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Foundations of Rural Resiliency: America during the COVID-19 Pandemic

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A B S T R A C T

In recent decades, a culture of hopelessness has emerged among rural Americans, visible in epidemic levels of suicide, overdose, and other addiction-related illnesses. While the arrival of a novel coronavirus aggravated existing strains in rural economies, it also enabled positive transformations in some rural cities and towns. This research explores how businesses in rural America experienced and adapted to economic shocks caused by the Covid-19 pandemic and, in the process, changed the economic and social landscape. Applying a qualitative research methodology, the present research offers Pennsylvania’s Central Susquehanna Valley as a case study, using data from 60 semi-structured interviews. The analyses demonstrate rural businesses’ resiliency and adaptive responses, bolstered by embedded rural capitals and the unique characteristics of rural businesses themselves. Furthermore, the pandemic forced drastic changes for businesses in the rural landscape. On the one hand, Covid-19’s losses and miseries take much material, human, and social resources from the rural community. On the other hand, changing relationships between businesses and workers, and among partners in the supply chain could be long-lasting, creating extra rural capitals and better working relationships at the factory and beyond. Finally, adoption of new technologies and automation; new business directions, such as e-commerce and higher value-added production; and increases in mergers and acquisitions across industries were prevalent during 2020–2021. In many ways, the Covid-19 impacts could make rural America more dynamic and competitive. This research offers conceptual and empirical pathways to supporting economic and social development in rural America.

1. The rural-American social, political, and economic landscape

The election of Donald Trump in 2016 brought into focus the polarization of urban and rural Americans. While rural-urban divides manifest in many industrialized democracies, in America, the issue has been particularly challenging, with wide-ranging consequences to the U. S. political economy (Hughes, 2020; Love and Loh, 2020). Yet, the fates of rural and urban Americans are intimately intertwined. Approximately one in five Americans lives in a rural area (Ajiore and Willingham, 2019). Ten percent of America’s GDP is generated in counties outside of a metropolis. And, most importantly, rural regions constitute 97% of U. S. land mass, including vital resources like water, food, energy, and recreation (Ajiore and Willingham, 2019). Although consistently undervalued in dominant rhetoric, rural communities continue to contribute meaningfully to the economy and society.

As the U.S. economy fully endorsed globalization, advanced technology adoption, and saw the rapid rise of the service industry, manufacturing has been the sectoral leader in total job share and earnings in rural America (Ngo et al., 2022). Industrial manufacturing in rural regions represents 2.5 million jobs—as compared to 1.4 million farm jobs, and 0.5 million mining jobs, including oil and gas extraction (Low, 2017). The manufacturing sector’s share of employment and earnings in rural areas exceeds the share in urban areas. Manufacturing jobs representing 14% of rural, private, nonfarm jobs, and 21% of rural, private, nonfarm earnings in rural areas in 2015—as compared to 7% and 11% in urban areas respectively (Low, 2017).

From a political perspective, rural areas retain a substantial electoral strength, even as they represent smaller populations (Badger, 2016). A growing unity among rural Americans as a heavily Republican voting bloc has disadvantaged Democratic candidates whose voters are often clustered in urban settings (Bradlee, 2018; Kristof and Wudunn, 2020). The disproportional political power of rural voters has allowed considerable Republican influence through overrepresentation in state legislatures and the Senate (Bradlee, 2018).

In spite of the role rural America plays in the national sociocultural and political landscape, federal policies (or the lack thereof) have left these communities behind. Failed promises of economic revitalization and reform led to a “story of two Americas: cities with bustling economies and rural communities declining in opportunity” (Hughes, 2020, para. 1). This binary narrative has tragic consequences, with high concentrations of jobless men, and surges in deaths of despair by drugs, alcohol, or suicide (Case and Deaton, 2015, 2017; Krugman, 2019). This binary also inadvertently prioritizes the political concerns of an imagined white, rural monolith, and erases the needs of rural people of color.

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1 This paper defines “rural” to mean outside of a metropolitan area and “urban” to mean within a metropolitan area.
(Bradlee, 2018). Even before the pandemic, social relationships in rural America were shifting amid changes in population and migration patterns. While rural areas are proportionately less diverse than urban areas, these communities are home to numerous people of color who comprise 21% of the rural population (Johnson, 2017). In addition, Black, Indigenous, and other people of color (BIPOC) accounted for over 80% of rural population increases between 2000 and 2010 (Johnson, 2017). In recent years, the population losses reported among rural Whites and Blacks have been balanced by slow but steady population gains among Native Americans and Hispanics (U.S. Department of Agriculture, 2018). Despite the growing influence and contributions of BIPOC communities in the rural economy, they are often left out of the discussion—even as they are disproportionately affected by policy impacts (Ajilore and Willingham, 2019; Love and Loh, 2020).

Given the significance of rural America in the social, political, and economic spheres, the American public and politicians on both sides need to better consider the values, nuances, and diversity of rural people and places, expanding conversations beyond the binary of a rural White monolith in decline, and a thriving and diverse urban America. Most immediately, it is urgent to investigate the impacts of Covid-19 on rural America, as the global pandemic has markedly changed the economic, political, and societal landscape of rural cities and towns. In this context, the present research paper asks how businesses in rural America experienced and adapted to economic shocks caused by the coronavirus; and, in the process, how this adaptation changed the rural, economic, social, and political landscape of rural America.

This paper employs a qualitative, analytical case-study methodology. Between June 2020 and April 2021, I conducted sixty semi-structured interviews, comprising one of the largest qualitative datasets about the rural business community during the pandemic. Interviews include a diverse set of participants: business owners, executives, managers, community organizers, and experts. Interviews with rural-business owners captured (1) how the pandemic challenged traditional business relations and operations; (2) how rural businesses adapted to economic shocks, and to the threat of the coronavirus on their operation; (3) how the pandemic posed challenges, but also presented new opportunities for small and medium firms, especially in the manufacturing sector; and, finally, (4) how the rural-American landscape was changed by coronavirus impacts.

The rest of the paper is organized as follows: Section 2 offers a new conceptual and theoretical framework to analyze Covid-19 impacts on rural cities and towns. Section 3 details the research methodology. Section 4 presents the analytical case study focusing on the challenges imposed by the pandemic, businesses' responses to them, and the subsequent shifting landscape of rural Pennsylvania. Section 4 concludes the paper with analytical observations, contributions, and directions for future research.

