing supply, a sudden influx of newcomers can end up exacerbating affordability issues for both owners and renters.

“Market-rate housing becomes more expensive, then that shifts individuals ultimately into potentially lower-quality housing. Renters end up paying more for lower-quality housing and it starts straining the market, especially if you don’t have the ability to grow or expand that market due to some other variables,” Danny Twilley explained on a recent episode of the Richmond Fed’s Speaking of the Economy podcast. Twilley is the assistant vice president of economic, community and asset development for the Brad and Alys Smith Outdoor Economic Development Collaborative at West Virginia University and one of the architects of the Ascend West Virginia program.

Some localities have gotten creative with repurposing existing buildings to both expand their supply of affordable rental housing and garner community support by preserving a landmark of historical significance. Carroll County, Va., located on the border with North Carolina and home to about 30,000 people, saw such an opportunity in Woodlawn School. The school began life as a private institution before becoming the first public high school in the county and one of the first public high schools in the state in 1907. After it closed in 2013, county officials were determined to repurpose and preserve it.

Carroll County partnered with Landmark Asset Services Inc., a developer with experience in adaptive reuse in rural communities, to convert the school into 51 affordable apartments. Because the county owned the land and the property, it was able to donate it to the developers, which was crucial to making the project financially viable. The county was also able to retain the school gym and athletic fields to host public activities.

“It’s a way to welcome new people into the community by preserving a building that locals know and love,” says Jones. She notes that such school conversions have become increasingly popular in rural places. While she says the apartments in these projects are often earmarked for local seniors, they can also serve as an entry point for newcomers.

Another source of rental growth in recent years is single-family build-to-rent homes. Developers create neighborhoods where the homes are rented out rather than sold. Construction of such homes has nearly doubled since the pandemic, although it still accounts for a small share of the overall market — about 5 percent of total new housing starts. Most rural renters live in single-family homes, which would seem to make build-to-rent a natural fit. The vast majority of rural single-family rental homes are owned by small-scale landlords, however, rather than the large developers behind many build-to-rent projects. Still, such developments require a lot of land, which can sometimes be easier to come by in rural places than in cities. The Lakeside at Trappe project in Talbot County is one example of a rural development that includes single-family build-to-rent.

**A WIDESPREAD ISSUE**

In opening remarks at a Fed research seminar in September on rental housing affordability, Fed Gov. Michelle Bowman noted that the completion of new multifamily units has started to ease price pressures for renters, but rents are still above pre-pandemic levels. And most of this new construction activity has been in urban and suburban markets. Rural communities and small towns face additional hurdles to improving rental affordability on top of national headwinds. As part of its economic mission, the Fed continues to learn about conditions in the housing market and the solutions communities are employing to improve affordability.

“Access to stable, affordable housing is critical for economic well-being,” Bowman said, “and it provides an important foundation for an individual to fully participate in the economy.”

**READINGS**

“America’s Rental Housing 2022.” Joint Center for Housing Studies of Harvard University, 2022.


When Angus Deaton was an undergraduate in mathematics at the University of Cambridge, he found that the other students were better and more serious mathematicians than he was. He found his attention wandering from his math studies. He later recalled that his advisor, concerned by his lack of focus, finally told him to “take up what they clearly thought of as a last resort for ne’er-do-wells, a previously unconsidered option called economics.”

Roughly a half century later, in 2015, Deaton was awarded the Nobel Memorial Prize in Economic Sciences — recognized, in the words of the committee, “for his analysis of consumption, poverty, and welfare.” Yet in some respects, the work leading to his Nobel Prize was but an opening act: Within a few weeks of the announcement of the award, he would release news-making research that uncovered a disturbing trend in U.S. mortality. He and economist Anne Case, his wife and Princeton colleague, found that the death rate of White middle-aged Americans, unlike those of other demographic groups in America, had been rising. Case and Deaton attributed the trend to “deaths of despair” — that is, deaths from suicide, drug overdoses, and alcohol.

Others have recalculated Case and Deaton’s numbers and argued that the post-1999 increase followed a different curve than they described, but it appears to be generally agreed that the trend of progress — falling mortality rates — stopped for certain people in America in the late 1990s. Drug overdoses are very important, alcohol deaths are very important, and suicide is also a big number, though not as big as the other two. It’s also clear that the decline in cardiovascular disease was the main driving force behind increasing life expectancy in the end of the 20th century. That decline has halted for large groups of people.

Deaton has also researched, among other topics, the determinants of health and the extent of poverty in the United States and elsewhere. His most recent book, *Economics in America: An Immigrant Economist Explores the Land of Inequality*, was published in October by the Princeton University Press; NPR’s Planet Money blog has called it “sort of like Alexis De Tocqueville’s classic *Democracy in America*, but with more numbers, more economics, and more vitriol.”

A native of Edinburgh, Scotland, Deaton was knighted in 2016 for his services to economics and international affairs. David A. Price interviewed Deaton by phone in October.

**EF:** You and Anne Case were the first to consider deaths from suicide, drug overdoses, and alcohol together as “deaths of despair” and to report that these deaths had contributed to a turnaround in longtime mortality trends. You found that deaths of despair were a major factor in an increase in mortality for non-college-educated middle-aged White Americans starting around 1999. How did your work on deaths of despair originate? What was the detective story behind it?

**Deaton:** First, I would like to cut a little bit through the controversy. Some people don’t like the use of the term “deaths of despair,” but there’s no doubt at all that the trend of progress — falling mortality rates — stopped for certain people in America in the late 1990s. Drug overdoses are very important, alcohol deaths are very important, and suicide is also a big number, though not as big as the other two. It’s also clear that the decline in cardiovascular disease was the main driving force behind increasing life expectancy in the end of the 20th century. That decline has halted for large groups of people.