2. Rural businesses and resiliency: a conceptual framework

In order to better understand how the Covid-19 public-health crisis and economic downturn were endured in the rural business community, a new conceptual and analytical framework is necessary. To address this need, the present paper offers a novel framework that synthesizes theoretical insights from literature in rural studies and economics that focus on (1) rural capital and (2) business practices that build rural communities’ resilience over time. The first strand of literature examines the creation and development of rural capitals that contribute to firm strength and resiliency (Fig. 1, upper half). The second strand highlights the unique characteristics of rural firms that distinguish them from their urban counterparts, such that they operate and respond differently in times of crisis. In many ways, these characteristics buffer rural firms during challenging times (Fig. 1, lower half). For purposes of this paper and according to Brown and Kulig (1996), resiliency is understood as both individual and collective efforts to recover from short-term events that impact them negatively; and, in the process, transform the material and social environment to mitigate future events. Furthermore, as individuals and groups adapt to negative events, they also transform their economic, social, and political environments in the community (Brown and Kulig, 1996).

Fig. 1 illustrates the conceptual framework described below. It provides an analytical approach to exploring how rural businesses confront crises and economic downturn. It is by (1) drawing on the strengths (capital) of the rural community and its geographical advantages; as well as (2) on unique business practices in labor utilization, product development, firms and market locations, and financing. In other words, the unique businesses characteristics and rural capitals present in rural cities and towns are determinants of business resiliency. The following subsections detail the framework and relevant literature.

2.1. Rural businesses are more resilient because of rural capital

First proposed by Castle (1998), the concept of rural capitals contextualizes development in rural America to explain rural businesses and their capacity to manage crises. Using insights from Coleman’s (1998) Foundations of Social Theory, Castle (1998) suggested that “the rural capital stock consists of four components: natural, man-created, human and social” (p. 622). These components are shown in the upper half of Fig. 1.

First, “natural capital is that part of the natural environment capable of contributing directly or indirectly to human satisfaction” (Castle, 1998, p. 622); for example, outputs from forestry or farming reflect natural capital. Second, “man-created capital consists of those items produced by humans capable of use over time” (Castle, 1998, p. 622), such as software or hardware. To maintain a gender-neutral spirit, this paper refers to man-created capital as material capital. Third, “human capital reflects investments in people that enhance their potential social contribution” (Castle, 1998, pp. 622–623), such as education and training. Finally, “social capital consists of those group arrangements that make individual actions more productive than they would be in its absence” (Castle, 1998, p. 622). Social capital includes “a degree of mutual trust, the existence of reciprocity in some form, and means for enforcing commitments” (Castle, 1998, p. 622). In addition, “ethnic background, cultural heritage and shared aspirations all may affect the stock of social capital.” (Castle, 1998, p. 622). Castle (1998) points out further that the development and conservation of rural capital is especially critical to rural communities and their people “as they...
exercise their autonomy in addressing common concerns and pursuing their aspirations” (p. 622).

In the context of economic and public health crises such as the Covid-19 pandemic, rural capitals enhance resiliency, as they bolster businesses and residents with resources inherent in the geographical location, culture, and social networks. Anderson, Osseichuk, and Illingworth (2010) studied the impacts of downturns in the United Kingdom in both rural and urban areas. Contrary to the authors’ expectation, small rural firms were doing better than urban small firms. The authors extrapolate that rural firms were less susceptible to external changes: “It may be that their embeddedness in the rural environment, which acts as a limiting factor in buoyant times, acts as a support in these less prosperous times” (Anderson et al., 2010, p. 55). For example, firms reported that local customers were particularly supportive of them during the challenging period. Similarly, Shields (2005) investigated the effects of geo-demographic and socio-cultural features on 76 American small businesses. The author noted that “owners manage their business consistent with rural socio-cultural values by relying on strong social ties and word of mouth reputation” (Shields, 2005, p. 49). For example, rural business owners place significant emphasis on referrals, reputation, and relationships with family, friends, and neighbors. In this context, rural firms and their owners are highly dependent on rural social networks (Miller and Kim, 1999).

From the perspective of rural capitals, these are examples of social capital, wherein individuals and community members offer support to each other in times of crisis. Hence, rural communities with their tendency to generate social capital provide resiliency to local businesses. While all four modes of rural capital are significant, the case studies and literature herein suggest that social capital is the most significant in empowering rural-firm resiliency when facing crisis. In other words, rural businesses are more resilient due to their connection to rural communities. The upper-half of Fig. 1 illustrates the dynamic relationship between rural businesses and communities in creating and reinforcing rural capital.3

2.2. Rural businesses are more resilient because of their unique characteristics

Using Castle’s (1998) framework of rural capitals, Bosworth and Turner (2018) similarly include “the natural, man-made, human and social attribute of rural locations that can generate value for those with access to it” (p. 3), as important components of rural capital. In their interrogation of rural businesses from a rural-capital perspective, Bosworth and Turner (2018) further identify employment, firm location, and market location as key dimensions distinguishing rural businesses from others. Using these insights, this paper asserts that rural businesses become more resilient thanks to their unique characteristics in (1) employment and labor utilization, (2) products and product development specifically tied to the rural location and community, (3) businesses location and proximity to customers, and (4) financing strategy (see Fig. 1, lower half). Other literature confirms these observations.

With regard to employment, Phillipson et al. (2004) found that small firms relied heavily on their own households to absorb revenue and employment shocks during a months-long outbreak of foot and mouth disease that shuttered rural England and disrupted local-firm operations. Specifically, small business owners relied on personal savings and family members as reserve labor (Phillipson et al., 2004). They also reduced their own salary and household spending during hard times (Phillipson et al., 2004). This research highlights the unique use of labor and personal financing as part of rural business adaptation strategy during economic shocks (Fig. 1, lower half).

Rural businesses also adopt unique practices in developing their product and production. Due to strong connections to the local community and reliance on social capitals, rural firms emphasize quality production and high value-added products, while paying less attention to cost reduction, and competition. Miller and Kim (1999) suggest that rural businesses tend to avoid duplicating goods and services provided by other businesses within the community, and thus avoid competing directly with others. From this perspective, rural businesses gravitate towards cooperative strategy for their products and production, rather than competitive ones. Furthermore, research conducted by North and Smallbone (1996) in Northern England shows that rural small- and medium-sized firms faced less pressure to subcontract their inputs than their urban counterparts. Therefore, much of their production is done in-house. For example, the authors observe that “rural SMEs in the craft sectors also tend to produce higher value-added products in which the achievement of quality is more important than cost minimisation, resulting in a desire to keep control over all stages of production” (North and Smallbone, 1996, p. 164).

Concerning the third factor, firm and market locations, Anderson et al. (2010) surveyed 6300 urban and rural British firms during an economic downturn. The authors found that rural small firms performed better than urban small firms (Anderson et al., 2010). Specifically, the authors point out that while both urban and rural small firms “were proactively striving to cope with falling demand, not waiting for things to get better… Rural firms had better sales and fewer price reductions” (p. 45). The authors suggest that this could be due to “local embeddedness, a more stable customer base and less competition” (p. 45). In addition, the authors noted the relative independence of rural businesses. For one, “the rural customer base, which we expect to be local, is also more stable … There are simply fewer competitors” (Anderson et al., 2010, p. 55). The authors conclude: “Independence and self-reliance, albeit manifest in smallness and lack of external linkages and detrimental to growth, actually turn out to be factors influencing the stability of small rural firms” (Anderson et al., 2010, p. 56). These observations are consistent with the analytical framework presented in Fig. 1, showing that distinctions in firm and market location allow for greater resiliency in times of crisis.

Finally, although small firms’ financing strategy (fourth factor, lower half of Fig. 1) were not mentioned in the rural capital approach developed by Bosworth and Turner (2018), literature focusing on rural businesses suggests that firms are also more resilient because of their unique and possibly fiscally conservative financing strategy. In fact, financing plays a key role in businesses’ ability to weather crises and economic downturn. Research by Patterson and Anderson (2003) found that “the majority of rural firms owned their premises and were, therefore, better placed to obtain finance than urban firms, who were more likely to rent or lease their premises” (p. 479). This distinction offers greater resiliency for local firms. In addition, Anderson et al. (2010) observed that a majority of rural businesses tended to rely on internal financing rather than banks, thus creating independence and resilience during major downturns and financial crisis.

In summary, the four modes of rural capital—natural, material, human, and social—together with the four unique characteristics of rural businesses—in employment; in products and product development; in firms and market locations; and in financing—support rural businesses during supply and demand shocks and build resilience during global health and economic crises. This theoretical framework is used to analyze how rural businesses in rural Central Pennsylvania responded in the early 2020 phase of the Covid-19 pandemic. The next section explains the research methodology.

3. Covid-19 in rural America: research methodology

This research asks: How did the rural-American business community experience and adapt to socioeconomic shocks caused by the Covid-19...
The empirical research is based on original qualitative data collected that remain underutilized (Appendix A provides detailed information on land, rivers, and forests offer tremendous resources and opportunities in addition, the Valley is a microcosm of other rural regions with similar change; but it also maintains tremendous development potential. In Central Pennsylvania is representative of former manufacturing regions in the Rust Belt of the United States. Like others, it experienced significant decline due to outsourcing, urbanization, and technological change; but it also maintains tremendous development potential. In addition, the Valley is a microcosm of other rural regions with similar geographic size, natural resources, and population base. In these rural cities and towns, the labor force and property costs are low. There are higher-education opportunities and a diversity of industries. The vast land, rivers, and forests offer tremendous resources and opportunities that remain underutilized (Appendix A provides detailed information on the field site.)

This paper employs a qualitative research methodology using an analytical case study approach (Ngo, 2020; Starr, 2014). As mentioned, the empirical research is based on original qualitative data collected between June 2020 and May 2021, comprising 60 semi-structured interviews. I conducted 25 interviews with business owners and managers of 28 businesses, as some owners owned multiple businesses in 2020. The sample included 19 service businesses and nine manufacturing businesses. Businesses varied widely in size, ranging between one and over 300 employees. In addition, I carried out 18 interviews with local non-profit organizations, government agencies, and community organizers—all working exclusively in Central Pennsylvania. I conducted another 17 interviews with academics and experts, most of whom were of the economic and social scientists researching similar topics and/or similar geographical areas. All interviews were conducted over Zoom and recorded with interviewee permission. The interviews were between one and 3 hours in length. They were transcribed and thematically coded. I also attended a dozen local conferences and workshops designed to gather information from the business community, inform businesses on policies, and coordinate actions to fight the pandemic.

To identify major issues instigated by the pandemic, the initial 11 interviews primarily engaged social scientists researching the Central Susquehanna Valley, and nonprofit organizations such as Small Business Development Center (SBDC), SEDA-Council of Governments (SEDA-COG) and Innovative Manufacturers’ Members (IMC). These meetings identified issues that would later become coded themes for interview data (see Appendix B). Through my university connections with the business community and local government agencies, I was introduced to a number of local businesses, ranging widely from manufacturing, to retail, and other services. In the second half of the data-collection process, I interviewed business owners while meeting with community organizers and researchers to gather new data and croscheck, verify, and finalize observations. I also utilized a large volume of news reporting and academic articles to contextualize and double check the accuracy of qualitative data. All data presented in this paper has been carefully verified with existing literature, other interviewees, or both.

4 This paper adopts the World Bank classification of enterprises which separates all enterprises into three groups. Small enterprises have up to 50 employees, medium enterprises have between 51 and 300 employees, and large enterprises have over 300 employees.

4. A case study of Covid-19 impacts on rural Pennsylvania

The Covid-19 pandemic generated worldwide social and economic upheaval, with disproportional affects along lines of race, class, gender, age, and geography. Between January 2020 and January 2022, about 821,056 Americans lost their lives to the coronavirus pandemic (“U.S. Facts,” n.d.) with 16.72% of those deaths representing rural Americans (“Covid-19 Dashboard,” n.d.). Indeed, rural cities and towns were especially vulnerable to the Covid-19 crisis, due to “long-standing systemic health and social inequities that have put rural residents at increased risk of getting Covid-19 or having severe illness” (CDC, 2021, para. 2). Sixty million Americans are currently living in areas classified as “rural”; and among these individuals, there is a higher percentage of poorer, older, and more health-compromised residents compared to those living in the urban regions.

Many essential workers in agriculture, manufacturing, healthcare, and prison services live in rural areas, as well as immigrants who have access to fewer resources and are more likely to live multi-generationally (Minter, 2020). For example, among the twenty-five rural counties with the highest Covid-19 case rates per capita, twenty had a meatpacking plant or prison in the community (Thebault and Hauslohner, 2020). It is more challenging to socially distance in multi-generational or communal homes, and in warehouses or meat-processing workplaces. Infected workers often take the virus back to their families and communities, magnifying the pandemic effects. Additionally, some conservative farming communities did not appear to understand the full extent of the virus and did not enact proper preventative health measures (Thebault and Hauslohner, 2020).

Throughout most of the pandemic, Covid-19 deaths per 100 infections was consistently higher in rural areas than urban ones, except for a few brief periods (Fig. 2). In the early phase of the pandemic, a lack of attention to safety procedures coupled with mediocre sanitation standards transformed rural areas into transmission hotspots. In 2021, the high death rate was also due to low vaccination rates—about 20% lower than metropolitan areas—and fewer mask mandates and social-distancing rules (Carey and Marena, 2021). Fig. 2 shows that the weekly rate of deaths per 100,000 residents in rural areas surpassed urban areas for most of the pandemic period.