One of the things we discovered from the very beginning was these rising deaths were happening among people who didn’t have a four-year college degree. I don’t think anyone disputes that. Mortality from cardiovascular disease is actually rising among people without a four-year degree and is continuing to fall among people with a four-year degree. I don’t think that’s really disputed, either. A lot of these facts are laid out in our recent Brookings Institution paper.

As for the detective story, Anne and I spend a month or so in Montana in the summers. In the summer of 2013, we were working on different things at different ends of the same room.
in a companionable way. I was working on suicide, and I was interested in the question of whether suicide and happiness were correlated geographically. It turns out they are not much actually, which is somewhat surprising. And Anne, who has long suffered from chronic lower back pain, was looking at pain statistics and had noticed there were big rises in pain while I was noticing a big rise in suicide.

The second step was that we wanted to put the suicide rise in the context of all-cause mortality among the people we were looking at, White non-Hispanics in middle age. That's when we discovered the mortality rates for White non-Hispanics in middle age were rising. That seemed to us like a stunning finding. We thought we must have made a mistake. We thought something like that does not happen to a major group of the population without everybody knowing about it. And so we spent a lot of time checking, and we didn't find anything wrong with our numbers. So we assumed this must be in the literature somewhere.

What was actually in the literature was the fact that Black mortality rates and White mortality rates were converging; the gap between Black and White Americans was going down. That was a very welcome sign, given American history. What no one seemed to have noticed — or if they noticed, they didn't say it — was that that wasn't just because Black mortality rates were falling; it was because White mortality rates were rising, at least in this middle-aged age group.

We also discovered that this increase in the three most rapidly rising causes of deaths — suicide, drug overdoses, and alcoholic liver disease — was happening specifically among people who didn't have a four-year college degree. It's worth remembering that, today, less than 40 percent of the adult population in the U.S. has a college degree. So this was not like a bad thing that's happening to just a few people. That work has continued. The Brookings paper is basically about the four-year college degree people versus the others and showing how that gap in adult life expectancy, which is life expectancy at 25, is widening and has widened very rapidly, even before the pandemic.

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And that, in the original paper, we didn't identify the important slowdown and subsequent reversal in mortality from cardiovascular disease. And our view that they come from despair is obviously an interpretation. Nothing on a death certificate that says this person died of despair; that's not a classification of death.

What we've tried to tell — most fully in our book Deaths of Despair — was that the disintegration, the deindustrialization of America, the decline of unions, the increasing powerlessness of working-class people has left them in a fairly desperate strait. Whole towns have closed; social life has been disrupted. We were highly drawn to looking historically at when there have been terrible epidemics, there was one during the American Civil War, which didn't go away until the early years of the 20th century. There was a huge epidemic in China during the Opium Wars brought on by unscrupulous British drug dealers enabled by the British government at a time when the empire was disintegrating. And there are other examples where mass drug overdoses seem to be a symptom of social decline and dysfunction rather than the cause of it.

**EF: What is underlying the despair behind these developments? Is it mainly a matter of declining wages? Is it inequality?**

Deaton: I believe the central issues are deindustrialization — globalization moving jobs to China — and industrial automation. And the social destruction,
which we economists are not very good at taking into account. We worry about jobs and income, but we don’t worry much about social relations, and we tend to think that even if some people are losing out, other people are gaining more, because that’s what trade theory tells us. We think the people who lose will get up, go somewhere else, and get better jobs. And it doesn’t really seem that that was happening.

Regarding wages, it’s certainly true that if you look at real wages, the inflation-adjusted median wage for men without a bachelor’s degree is lower now than at any time in the 1980s. And even if it’s perksed up recently in the last year or so, that tends to happen in good times and then in the slump it goes back again.

But our thesis isn’t about declining wages at a particular moment in time. We think of this as a slow-rolling catastrophe, not a sudden one. In our book, we have a graph of deaths of despair before, during, and after the great financial crash. As it turns out, you don’t see anything; they were rising before, during, and after the crash at much the same rate. I think the parallels are more like going back to the Gilded Age or something when labor was on the rocks and working people were being treated very badly. It took 30 years to get some of that changed.

To be sure, material living standards are hard to measure. One of the advantages for us is to say, OK, maybe it’s hard to measure living standards, but a large group of people is dying in droves. We regard that as an indicator that something desperately wrong is happening.

**EF: You’ve argued that health insurance is an issue here.**

**Deaton:** Right. Workers who are below the Medicare age or not qualified for Medicaid get their insurance mostly through their employers. And that’s a flat tax; essentially, the CEO’s health policy costs about the same as his or her driver’s health policy. For the driver, that could be half of his or her wages. So this destroys working-class jobs.

**EF: You and Anne Case suggested in* Deaths of Despair* that domestic outsourcing, or contracting out, has played a role. In what way?**

**Deaton:** If you put a flat tax on every-one, as we do with our structure of health insurance, that’s going to do terrible things to the bottom of the labor market, including a drive to contract out.

Suppose on day one, somebody is a janitor, let’s say, for Ford Motor Company, and on day two, the person’s job has been outsourced to a cleaning company. From the worker’s point of view, that’s bad for a number of reasons. First of all, the wages might not be quite as good, because there was probably a certain amount of rent sharing in large corporations. Also, you’re less likely to have health care benefits because outsourcing firms are often structured to avoid paying those.

The other thing is that the in-house people may not be the ones getting the jobs. I don’t know any documented evidence for this, but we talked to a CEO whom we mentioned in the book about what happened when their health people came along and said the premiums would be going up 40 percent the following year. In response, they basically got rid of all their low-wage staff and brought them in from outside. According to the CEO, a lot of the new people were illegal immigrants. That is widely believed, though as I said, I have seen no evidence on whether it’s true on a large scale.

Another issue is that there are lots of stories of people working their way up from the factory floor or the mailroom. When I was a kid, and we were pretty poor in Scotland, if you got a job with a big company, you thought you were sort of made for life — in part because even if it was a lowly job, if you had the talent, you might work your way up. That’s just not possible if you’re being outsourced. You’re not part of the company anymore.

**EF: Has there been a parallel trend in deaths of despair for Black Americans?**

**Deaton:** We should step back to the Black Americans. This is very important because we’ve been criticized a lot for ignoring them. And the truth is that when we wrote the first paper in 2013, none of this was happening to them. Only later did it come to the Black and Hispanic communities, too. So there has been a parallel but delayed trend for Black Americans, whose mortality rates from suicides, drugs, and alcoholic liver disease are going up. Their picture today looks much more like that of Whites than they did before. And within the Black community, there’s the same division between people who have a college degree and people who do not.

I think the most likely explanation is that Black Americans are much less likely to trust the health care system than Whites are. There’s also literature on pain that suggests that some physicians don’t treat Black patients’ pain as seriously as they treat White patients’ pain. And so Black communities were not swamped with opioids the way that Whites were. So the discrimination against Black Americans saved them from this epidemic for a while,
but then when it moved to an illegal epidemic with people selling drugs on the streets, Black and Hispanic communities were no longer exempt.

EF: Much of your work has been in the area of development. In your new book, Economics in America, you wrote that your views of foreign aid and of your own personal charity have evolved over the years—in particular, that you’ve moved away from “cosmopolitan prioritarianism.” Please explain.

Deaton: If you try to find out what an economist believes philosophically, they will say it’s utilitarianism. What they think that means is diminishing marginal utility, and maybe it does. And so there’s a widespread view in economics that poorer people deserved our attention more than less poor people, because an extra dollar given to someone who is really poor would do more good than an extra dollar going to someone who already had plenty. Philosophers nowadays call that “prioritarianism,” meaning people who have the lowest level of well-being are the ones who deserve the most at the margin.

The other dimension is “cosmopolitan,” meaning you apply this idea across the whole world, without paying attention to national boundaries. Many do seem to embrace cosmopolitan prioritarianism, in which you metaphorically line up everybody in the world from worst off to best off and you prioritize the people at the bottom—without regard to where they are.

I certainly believed this for a long time, and I spent many years consulting for the World Bank where this view was strongly held. But I now think it’s wrong for a number of reasons, which I talk about in the book. One of them is that national boundaries really do matter. I’m a Scotsman, for one thing, and we Scots believe we’re different and we like some Scottish traditions; if Scottishness were to vanish in a cosmopolitan sludge, as it were, I think that would be a loss to the world. Not everybody believes that, but I think a lot of people do believe that about their own country.

National boundaries matter in other ways. You pay taxes in America, or I do. We have an obligation to serve in the military in certain age bands if we’re called upon to do so. We accept obligations for other people in our country, which we don’t accept for other people outside the country. So whether we like it or not, we’re locked in this tangle or this system of reciprocal obligation, which we may not like and we may not necessarily agree with. But nevertheless we pay our taxes.

So that means that there are certain things that we have to pay attention to domestically. Our fellow countrymen, whether we care for them because we feel like them or not, we have a responsibility for in terms of our taxes and welfare systems, such as they are, and so on. So that’s part of it.

The other part is my suspicion, and this is deeply controversial, that some of the poorest people in America are every bit as poor in terms of overall well-being as the people in Africa or India or wherever the aid agencies like to hold up in front of us. And again, that’s not just money. It’s living in a functional society with societal supports.

For instance, if you read some of the ethnographic literature about the Mississippi Delta, there are horrible things going on there in people’s lives. I don’t know how to estimate those in terms of numbers, because we don’t have very good tools for that. But I do challenge the idea that there’s no global poverty in America. So I am increasingly drawn to a form of domestic prioritarianism in which I worry a lot about others in my country who have the least.

EF: You have argued for consumer price indexes that give price-level changes by region. Why is that important?

Deaton: If you have $15,000 a year, let’s say, you could live quite well in Manhattan, Montana, in a way that you couldn’t possibly live in Manhattan, New York, for instance. And we don’t have any variation in our poverty lines in the U.S. that takes account of that. My argument is that we should have purchasing power parity exchange rates, as it were, between different places in the U.S., just as the eurozone, even as it has a single currency, has price indices for different countries. The statistical agency Eurostat spends a lot of time calculating those.

The argument against that, I suppose, would be, well, if you’re free to move, why does it matter? But it’s pretty easy to think of reasons why that could not happen. So I think as a first order, if we’re measuring poverty or we’re measuring living standards, we should be taking into account what things cost in different places.

EF: You have expressed skepticism about the use of randomized controlled experiments and natural experiments in economics. This has been an area of a lot of excitement within economics. Why are you skeptical?

Deaton: How many hours do you have? I think people have gotten carried away a little bit in that we got tired of standing up in seminars and people
challenging our identification assumptions, and so this seemed like a way out of this. But I’m not entirely sure it solves as many problems as its proponents suggest.

There are a lot of statistical issues, which are less simple than they appear. In the old days, we used to say here’s a regression and here’s a bunch of regression diseases. There’s a bunch of randomized controlled experiment diseases, too, which can get in the way.