Source: “Covid-19 dashboard” (n.d.).

A defining feature of Covid-19 was that it caused remarkable levels of economic, social, and political uncertainty, especially in the first year of the pandemic (Bahn et al., 2020; Spash, 2020; Ajilore and Willingham, 2020). The next section presents an analytical case study of rural Central Pennsylvania to highlight the experiences of the rural-American business community, and how they adapted their businesses to mitigate the health and economic shocks caused by the pandemic. In particular, the case study focuses on how rural capitals and rural business characteristics provided resiliency during the 2021 economic shock. Finally, the case study concludes with analytical observations of how the pandemic crucially transformed the rural economic and social landscapes.

4.1. Early challenges of the pandemic

The coronavirus reached U.S. shores in December 2019 and quickly led to widespread lockdowns across the nation from March–June 2020. The initial lockdown was particularly difficult for businesses and workers in central Pennsylvania, with year-to-year revenue down more than 40% for some businesses during this period. Pennsylvania unemployment soared from 5.10% to 16.2% between March 2020 and April 2020 (Focus Central, 2021). Shutdowns created severe demand
The owner of a small lumber company explained the rapid changes in the business conditions early in the pandemic during spring and summer 2020:

When Covid-19 hit, we were in the height of activity. In the middle of March, when it was considered an emergency and governments were forcing business shutdowns, when that happened, we actually had to close for two days because we were then considered an essential business ... The challenge was that our customers weren’t open. I couldn’t ship anything and couldn’t generate any revenues because of it. We ended up doing okay in March. April was when we saw, maybe, about a 50% decline in business. May bounced back a little bit—maybe a 25% decline in business. And then June was a pretty good month. Now, July has slowed again, maybe back to 25% slide again.

A chief executive officer (CEO) of a small manufacturing firm explained the initial difficulty when revenue dropped, and clients went into a shutdown:

It was a very difficult second quarter. Fortunately, only 25% of revenue were off, from 2019, through June 30th while April was 50%. Forty-five percent of our sales happen between March 15th and June 30th most years, so it hit us right at the time that we are actually the busiest. We had a million-dollars’ worth of products that didn’t ship because the customers said no to delivery. It has been a very chaotic time, but we have survived.

When an employee contracted a virus, there were additional layers of stress, and operational challenges. The vice president of a small wood-working company explained the difficulties when an employee became sick:

If you have a small business, and you don’t have all sorts of people cross-trained to do the job, when somebody’s ill, that could shut you down. If the rules are you gotta be out for two weeks, then who will do your job? So, this great uncertainty is the biggest constraint—especially when we are going to enter the flu season in a few months.

Businesses also indicated that it was challenging navigating new regulations and unclear guidance from the state. A CEO of a sprinkler-installation company explained the difficulty of navigating the waiver process recommended by the state for operating during the shutdown:

The waiver process was inconsistent. We made the decision in consultation with our council that we were not going to apply for a waiver because we wouldn’t know what the waiver was based on. In other words, there was really no criteria. Some companies doing one thing got a waiver, some got partial. We just went, “this is going to be inconsistent. If we apply and they say no, we’re going to be in direct violation of a state order.” So, we looked at the criteria that came out from the CDC and everything else and said ok, “we’re going to deem certain aspects of our business essential.” We did a lot of work to justify and document that.

What we ended up really doing is we shut down about 40% of our business. For instance, if we were building at a mall, that was shut down. We were actually doing sprinkler work at a company that was making the Covid-19 test kits, so they came down right away and said "hey, we got to keep this stuff going because we make these test kits." And so, it was tremendously confusing. But what we did is we made our own internal decisions based on liability and safety as to what was essential and was not essential. Out of state, pretty much everybody said "you guys are essential, you better be here!".

The economic shocks, uncertainty, and stress of navigating business in an unprecedented pandemic, coupled with early unclear guidance and policies, demonstrate the enormous challenges small and medium business owners faced between March and June 2020. Some businesses seemed to recover quickly, when they were deemed essential. At the same time, others faced a prolonged crisis, as virus cases surged across three major waves in a 12-month period. While some businesses did not survive, others adapted and reinvented themselves. Some businesses even prospered. The resiliency in “fighting” the pandemic and the multitude of challenges show the strength and capacity of rural businesses—despite their size, geographical location, and lack of resources (interviews, 2020 and 2021). The next section analyzes how rural businesses responded to health and economic shocks.

4.2. Business adaptations to global health and economic shocks

For rural American cities and towns deprived of crucial resources to fight the pandemic, the loss, grief, and trauma will be long-lasting, especially among the impoverished population. Yet, rural businesses and people are resilient. Indeed, resiliency helped them weather many structural changes and crises in the past: the rise of globalization, the rapid adoption of labor-replacing technology, urbanization, and the Great Recession from which rural economies never fully recovered (Ajilore and Willingham, 2020). From this perspective, resiliency is built into the culture, operation, and planning of rural businesses.

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Fig. 2. Weekly rate of new infection (left), and weekly rate of new deaths (right) during 2021.
Despite major shakeups in the pre-pandemic U.S. economy—most notably the nationwide shift from manufacturing to services (Ngo et al., 2022)—rural businesses have found ways to make themselves competitive in the global market. They take advantage of rural capitals (see Appendix A) affordable living expenses, and the unique characteristics of their businesses. During 2020–2021, while Covid-19 aggravated social and economic stress among working-class people in rural areas, qualitative data also reveals signs of economic resiliency, optimism, and innovation among businesses and local communities.

Addressing employee health concerns was the first and most immediate response for most businesses. In the manufacturing industry, almost all businesses were deemed “essential,” and thus some of their adjustments involved making sure the workplace was clean and personal protective equipment was adequate. A general manager at a medium-sized manufacturing company noted:

As everyone was, our employees were uncertain about this virus and coming to work and getting sick... We tried to implement things to make the facility safer. We had a visitor screening. We limited visitors. We ramped up our cleaning protocols in the facility. We adjusted entrances, time clocks, lunches, and breaks. We really tried to go out of our way to make sure people felt comfortable coming in here. When somebody was sick or had a sick family member, we got them out of here pretty quickly. We overall didn’t have that many cases in the grand scheme of things that affected our facility. It was definitely a whirlwind.

Interviewees mentioned various ways they addressed employee health concerns, such as hiring a cleaning company, offering masks, sanitizing the workplace, and installing sanitation stations. They also separated workstations to maintain distance and allowed some employees to work from home. Other responses showcased rural businesses resiliency and highlighted the essential role of rural capital and rural businesses characteristics.