People seem to think if you randomize — if you have two groups picked at random and one gets the treatment and one doesn’t — they say the only difference between the two groups is the treatment. But it’s dead wrong. When I used to teach this class, I would say, if I pick one of you at random with my eyes shut, and I pick another one with my eyes shut, does that make you identical? Of course not. You could argue that’s a large-sample or small-sample thing: If you pick a million people at random, then on average, they’re going to be the same in the two groups. And that’s true. But we don’t know how big it really has to be. And a lot of the experiments are pretty small. So it could be that the two groups you’re looking at are different at random but still different.

The other thing is that randomization can’t control for things that are the same in the two groups. That’s the external validity issue. One of my co-authors in the field of randomized controlled trials, the philosopher Nancy Cartwright, has an example that I like to give. There is famous work that Ed Miguel and Michael Kremer did on worms and deworming. They gave deworming pills in Kenya, and the kids who got the deworming pills did much better in school. Nancy lives in Oxford, and she said, “I have my granddaughter living with me and she’s not doing very well in school, so now I know what I should do, which is I should give her deworming pills, right?” But somewhere between Kenya and Oxford, the pills stop working.

So then, why and where? Of course, what’s on the line is there has to be worms or there has to be lack of sanitation or people are not wearing shoes or something, which is never in the experiment, because everybody in the experiment doesn’t have shoes. Or everybody in the experiment is walking around in an unsanitary field or something, and that’s not what you get in Oxford, so it’s not going to work there. But you have to know what these conditions are if you’re actually going to use those results. So sometimes these little experiments are not much more than anecdotes. You don’t really know what to take away from them.

To paraphrase Bertrand Russell, you need a deeper view of the structure of reality. You can’t solve these things by experiments; we’ve thrown away all these structural models and in many cases for good reasons, but you can’t do without that. You need some formal structure on which to hang these things. And within that, randomized controlled trials could certainly play a role, too.

**EF: Much of your work in development has focused on household survey data. What inspired your interest in this approach?**

**Deaton:** I was a visiting professor at Princeton in 1979-1980. For tax reasons, it was advantageous to stay out of Britain for 12 months. And my contract job with Princeton was for nine months. I knew some people who worked in the World Bank, and they said to come to work there for the extra three months. So I did.

They had some data from Sri Lanka. They said, you’re an econometrician, do you want to play with these? And I said OK. It turned out to be interesting. Also, I’ve always been interested in welfare, consumption, savings, all these things. I had never worked with cross-section data before, or very minimally. And at that time, there wasn’t all that much work on micro cross-section data, so it was fun.

I tend to be fairly fickle in my research interests. I like playing with shiny new things and often they reveal hidden truths. So I have spent a lot of my life either collecting or analyzing household survey data.

It’s actually something I worry about a lot, because in the U.S., our poverty measurement system has been under attack, and the poverty measure was never very well thought out to start with. Maybe we can’t measure poverty in America in a way that attracts any consensus anymore or maybe it was always too hard.

We’re seeing that elsewhere in the world, too. We’ve always been a bit suspicious about data that comes out of China, and people have evolved ways of trying to deal with that. But now India isn’t making its household survey data available. So the poverty monitoring in India, which I spent a lot of my life trying to do and trying to improve, is now not credible either.

**EF: What’s it like to win the Nobel Prize?**

**Deaton:** It’s a lot of fun. You spend a week in Stockholm in the winter. It was a very mild winter when I was there. We ate a lot of herring. You get treated like royalty, which is an unusual experience for most of us. You know, you get out of the door of the airplane and whisked through customs and there’s a driver who stays with you for the week.

For me, the thing that was most completely unexpected was that you could invite friends and family. So I could invite people I’d worked with over the years. And I was the only one of the laureates that year who had grandchildren. So my grandchildren became sort of national celebrities, because they were much cuddlier than the laureates themselves. As my guests, they got invited to the Nobel banquet; they got to be part of the festivities. It was like a family holiday, which was not something that I was expecting. And so it’s really a magical thing. To be recommended. **EF**
Community colleges play a major role in workforce and economic development. Unfortunately, existing data collected across states do not fully describe the range of positive outcomes achieved by these students. So the Richmond Fed recently launched the **Survey of Community College Outcomes** to better measure success rates.

Success rates at Fifth District community colleges may be up to 83% higher on average than currently measured by traditional graduation-based success metrics, according to the latest data from our new survey, released Nov. 15.

**Other highlights from the survey data include**

- Students enrolled at urban institutions tended to have higher success rates than rural counterparts, except in Maryland.
- Success rates for female students were higher than for males.
- Dual enrollment students comprise a higher share of enrollment at rural institutions (27.0 percent) compared to urban institutions (16.8 percent).
- Female students account for a large share of credit and dual enrollment. Non-credit enrollment is more balanced between males and females.

Visit the Survey of Community College Outcomes hub to learn more: https://www.richmondfed.org/region_communities/regional_data_analysis/surveys/community_college
Lack of a car can be a barrier to employment, particularly for low-income individuals. According to a 2022 survey conducted by the South Carolina Department of Employment and Workforce, almost 20 percent of individuals in that state who were able to work but were not currently working cited transportation as a barrier. Many studies have shown that ownership of a car (or a truck or motorcycle) increases the probability of work, especially among welfare recipients. And low-income individuals are the least likely to own a car and therefore must rely on other means of transportation, such as public transportation, ride services, bikes, or walking to get to work.

Moreover, users of public transportation tend to have lower incomes and longer commute times. (See “Transportation and Commuting Patterns: A View from the Fifth District,” Econ Focus, Second/Third Quarter 2019.) While public transportation options typically exist in larger urban areas, those options become more limited farther outside an urban center.

In addition to needing access to a car, individuals also need to be able to legally drive it. Revoking driver’s licenses can create additional barriers. Some research shows that lower-income individuals and minorities are most likely to have their licenses revoked. There are, however, some potential ways to mitigate barriers to transportation, including expanding or creating new public transportation options, providing access to financial and educational resources to help people purchase cars, and overturning laws that limit people’s ability to drive the cars that they do have access to.

Car ownership may seem almost universal, but it isn’t — far from it. In every state in the Fifth District and in the District of Columbia, car ownership declines with income. (See chart.) The share of people with access to at least one car ranges from about 40 percent among very low-income households in D.C. to 99 percent among high-income households in every other state. And the gap in car access between the lowest and highest income levels can be significant. In D.C., only 40 percent of low-income workers have access compared to over 80 percent of high-income workers. Elsewhere in the Fifth District, the share for low-income workers hovers around 80 percent while the same share for high-income workers is nearly 100 percent.

In D.C., car ownership rates are notably lower across all income levels,
likely due to two factors: its broad public transportation system and the fact that higher taxes, registration fees, and parking fees make owning a car there more expensive.

Regardless of income, people not working are less likely to have access to a car. In every state in the Fifth District, access to at least one car for individuals who were unemployed or not in the labor force was around 4 to 7 percentage points lower than for those who were working. In D.C., the difference in rates compared to employed individuals was a staggering 17 percentage points lower for those unemployed and 13 percentage points for those not in the labor force. Those individuals at the lowest levels of income and not working are far less likely to have access to a car. (See charts.)

**IS ACCESS TO A CAR MORE IMPORTANT IN RURAL AREAS?**

Not having access to a car in a place where other transportation options are more readily available is very different from not having a car in an area with more limited options. County-level data from the Census Bureau’s American Community Survey show that while some of the lowest rates of car access do occur in urban areas of the Fifth District, there are several rural counties that have similarly low rates, have high levels of poverty, and have fewer transportation options than their urban counterparts.

For example, among the top 10 counties in the district with the lowest ownership rates are Dillon County, S.C.; Washington County, N.C.; and Northumberland County, Va. All of these counties are classified as rural according to the Rural-Urban Continuum Codes. (The RUCC is a classification system based on the size of a county’s urban population and proximity to metro areas, with 1 being most urban and 9 being most rural.) Additionally, all of them have median incomes below and poverty rates above their respective state averages.

In Dillon County, for example, 8 percent of workers don’t have access to a car; this is the fourth highest rate in the district after the District of Columbia, Baltimore city, and Arlington, Va. Dillon has a large low-income population with a median income in 2021 that was about 37 percent lower than the state median and the poverty rate was 26 percent.
— much higher than the state rate of 14 percent. Moreover, the 8 percent figure is for those who are working and therefore doesn’t capture the people who are likely unable to work because of a lack of transportation.

Several urban counties also have low rates of car access and high concentrations of low-income population, but they also have public transportation options available to them. For example, Richmond and Norfolk cities in Virginia tend to be poorer with median incomes below and poverty rates above the comparative state rates, but their public transportation systems offer a variety of routes at subsidized costs.

All of these data suggest that individuals at the lowest levels of income and people in densely urbanized counties with public transportation systems are less likely to own a car. Those two facts can be hard to disentangle, however. Take the city of Norfolk, for example, which is an area with a public bus system, but also one with lower incomes and high poverty rates, making it difficult to know which issue is behind the city’s low car ownership.

RURAL WORKERS USE PUBLIC TRANSIT MORE

If low-income individuals are working, then low rates of car ownership indicate that they will need to rely on public or other transportation options to commute to work. But the ACS county-level data show that the share of the population who take public transportation to work is lower in more rural counties. No doubt this is at least in part due to the more ready access of public transportation in urban areas. (See chart.)

Although use of public transportation decreases with rurality, there is quite a bit of variation with similarly rural counties. For example, within the RUCC 1 code — counties in metro areas with a population greater than one million — the share of workers using public transportation ranges from close to zero to Washington, D.C.’s 27 percent. In smaller cities and rural areas (codes 3-9), the majority of counties have very low shares of the population taking public transportation, with a few notable outliers. One outlier is Charlottesville, Va., (RUCC 3) which has just over 6 percent of its working population taking public transportation to work — double the share of the next county within the same code. Charlottesville is home to the University of Virginia and has a public bus system.
Similarly, in the RUCC 7 category, the outlier is Norton city, Va., which is a small city in the Appalachian region of southwest Virginia. Citizens of Norton have access to the Mountain Empire Transit system, which offers transportation services across the counties of Lee, Scott, Wise, and Norton.

Finally, in larger urban areas (RUCC codes 1 and 2), there is a positive relationship between the share of population using public transportation and the share without a car. (See chart.) This relationship suggests that in larger cities where public transportation is more heavily used, people are less likely to own a car, but it remains unclear if people take transportation because they don’t have a car or if they don’t have a car because they can take public transportation.

The panel on the bottom showing this relationship in small towns and rural areas, on the other hand, does not show a clear pattern. The vast majority of counties and independent cities have less than 3 percent of the population using public transportation, while the lack of car ownership ranges from zero to 8 percent. Again, this is most likely because public transportation options are more limited in those settings, which would make owning a car all the more important.

**THE CHALLENGE OF DRIVER’S LICENSE SUSPENSIONS**

Another factor that has received some attention by researchers and by government officials is the suspension of driver’s licenses for reasons other than traffic offenses. In North Carolina, for example, a driver’s license can be suspended for nonpayment of court fees and for failing to appear before the court for traffic offenses. In a 2019 Duke University School of Law paper, authors William Crozier and Brandon Garrett looked at court data from 1986 to 2018 and found that there were 1.2 million driver’s licenses suspended for these reasons, representing approximately 15 percent of the state’s drivers.