4.2.1. Rural capital provided resiliency

Rural businesses in Central Pennsylvania are often perceived as closed groups, where businessowners know each other and maintain strong bonds, likewise sharing information and resources to elevate one another (interviews, 2020–2021). Although they commonly participate in similar business associations, relationships are built through a supply network where they often supply inputs for one another. Interview data highlights that businesses accumulated social capital through connecting and supporting each other during hard times. For example, in email exchanges, businessowners and managers addressed each other as “brothers.” Similarly, during interviews, participants shared anecdotes and affirmations that they “had each other’s back.” One interviewee shared that he received financial support from two suppliers when his business was failing. As cashed dried up and major customers delayed payments, this interviewee’s business survival was entirely dependent on credit assistance provided by other suppliers. In response, he indicated that he would do the same and/or return the favor when others needed help.

Indeed, the pandemic seems to have brought some businesses closer together, capitalizing on but also reinforcing social capital during hard times. In the early period of the pandemic where information and government guidelines were changing quickly, businessowners kept close communications with each other, advising and informing one another on policies and safety measures. Interviews also revealed good will and sharing of resources among manufacturers facing similar uncertainties. One operations manager at a small manufacturing company noted:

When Covid-19 first happened, one thing that we did that was kind of neat was that we erected plexiglass shields between employees at the workstation, so that people could work and have less fear about germs. We have all the equipment and so we did that in the whole facility. We also did that for people that we work with, for example, a couple of board members. If they wanted to use them, we were happy to make them for those people without charging.

Most importantly, some manufacturing companies also used the downtime during spring 2021 shutdowns to invest in employee training, adding material and human capitals—a difficult and costly task when production is at or near capacity. A chief operating officer (COO) of a small manufacturing business described training his workforce while production and sales were down:

We used the [down] time to our advantage: develop people, create the most attractive customer driven organization, so that as opportunities come up, there’s no question that we will be the supplier for others. We did everything from painting at the factory to maintenance on the equipment. We even trained our management staff on lean and continual improvements. We were doing all of that so, as we come out of this, we can be responsive to what our customers need.

Businesses reported that they used funding from the government’s Paycheck Protection Program (PPP) to train and upgrade employee skills, teaching them new equipment, and cross-training them in different parts of the operation. The reasoning for this approach was that once the pandemic ended, they would have the readiest workforce to tackle surges in demand, as Americans would be eager to spend and enjoy their lifestyle again.

4.2.2. Businesses’ unique characteristics provided resiliency

Rural businesses also adapted by relying on their unique characteristics. From an employment perspective, they were fortunate to have a flexible workforce, who not only endured through the shutdown period, but who were also willing to put in additional hours when the shock in demand reverted. Most businesses owners and managers interviewed did not lose workers during the initial shutdown, thanks to the PPP, which provided pay for workers during initial shutdowns. For example, the local UPS shipping office returned to full operation after just a few weeks and all furloughed workers returned within six months. Similarly, a hair salon closed for three months and the owner temporarily laid-off stylists. However, when the salon was reopened, the owner added extra hours. She and her stylists were working 12 h a day, 7 days a week for months straight due to skyrocketing customer demand. All business owners interviewed expressed gratitude that they did not lose workers when their businesses closed. In sum, as businesses adapted to the pandemic, workers adapted with them. From this perspective, worker loyalty and flexibility boosts business resiliency during difficult times.

Many adaptations also took place from the products and production viewpoint. First, all businesses, especially manufacturing companies, embraced technology and virtual work platforms at a speed and extent unimaginable pre-pandemic. A few manufacturing businesses also researched ways to automate production during shutdowns, with the expectation that once the pandemic ended, they will be more competitive. Second, as traditional customers disappeared, many business owners modified production operation, redesigned existing merchandise, or added new products to increase revenue. Small companies with a few employees, and those deemed non-essential seemed to make the most adjustment in the new economic environment, as compared to their manufacturing counterparts. For example, a jewelry store that traditionally depended on downtown foot traffic pivoted to by-appointment and online sales only. A beauty salon offered haircare kits for customers in order to stay in touch with them during the shutdown. A coffee shop offered new drive-by pickup for customers, while on reduced open hours. A business consultant took a new training to add extra services to her business. A basketball coach rented a warehouse to build his own basketball training gym, as traditional gyms closed.

Third, many businesses, especially manufacturing firms, took advantage of the down time to upgrade their product and productions with new equipment and technology. A COO of a printing company observed
that production slowdowns forced decisions to upgrade production systems with more advanced technologies. As a result, the company expects to emerge from the pandemic ahead of its competitors:

As an operation standpoint, it’s really hard to actually have a break to install new equipment and innovations, and so those shutdown[s] actually gave us time and space to integrate. We’ve been investing in the equipment. We spent maybe $150,000 in new machines to help stack the papers and $75,000 in new printers…And we have a new color management system scheduled to be put in next week.

The creative adaptations firms made to their products and production operation during the initial shutdown periods, and later, show strength, determination, and ability to reinvent. They showcase resilience and yield enhanced competitiveness—not just within the business, but also to the community via employment and supply networks.

From the firm and market locations standpoint, Covid-19 forced firms to rethink sales approaches, finding ways to secure new customers when traditional, in-person sales relationships ceased temporarily. Interviewees were adamant about broadening their market, going beyond traditional customers gained through in-person relationship and exploring ecommerce as a new platform. Businessowners described how they had to build a media and online sales presence in just a few months, given the urgency to pivot. For example, a small container manufacturing company went into e-commerce for the first time, while also expanding sales into a market segment previously excluded from their business model. An apparel company moved all sales and promotions online and attracted customers using social-media platforms such as Twitter and Facebook. In other examples, an author and social-media influencer created online courses to attract viewers who had extra time at home; and a popular boutique gym closed and then reopened with online fitness classes and video-coaching.

For some interviewees, one key aspect of their resilience was the ability to diversify customers and service regions beyond the traditional, “local” norm, thus reaching customers in numerous industries and states. Businesses that diversified customers and expanded to new service regions were also less vulnerable to shutdowns, as some states were more expansive in their definition of “essential business.” The CEO of the sprinkler-installation company mentioned above explained the change in revenue and the factors that kept his business dynamic during the pandemic:

One of the advantages we have is we work in multiple areas, multiple states, and multiple industries. We are in distribution, healthcare, residential living, senior living…We got lucky, and we already had a model where we wanted lots of regions, lots of markets, and lots of customers. Lots of everything. So, that really hasn’t changed during the pandemic and that did benefit us…My outlook for 2021 is it is strong. And again, I think our diversification played a huge role in this.