The report also found that driver’s license suspensions were disproportionately imposed on Black and Hispanic drivers. About 33 percent of those with failure-to-appear suspensions were Black and 24 percent were Hispanic, while 35 percent were White. For unpaid fee suspensions, 47 percent of drivers with such suspensions were Black, 11 percent were Hispanic, and 37 percent were White. For context, in the same year, the North Carolina driving population was 21 percent Black, 8 percent Hispanic, and 65 percent White.

Virginia had a similar policy until 2020, when a law was enacted to end the practice of suspending licenses for nonpayment of fines and court fees. Additionally, the law retroactively reinstated any licenses of Virginians who had previously had their licenses suspended for those reasons, which was an estimated 900,000 people, accounting for two-thirds of all suspended licenses in the commonwealth.
West Virginia also repealed a similar law in 2020, and Maryland amended its law to stop suspending licenses for unpaid traffic fines. South Carolina continues to suspend licenses for nonpayment of fees. There is limited research on the effect of these laws, but having a revoked license clearly affects a person’s ability to use his or her car to travel to work.

REMOTE WORK: A RED HERRING

In principle, remote work could provide an opportunity for low-income individuals to work without car ownership. A 2023 report by Payscale showed that the amount of work being done from home all or most of the time rose from 10 percent in 2019 to 28 percent in 2023. In reality, however, remote jobs tend to be in higher-wage sectors of professional business services like computer, mathematical, financial, and legal professions. Within lower-wage industries such as food and accommodation services, 75 percent of the jobs are performed in person.

This pattern is reflected in income figures. The average annual income from an in-person food service job is just over $35,000, whereas a food service job that could be done remotely has an average income of over $50,000 a year. Similarly, in the retail sector, where 70 percent of jobs are done in person, the wage gap is even higher: around $35,000 for in-person jobs and almost $68,000 for a remote job. In many industries, lower-skill and lower-paid jobs remain largely in person and thus the switch to remote work in many occupations did little to change the commuting needs of lower-income workers.

INNOVATIVE APPROACHES FOR THE UNDERSERVED

One option that is being tried in rural areas is an on-demand public transportation system without traditional routes, also known as microtransit. These systems typically rely on shuttle vans. The Mountain Empire Transit (METGo) system in rural southwest Virginia, mentioned earlier, is an example. That system was started in 2021 along with the Bay Transit Express system in Gloucester, Va. Both systems received a combined $160,000 innovation grant from the Federal Transit Administration (FTA) to launch these services.

When METGo launched, the service cost was 75 cents for seniors and children under 17 and $1.50 for everyone else; more recently, METGo received an additional grant from the Virginia Department of Rail and Public Transportation that allowed it to offer the service free of charge. The system also received a grant to expand service to Mountain Empire Community College and an industrial park in Duffield to help transport citizens to education and job centers. According to an article published in August by the Virginia Mercury, since its launch in June 2021, METGo has provided over 76,000 rides to residents of Norton city and the counties of Lee, Scott, and Wise.

As another example of a rural public transportation initiative, Bay Transit Express has been providing shuttle services in the Northern Neck region of Virginia since 1996, but the FTA grant allowed them to replace two fixed routes in Gloucester and instead allow citizens to book on-demand and point-to-point rides in the service area through an app or over the phone. According to the Virginia Mercury, ridership on the Bay Transit Express system increased over 200 percent over the fixed routes that it replaced.

There have also been recent investments in urban transit options. For example, during the pandemic, Richmond city and Chesterfield County, which jointly own the GRTC transit system, made bus trips free for all riders. This has been continued several times, and bus trips will remain free at least through June of 2025 because of a grant.

In addition to improving public transportation options, there are programs from nonprofits and community development financial institutions that help low-income families access financing to purchase a car. One example of this is the Responsible Rides program in Roanoke, Va. This partnership between Freedom First bank, several nonprofits in the area, and car dealerships offers low-interest loans along with financial and car maintenance classes to educate borrowers on budgeting for the ongoing costs of owning a car.

Other entities, such as People Inc., offer personal loans to purchase cars as one of many services aimed at helping economically disadvantaged people in their service areas of rural southwest and northwest Virginia. In 2022, People Inc. loaned over $400,000 to 104 people to help them purchase cars and cover household expenses.

CONCLUSION

For most people, access to work requires transportation. The vast majority of Americans use a personal vehicle to get to work, but not everyone has access to one. The difficulty getting to work without a car is particularly challenging in rural areas where public transportation options are more limited. Some of the ways that these challenges have been addressed are public and private investments in subsidizing the cost of public transportation, creating point-to-point systems rather than traditional fixed routes, repealing or limiting driver’s license suspension laws, and providing access to loans and educational resources to individuals to help purchase and maintain a car. EF
They say that money makes the world go round — the ability to borrow it can shape a person’s life, livelihood, and neighborhood. But just because trillions of dollars are loaned to households and businesses every quarter doesn’t mean lending is equally available to those who need it the most.

Community development financial institutions, or CDFIs, emerged in the 1970s to improve credit access for underserved individuals and communities, offering a range of financial services and educational programs. But little was known about the impact of these organizations. The Richmond Fed launched the CDFI Survey in 2009 to fill that data gap for the Southeast region.

“We recognized the public policy importance of CDFIs, as well as existing data gaps that made it challenging to answer research questions about them,” says Emily Wavering Corcoran, senior manager of the Federal Reserve Small Business Credit Survey at the Cleveland Fed. In her prior role as a senior research analyst at the Richmond Fed, Corcoran oversaw the administration of the CDFI Survey.

“Early iterations of the survey captured the varied levels of CDFI reach and representation across Southeastern states, providing far more detailed information than was previously available on the geographic scope of CDFI activity,” Corcoran describes. “This work helped us understand where CDFIs were and were not actively filling market gaps — and where community development finance dollars were and were not flowing.” In addition, the Richmond Fed used the survey results to create a regional directory of CDFIs.

After the 2017 survey, Corcoran says, it was clear their research could benefit from “adopting a national lens.” The CDFI Survey was expanded in 2019 to gather information from community development financial institutions across the country, requiring the resources of all 12 Reserve Banks.

The Richmond Fed also turned to partner organizations outside of the Federal Reserve System to expand the survey’s geographic reach. “We intentionally approached our partners, including the CDFI Fund and Opportunity Finance Network, to ensure that the survey reached as many CDFIs as possible and to ensure that the resulting data could directly inform the CDFI industry,” Corcoran explains. “Partnerships have always been a key feature of the CDFI Survey, and those relationships were built through collaborative and mutually beneficial work.”

Surekha Carpenter, a research analyst on the Richmond Fed’s Regional and Community Analysis team, has worked with partner organizations to conduct the survey. “We rely in part on the CDFI Fund’s records to know who to distribute the survey to,” Carpenter notes. “Partners also help us understand more about the industry, which informs what questions we ask.”

NeighborWorks America, a congressionally chartered nonprofit that supports affordable housing and community development in the United States and Puerto Rico, became a partner organization in 2018 for several reasons. “We were sold on the positiveness of a national CDFI directory, especially one that would communicate the importance and impact of our network of CDFIs to funders, policymakers, and communities,” says Paula Zayas Planthaber, director of lending — national initiatives at NeighborWorks. “Individual organizations always want to know where they ‘sit’ in their industry.”

Planthaber says the survey also provides CDFIs with benchmarking information to understand industry trends within the broader context of the financial market and potential industry challenges. For example, the 2023 survey identified lending capital as the most significant barrier for CDFIs to meet growing demand. As a result, NeighborWorks launched a survey to better understand the funding needs of its network, analyzed the results, and presented them during a conference in Chicago this past August.

Over the years, the CDFI Survey has provided a valuable perspective on the issues that lenders face in filling market gaps. Carpenter notes that the challenges identified by survey respondents in 2019 — namely staffing and insufficient capital to lend — are fairly similar to what they reported in 2023. “We did hear more that lending capital challenges were more severe than other issues this year,” Carpenter says. “As you can imagine, this has likely been exacerbated by the recent economic environment.”

The survey has also highlighted the strength and resilience of CDFIs, Planthaber adds. “Survey findings show that the CDFI industry has demonstrated its ability to grow, innovate, and meet rising demand amid economic challenges.”

EF
Explore the Richmond Fed's series of interactive maps that present county-level demographic and economic indicators to enhance understanding of rural-urban differences in the Fifth District.

The maps look at population, demographics, educational attainment, labor force, and income and poverty.

Find more maps and the data at https://www.richmondfed.org/research/regional_economy/reports/rural_urban_maps
Why Is Returning to the Office Contentious?

A trusted colleague recently relayed an article about CEOs taking a harder line on bringing staff back to the office. I found the employers’ views expressed in the article understandable. When it comes to bringing people together in the workplace, it’s often the case in specialized teamwork settings that what I as a leader am looking for is simple availability. Stuff needing quick attention comes up in any organization, especially when others are waiting for one team member to dispose of an issue. It is bad for business, and personally frustrating, when such agility is compromised. A rigid in-office policy more or less solves this in a crude but effective way: Team members are physically available should the need arise.

Yet I suspect that return to office, or RTO, is not a “return” in the sense of going back to the past. Instead, it is a new approach combining what we always knew about physical proximity with what we learned about its costs and benefits during the pandemic.

THE MIXED BAG OF BEING BACK

What is gained from RTO is pretty clear: A vibrant office is absolutely more fun to be in (unless, I suppose, one is especially shy or introverted, which should not be dismissed — people differ in the “space” they need to thrive, even when they’re members of teams). It is more productive in very tangible ways — meetings are in my view far better in person. And quick resolution of matters via an impromptu pullup in the corridor can be worth a lot. Chance encounters can spark ideas. And on and on.

Economists always want to tally benefits and costs, though, so this made me wonder: “What, specifically, is lost from RTO anyway?” One thing that is surely key is the ability to simultaneously invest in one’s work and one’s life and loved ones. For example, using the otherwise unproductive six minutes between meetings to grab a 12-year-old and get them started on homework — and simply being around to deter their goofing off! Dealing with a change in after-school events, being present for generally able-bodied elders in our homes, managing dual-career lives when one partner travels a lot, and all the rest. This is by nature not fully predictable, but all of it is easily resolved by working from home. So, an RTO stance that retains meaningful flexibility will, I suspect, be important if the organization is to stay competitive in the marketplace for workers.

Moreover, the “availability” I noted above doesn’t have to be the same as physical location. And employers who overprioritize the latter over the former run the risk of sending a message that they don’t quite trust their employees. Now, unmotivated people who need direct in-person oversight definitely describes some people, but if weak motivation describes a lot of people in your organization, then RTO is the least of your problems. And today, availability is straightforward enough to gauge and incentivize no matter where you are. If the average wait time for acknowledgment and response to an “instant” message is routinely inordinate, the employee is defaulting on their availability obligation, full stop, no matter where — at the office or in a treehouse — their keyboard is.