Similarly, a CEO of a small manufacturing company explained how his company figured out new strategy to increase customers and sales while his regular customers were shut down:

While the CFO knows that he is supposed to hold cash instantly when there is a market downturn, small companies are short-term thinkers and see the opportunities and need the equipment to meet them as the bigger guys are on hold. Forty-five percent of our new customers are very small companies who are just working hard, while everybody else is just afraid to do something. This has allowed us to expand our customer base and become better salespeople…In fact, if we can finish the year with 15% off [from 2019] and have grown 30–40% of customers by the end of 2021, we should be in a wonderful position.

Finally, like other rural regions in the U.S., Central Pennsylvania benefitted from the low cost of living, abundant natural resources such as forestry and waterways, and infrastructure that allowed them to access metropolitan within a few hours (see Appendix A for more information). Thus, although rural firms are not located in the immediate major markets, they are not absent from them either. The key business strategy seems to be to leverage the low costs these geographical locations confer, while working hard to create a presence in the larger market. Similarly, the active engagement with ecommerce forced onto rural firms by the pandemic will further help businesses take advantage of their locations, while expanding markets in distant areas.

From a financing strategy perspective, some of the first actions businesses owners took in response to the economic downturn were to cut costs and shore-up cash. A CEO at a sprinkler installation company described early cost-cutting measures:

Probably when we started to hear rumblings of what was going on, I went to accounting and said, “Stop paying bills!” and she kind of looked at me. But I said, “Just stop!” We actually went and drew 100% of our line of credit out, put it in the bank as cash, stopped paying bills, kept collecting, and shut down. My concern was, if my customer stops paying me because they’re shut down, the bank freezes my line, and I’m promising my employees I’m going to pay them, I get caught in a bind … If I have no cash, it doesn’t matter what my rebuild plans are, I’m sunk. We put together a ton of cash, put in the bank, sat on it, and then as soon as customers release payment, we paid vendors but kept that cushion in the middle …. We were down 40% and we cut costs 40%.

Some CEOs also mentioned that the 2007–2008 financial crisis taught them to save for rainy days, and thus they came into the pandemic with reserves. One business owner pointed out that in the last decade, he often purchased new equipment using cash, so that the bank would not have control over his business operation during the economic downturn, giving him the freedom to adapt the business during crises. Though fiscally conservative, these business practices appear to be advantageous in that they provided extra resiliency during the global health and economic shocks in 2020 and 2021.

While popular perceptions and media often portray rural America as slow-moving, backward, and obstinate, my interviewees demonstrated dynamism, resiliency, adaptive capacity, and preparedness. When confronting the crisis, rural capitals provided firms with community supports, and workers with loyalty and flexibility. In addition, rural firms adapted in various ways, leveraging their strength in workforce, products and production, locations, and financing strategy. There is also evidence that some businesses used the shutdown period to their advantage by upgrading production, training workforce, and expanding into ecommerce. Businesses were realistic and resolute about doing all they could to overcome the crisis, rather than surrendering to the forces that took away supplies, customers, and revenues. Almost all interviewees reported that these changes would permanently impact business operation and their relationships with workers, customers, and suppliers—even after the pandemic was under control. The next section explores the second research question: How has the pandemic changed the social and economic landscape of rural America?

4.3. The changing landscape of rural America

The novel coronavirus and the government’s corresponding policy supports during 2020–2021 provided unique opportunities to some firms—namely, time, space, and financial resources—that businesses rarely experience under normal conditions. These opportunities were especially clustered among manufacturing industries, which is beneficial for rural economies, as these industries play a key role in jobs, tax revenue, infrastructure, and community building. In the medium and longer terms, these new opportunities will come with higher demand for workers, and boost employment and labor bargaining power in meaningful ways. This section discusses the positive and negative impacts of the pandemic and how they may transform the rural landscape in coming years.
4.3.1. **Positive impacts of the pandemic**

The pandemic stimulated the creation of rural capital, as it strengthened business owners’ and managers’ ability to respond to crisis without advanced guidance. As business owners learned their ways through the crisis, they not only grew as managers and entrepreneurs, they also transformed their businesses and the landscapes of the rural economy. From the perspective of rural capital, the experience of managing the business through the course of the pandemic added strength, or human capital, to business owners who likewise provided for the rural community through employment, workforce training, and tax payments. For example, the CFO of a fire protection company explained her insights six months into the pandemic:

Coming through this, I have a clarity of decision-making now. We had to make hard decisions. The worst one was telling employees that they will not have health insurance. We paid for their health insurance in March and April [2020], while the majority of them were not back to work yet. And then we had to make the decision that we were not going to continue to do that. In the future, when I have a hard decision to make, I will have much more confidence in my process and my decision.

A human resource director and a general manager of a medium manufacturing firm reviewed the company’s responses one year into the pandemic:

It’s hard to believe that we’re a year into this. Like everyone was, we were a little bit uncertain of what was going on. A lot of things happened really quickly. Last March, we needed to really be on top of guidance from the governor and other authorities on how to best proceed. I feel like we probably handled it as well as we could have. I don’t feel like there’s anything I wish we did differently. Keeping our employees safe was important to us. Keeping production running for our customers was important to us, and we balanced those two things as effectively as we could...We learned to embrace technology a little bit more...and [Covid-19] made us rethink all of the work we used to have...So, it’s definitely been a learning curve. We had a good year despite everything going on in the world. With that comes opportunities and new business as we move forward.

From an employment perspective, Covid-19 has improved the employer-employee relationship. During interviews, business owners and managers communicated appreciation of employees who were committed to working despite the viral threat. Many of them expressed pride in their workforce. Managers and business owners also realized how much businesses are dependent on employee’s ability to adjust and adapt, and their willingness to go the extra mile. Some business owners reported that they spent more time on the shop floor, meeting with employees and weighing in on production issues. These changes fostered greater connection and understanding of workers in ways that improved workforce management, as well as the employer-employee relationship. Overall, although the pandemic may have divided the nation on mask and vaccine mandates, some workforce relationships improved during the first year of the pandemic.

From a products and production standpoint, Covid-19 first boosted consumer demand for goods as Americans grappled to adjust and adapt to the public-health crisis. In particular, many manufacturing firms experienced increased demand for their products, either because of the shutdowns, supply-chain disruption, or new safety requirements. The general manager of a medium manufacturing company specializing in commercial ovens explained unexpected new demands for their products due to the pandemic:

Last year [2020], we had a good year despite everything going on in the world. With that, comes up opportunities and new business as we move forward...We do a lot of business with the medical and pharmaceutical industry, and when there was a shortage of N95 masks, we were able to apply for a EUA [Emergency Use Authorization] to try to get our product into facilities to sterilize and reuse masks and things of that nature.