A perhaps minor — though more subtle — problem with emphasizing physical presence over availability is the inferences that people will make about their co-workers for entering after, or exiting before, the “official 9-to-5” hours. This can, if not managed, lead to idiotic outcomes. People clock in and out in minutes — with just a badge swipe or a quick walk around the office to be seen — to game the system, wasting time and gas commuting along the way. At the other end, the scenes from 1980s movies of East Asian offices where everyone is racing the others on the way in and marking time for others — the boss especially — on the way out of the office come to mind. So, communicating that we will operate in-office RTO days with the organic flexibility that arose in the pandemic era will be key.

But since that was organic and natural, it may take time and effort to reestablish. (I serve as a manager myself and have always been acutely aware of the constraint this role places on my ability to communicate such notions credibly and effectively.) Absent that, I think it’s not correct to argue that we have something more flexible simply because we have fewer days in office now versus pre-pandemic. For that to be true, the ones that remain need to be run well.

Despite all these concerns, I suspect there are actual productivity and career development/mentoring gains to more in-person interaction, making some form of serious RTO absolutely the smart thing to do. And if that’s right, then RTO ought to be an easy sale: The pie gets bigger.

SHARING THE GAINS

But even an RTO that was well-tuned to deal with the things I note above might not be appealing to the bulk of employees. Indeed, it appears that this movement is far more driven by management — across all the varieties of RTO that are now being tried. Something is still not fully
clicking; I’ve not heard of many employees telling their employers, “Phew, thanks guys — you finally coordinated the whole group to something better for everyone!”

Why?
If I had to guess why the raw productivity gains (which, again, I think are real) to physically congregating are proving to be a hard sell to employees, it is because the mechanism for sharing those gains seems not quite present.

In any for-profit business, if there are big gains to productivity from physically convening en masse, then total revenue will grow for the same employee base. If they are paid the same as before, those gains all go to management and maybe to shareholders. So why would anyone expect the rank-and-file employee to find that compelling? Put another way, an employee might believe: “Hey, it’s just the employer saying: Give me more.” That’s not energizing for most people I know.

Yet, if there are truly gains, it should be feasible to make shareholders and workers all better off — an “RTO dividend,” if you will. So, the friction so plainly visible all around seems to me to have roots in the employers’ view that gains are available under RTO colliding with the employees’ view that they will not see most of those gains themselves. This to me is consistent with chatter I hear about how “employers are finally getting back to having some clout.” The latter makes very clear a view of the world as changing who gets the gains from workplace arrangements, and far less one of better coordination.

**CAN COMPANIES AND WORKERS MAKE A DEAL?**

An interesting thing for me as an economist is to see just how little (explicit, anyway) deal-making more generally seems to be going on, at least so far. (Perhaps you readers see more of it?) It’s apparently hard to have models where we let people “buy the right to WFH” — that is, you work from home, you agree to take a pay cut, or alternatively, you come into the office, you make more. For individual contributors with clear metrics, this seems easy. For team producers, that is hard to implement, I’d guess, but it suggests that other frictions get in our way. Maybe due to the worker selection it would induce? We will likely see such experimentation in the months ahead. We know this because we see a version of this in the data already: The only reason businesses adjust for cost of living in bigger cities is that to them ... it’s worth it!

In the end, though, a more diffuse form of deal-making will happen, with firms sorting into different models with different mixes of compensation. This is an extremely complex process at the level of any society, and the outcome will reflect a kind of “multidimensional competition” (think of the “bundles of amenities” of any job — commute time, cafeteria quality, IT support, etc.) for which economists, as far as I know, have no clean determinative theory. It isn’t like price-based competition, which we understand so much better and which seems to work so well much of the time. So, don’t ask me how this all ends!

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**A brief postscript:** This will be my last column in *Econ Focus*. In February, I will be stepping into a new role as executive vice president and research director at the New York Fed. The Richmond Fed has been my intellectual home for the past 23 years and having an outlet like this one where I can share my thoughts and musings has been an enjoyable part of my wonderful experience as a Richmond Fed economist. My thanks to the entire Richmond team — for everything. EF

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WHERE DID THE 2 PERCENT INFLATION TARGET COME FROM?
In recent years, the Federal Reserve has continued to demonstrate its longtime commitment to its 2 percent inflation target. Policymakers first discussed the idea of inflation targeting nearly 30 years ago. Before formally announcing the target in 2012, they confronted several potentially contentious questions, including whether the target should even be announced publicly.

GOODBYE TO THE STUDENT LOAN REPAYMENT MORATORIUM
In 2020, the Biden administration instituted a temporary moratorium on the repayment of government-held student loans, keeping as much as $5 billion per month in borrowers’ pockets. After a nearly three-year hiatus, repayments resumed in October, leaving disagreement over what effect, if any, such a change might have on the spending behavior of borrowers and on the broader economy.

THE OUTDOOR RECREATION ECONOMY
Outdoor recreation isn’t just weekend fun: It can have a significant influence on local economies, accounting in 2021 for 1.9 percent of U.S. GDP nationwide. Within the Fifth District, its share of statewide GDP ranges from 0.9 percent in D.C. to 2.6 percent in South Carolina. For many local leaders, particularly in rural areas, it holds potential as an economic development tool.

THE ORIGINS AND ECONOMICS OF TIPPING
Tipping is huge in the United States, particularly in the restaurant sector — where, according to a recent survey, 92 percent of adults say they always or often leave a tip when sitting down to eat a meal. Yet tipping seems to have been rare during America’s early history, mostly confined to the few larger cities. What are the origins of tipping, and what do economists think about the practice?
SAVE THE DATE
Investing in Rural America 2024

Mark your calendar for the 2024 Investing in Rural America Conference, being held May 21-22, in Roanoke, Virginia.

This year’s conference theme is Building and Sustaining Momentum, during which we will explore how to leverage community assets and how to create space for residents and communities to thrive.