The federal government reached out to us. We never thought of this from the federal prison standpoint. When they’re changing shifts...how do they sterilize the batons, the keys, the walkie talkies, things of that nature? So, we’re currently working with the FDA to get approval for our equipment to be used to decontaminate not only masks, but other things that are used by multiple people on a daily basis.

With increased demand, many businesses projected healthy growth for the business, employment, and community development. In a March 2021 interview, a general manager of a medium manufacturing company looked back to 2020 and offered insights into the business condition for his firm in 2021:

We had a banner year last year...and this year started out like a firecracker: exploding. We’re very excited about what the future is going to bring to our business...From a revenue standpoint, 2020 was about 20% better than 2019. This year, we think from a revenue standpoint would be flat year-over-year just based on the ramp up of our customers getting back online. But again, we have a very healthy backlog of orders, and we have a very healthy front log of projected orders. And if the front log of projected orders converted, we’re going to probably be, from a revenue standpoint, very close to where we were in 2020.

Second, other businesses spoke of improving their products by adding more value to products in the future, as a part of a business strategy to adapt to the new business environment. As businesses add more value to their goods and production, there will be beneficial spillovers to the workforce, the rural community, and the U.S. economy as a whole. An owner of a small manufacturing company talked about changing his products to meet new market demands and increase value of the products, noting, “I think we’ll be doing more value-added business. We’ll be doing more to the products that we [currently] make, like putting paint and finish on them. We’ll be making more parts maybe. I think we will have to develop some clientele outside of our normal distribution.”

From the firm and market locations outlook, rural businesses were resolute about changing ways to engage with consumers and making plans to attract new customer through social media and online platforms. An owner of a small manufacturing company talked about transforming his business after the Covid-19 shock:

I think that we need to be much more proactive in marketing on a social-media basis. Even if it wasn’t for Covid-19, I would think that we’d have to do that. I notice that in my son’s age group, they do everything on the phone. I really think that there is a huge shift in maybe power or decision-making, it’s going to have everything to do with being able to grasp and utilize those forms of communication. We have somebody that we’re starting in a couple of weeks, and she has more experience in that. That’s going to be our beginning.

From a financing strategy perspective, rural businesses continue to talk about being more fiscally prudent and savings for major shocks which allows for better resiliency. The CFO of a fire protection company explained her insights six months into the pandemic, offering, “I will be paying much more attention to saving for a rainy day, positioning the business to always now be able to handle a major bump in the road—something that I wasn’t as focused on before. I will definitely be more focused going forward.”

Perhaps not surprisingly, some businesses are looking ahead with optimism. I asked one business owner and CEO at the end of an interview: “Would you say Covid-19 is good for business?” He replied: “We learned a lot. We have gotten better at what we do. We communicate better. It is somewhat fortunate for us to be in the manufacturing business to be able to absorb a little bit of the shock, but it really depends on the industry.”
Overall, the pandemic forced critical transformations that may well strengthen rural businesses’ competitiveness. My research suggests that rural businesses are more likely to proceed with more integration, deploying communication technology such as virtual meetings, sales, promotion, and e-commerce that allow them to find new customers near and afar, negating the disadvantage of operating in more far-flung areas. Most importantly, businesses will also focus more on value-added goods and production that together will further enhance their competitiveness in the domestic and global market. It will also contribute to improving rural communities.

4.3.2. Negative impacts of the pandemic

From a rural capital viewpoint, much will change once the nation fully controls the spread of the coronavirus and returns to a new state of normalcy. Covid-19 will have long-lasting impacts on the nation’s mental and financial health. However, the severity is likely to vary across social groups and communities. As the U.S. recovers, the rural American landscape will change. Families who lost loved ones, jobs, and businesses will see the pandemic from a different perspective than those who emerged unscathed. Nevertheless, crises are exhausting and impact the collective outlook on the nation and the future. Some business-owners revealed their vulnerability and exhaustion during interviews. They endured much during the pandemic. For some, there was little refuge against continuing uncertainty, fluctuation in consumer demands and inputs for production, and a feeling of responsibility to their workers and families. An owner of a beauty salon explained her experience and plan coming out of the pandemic:

My goal as an owner has changed due to the pandemic and the stress load that it created on me personally. I was looking to keep every stylist. I have six stylist chairs and I have three treatment rooms upstairs where I can offer additional types of beauty service. My goal was to fill two of the rooms upstairs with skin care prior to the pandemic and have six stylists working at all times in the downstairs. My goal now is to be smaller and maximize profitability with less staff because of how stressful it was to manage during [the pandemic] time. I personally don’t want to face that and be that size anymore. Less is more my priority. My priorities as a person have changed. They want to be bigger, bigger, bigger, bigger. I want to be smaller now. I’m not scaling back by eliminating any employees, but just simply not filling in the spaces as people filter out due to life changes.

This statement is representative in that small business owners find themselves worn out, with changed ambitions and goals. The salon owner was not alone. Others expressed similar sentiments. An owner of a small lumber company talked about his experiences and concerns of future outlook:

The biggest thing holding me back is fear of experiencing downturns. They were very painful, and I don’t want to go there again. I found my comfort zone and it works. That’s a constant struggle of mine… I think probably along with the fear is just lack of confidence. Lack of confident knowledge of the future. Ten years ago, I didn’t have any fears about what direction we were going in. Today, I can’t say that, because I don’t know what’s going to happen. I have to admit that maybe $10,000,000 [annual revenue] is fine, and maybe that’s where we’re at… We always fear the unknown and not being able to have a quality grasp on the future. And, I’m not convinced that the markets are sound …

If I were to be sitting down with a financial planner today as opposed to when I started in this business—I was 33 years old—we started with less than a half a million worth of wood. How did we get from there to where we are today? How did you get from doing $600,000 a year in sales to $10,000,000 a year in sales? Whatever I brought to the business was good; it got us there. Where we go from here, I’m not sure of. All that stuff that I brought probably isn’t going to work forward. I don’t have that drive and confidence level that I had when I was 33.

From a business characteristics perspective, the distress and doubt expressed by interviewees appears to have positive and negative effects on the rural landscape. On one hand, it illustrates the severe exhaustion of owning a business during a prolonged crisis. It will take time and resources for rural-American businessowners to recover. On the other hand, the rapid technological changes and consumer demand will likely alter the longstanding norms of rural business. In the post-pandemic moment, there may be a “changing of the guard” among older business-owners, who may hand over some management aspects to younger successors who are more social-media savvy. They will be more willing to adapt and innovate products, production, and sales. Young entrepreneurs might help reorganize rural businesses, with visions and characteristics more closely matched to the needs of national and global consumers, instead of local customers. From this perspective, rural cities and towns may find themselves open to influences from the outside.

Finally, from a socio-political-economic standpoint, the severe distress, grief, helplessness, and anger enabled by the multiple crises of the last half century have fostered a deep distrust and resentment towards the global elite and the government (Williams, 2017). In this context, Covid-19 further aggravated America’s political divide. An owner of a bar and coffee shop expressed his distress looking into the future:

My expectations and hopes are that at the end of the pandemic is that we can get out of this turmoil. And this is more of a personal than business. I touched on [the future of the] businesses earlier, where I thought the industries would go with smaller seating areas. I just want to see us get over this hatred of everything and everybody. There just seems to be nobody that is happy anymore.

I think all of us feel that way. For instance, waking up this morning, I feel sad for where we’re going. I’m old enough and now, you know, me and my wife adopted a baby. And at 50 years old, and I’m looking to retirement in my future, and I’m scared if I’m going to be able to retire. I’m scared if I’m going to end up losing everything business-wise and all my finances along the way. And at the end of the day, what do I have left to do with my son? Am I going to be delegated to just going down along the river and fishing and saying, “this is all we can do”? I can’t give you the life that I think you deserve? I’m saying that openly, whether we get either president, you know. There is one who is arrogant, but he speaks for angry America. And on the other hand, the political one… He is going to regulate the living crap out of us again. I’m fearful for the minimum wage increases that they want to do. How am I going to pay somebody $15.00 an hour, you know? So, I’m scared across the board.

This statement speaks of the two Americas the country has experienced for some decades. In an urban area like New York, paying someone USD15 an hour is rather common—29.2 percent of urban workers earn less than $15 an hour, compared to 39.5 percent of rural workers (Willingham, 2021). However, this particular businessman cannot see his businesses surviving if asked to pay workers a living wage. As the country moves towards increasing wages due to the federal minimum wage policy and recent labor shortages, pressure on rural business owners will heighten the sense of being left behind.

In sum, Covid-19 has brought new opportunities and challenges to rural America and its businesses. With them, came changes to the rural American landscape. On one hand, businesses that survive the pandemic may find themselves more competitive and well-positioned post-pandemic. In this context, rural America may become more resilient for having endured another major economic and public health crisis. On the

6 Research by Willingham (2021) asserted further that the current federal minimum wage is not offset by lower costs of living in rural areas.
other hand, death, despair, and stress have taken great toll in the people’s mental health and resources. It is undeniable that without major legislative support aimed directly at rural America, it will be decades before rural people and business owners in these cities and towns find their footing.

5. Observations, contributions, and future research

By early February 2022, America lost 159,083 rural lives, or 18.2 percent of all Covid-19 related deaths ("Covid-19 Dashboard," n.d.). Although most rural areas are sparsely populated, the coronavirus had a stronger and more devastating impact on rural communities due to their lack of critical infrastructure, such as broadband access; distrust of science; and a concentration of industries more prone to spread the virus (e.g., meat packing) (Bradlee, 2018; Kristof and Wudunn, 2020). Rural healthcare facilities are fewer and less accessible, and many rural residents do not have adequate health insurance (Case and Deaton, 2015, 2017; Krugman, 2019). Consequently, the novel coronavirus have been devastating for many rural communities and families.

Within the business community, adaptive responses exemplified their resiliency thanks to embedded rural capitals and the unique characteristics of rural businesses. From a rural capital point of view, evidence suggests that rural business relied on existing rural capital to weather the crisis: by sharing information and resources with each other; relying on customer loyalty; and counting on worker flexibility when demand fluctuated. From a business characteristics perspective, rural firms tackled the crisis using all the tools and resources they had available—from adjusting and training their workforce, to modifying and adding new products, to reaching out to new customer using e-commerce, to relying on personal savings. The resolute and diverse re-actions during spring 2020 show that rural businesses are not only pre pared but also as dynamic as their urban counterparts.

The pandemic not only brought tremendous loss and challenges to rural economies and communities, it also forced drastic changes upon businesses and the rural landscape. From a rural capital viewpoint, the death, prolonged sickness and deterioration of mental health among community members rob material, human, and social resources from the community. At the same time, businesses had time and space during shutdowns to upgrade skills and infrastructure, thus adding more human and material resources. Many businesses did not survive the economic downturn, and some had to reduce their size. At the same time, new businesses opened during the crisis, as owners took advantage of low rent and workforce surplus.

From a business characteristics standpoint, while the changes may be less visible, they may also be more impactful in the rural landscape. Most significantly, the changed relationships between businesses and workers, and among partners in the supply chain will hopefully be long lasting, creating more rural capital and better working relationships at work and beyond. Other important changes include adoption of new technology and automation; new business directions, such as decisions to exploit e-commerce and higher value-added production; and increases in mergers and acquisitions across industries. In the long term, these changes could make rural America more dynamic and competitive. However, they could also lead to further market concentration in regions that are less diverse—raising prices, reducing consumer choice, and weakening worker bargaining power.

This paper combines theoretical insights from two separate strands of literature focusing on (1) rural capital and (2) business practices to derive a novel conceptual and analytical approach for studying rural businesses’ resiliency during crises. Furthermore, it offers empirical evidence that supports theoretical insights into businesses-copying strategies, and factors that comprise rural resiliency in times of crisis. Through 60 semi-structured interviews, the case study resists simplistic depictions of rural America as sluggish, deeply conservative, ignorant, pro-Trump, and closed-minded. Instead, the interviews present a thoughtful and caring community that is constrained in significant ways, and making do with what is available. Urban elites and global businesses in large American metropolises take for granted their access to government funds, infrastructure, and information sharing. Obstacles to these supports hamstring rural communities—forcing them to work harder for less money. Material, mental, social, and economic barriers hinder rural businesses, preventing them from accessing a more equitable and sustainable future. Nevertheless, they have persevered thanks to rural capitals created by the land, people, community, and their unique characteristics.

More in-depth research must shed light on rural America, and the biases that divide the nation. Most immediately, what are the factors causing rural businesses to exit the market and close-out? Could this be due to resiliency issues or others? Furthermore, how can we use the forces of change driven by a global pandemic to enact fundamental and developmental transformations in the wellbeing of individuals, workers, and rural communities? How can federal, state, and local government policies unend long-stagnant rural economies and accelerate much-needed economic, social, and political change? Finally, as rural economies transform, how can a new social-compact between businesses and workers, and among businesses themselves, cultivate more cooperative and productive relationships in rural economies? This research paper offers conceptual and empirical pathways to explore these important research questions.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

The data that has been used is confidential.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jrurstud.2022.10.022.

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