SMALL BUSINESS & ECONOMIC CONDITIONS: NAVIGATING VOLITILITY

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ABSTRACT

COVID-19 created a health crisis and contributed to economic factors that are impacting consumers and small businesses, with both sharing interdependencies. This paper explores those impacts by investigating current and projected conditions associated with inflation, supply chain logistics and disruptions, labor shortages, debt accumulation and borrowing habits, and confidence indices on the future of the U.S. economy, in juxtaposition with mixed results on businesses' pivots and innovative responses. Some economists have noted that as of mid-summer 2022, the U.S. economy had experienced a technical recession due to a "rule-of-thumb" definition of two consecutive quarters of declining GDP (Gross Domestic Product). This research is framed to address the volatility and uncertainty that small businesses are facing in the post-COVID-19 economy. It contributes to the literature of entrepreneurship by capturing the conditions and contexts informing the vacillations small businesses continue to endure. By curating observations of disparate data sources, patterns have emerged which may point to solutions for navigating the future. Many data points are confounding. On the one hand, GDP is up, and unemployment is down. On the other hand, ironically, the tech sector has been engaging in layoffs with several entities doing so for the first time in their respective histories (many are attributed to over-hiring during the pandemic); consumer debt is reaching an all-time high, while consumer sentiment has remained low and flat for approximately a year. As a result, uncertainties about assessing economic conditions and a trajectory, remain. For example, the National Bureau of Economic Research (NBER)[1] – comprised of a body of economists that are regarded by many as arbiters in making such determinations – has not, decided. As far as the management and mitigation of negative economic conditions go, it does appear that there is continued volatility ahead for consumers, small businesses, and the U.S. economy at large.

Keywords: *COVID-19, inflation, recession, small business, entrepreneurship, economy*

[1] Business cycle dating procedure: Frequently asked questions. (2022, August 15). Retrieved from https://www.nber.org/research/business-cycle-dating/business-cycle-dating-procedure-frequently-asked-questions

INTRODUCTION[2]

The U.S. and global economy suffered greatly due COVID-19 (Adams-Prassl et al., 2020; Amuda, 2020; McIntyre-Mills, 2020), with some small business sectors and occupations faring worse than others. Among those business sectors that were impacted the most, were those that involved close personal contact such as bars and restaurants, hotels (Gunay & Kurtulmuş, 2021), transportation (Rimmer, 2020), tourism at large, and personal services such as nail and hair salons (Fairlie, 2020; Obrenovic et al., 2020). Widespread "lockdowns" (Gopinath, 2020; Greene & Rosiello, 2020) and shutdowns of large and small businesses, parks, libraries, places of worship, government offices, and numerous other entities, impacted society at large (Barone, 2021; Greene & Rosiello, 2020). Some business closures that were intended to be temporary in nature, became permanent. As such, COVID-19 brought with it "both a health crisis and an economic crisis" (Stephens et al., 2020, p. 427). Thus, given additional coronavirus strains that have arisen (Bollinger & Ray, 2021), and the acknowledgement of "long COVID" by the medical community, the full impact over time (*Science & tech spotlight: Long COVID*, 2022) of this pandemic remains uncertain.

Next, inflation struck, affecting individuals as consumers (Rubin & Harrison, 2022) and small business owners (*Small business and inflation*, 2022; *Survey: Small business challenges worsen amid record inflation and workforce shortages*, 2022) alike (a majority of small businesses have no employees). Once gasoline, and importantly diesel fuel—vital for the production and/or transportation of almost all goods in one way or another—reached record highs (*Gasoline and diesel fuel update*, 2022; *What are the possible causes and consequences of higher oil prices on the overall economy?*, 2007), price increases began to deal mighty blows to personal and small business finances. Subsequently, consumers are confronting myriad price increases thereby straining finances considerably (Daniel, 2022). It is important to note that gas prices have leveled off to $3.42 in late-March 2023 (*Gasoline and diesel fuel update*, 2023), but are still a long way off from the pre-pandemic price per gallon of $2.53 in January 2020. Further, during the period associated with this research, gas prices did reach an all-time high nationally.

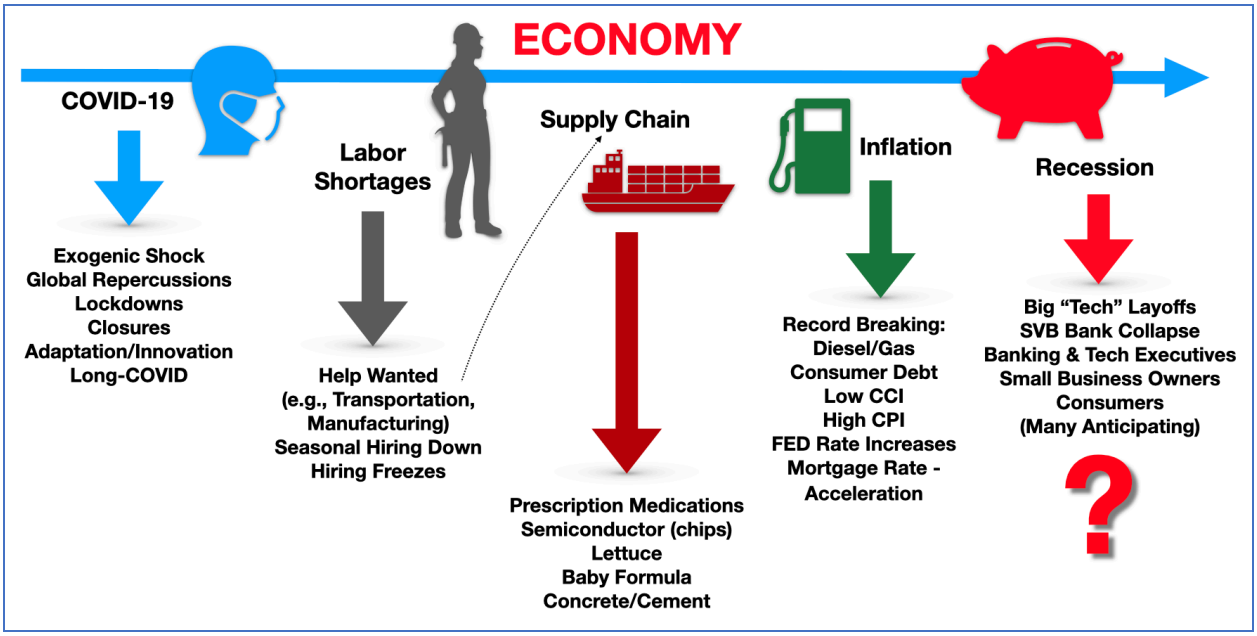
While inflation is a complex phenomenon in our economy, two key contributing factors to inflation in its present iteration were exacerbated by COVID-19 and are identifiable in the supply-side (through the supply chain) and demand-side (through consumer demand) (Santacreu & LaBelle, 2022). Small businesses are still suffering from inflation as well, and they do not anticipate relief any time soon (*Small business and inflation*, 2022; *Small business owners expect a recession, but few are ready for one*, 2022; *Survey: Small business challenges worsen amid record inflation and workforce shortages*, 2022). For the past several months, surveys (as well as the Federal Reserve and several banking industry executives), have been predicting the

[2] This paper, while it is a unique work product, is connected to an ongoing research stream (including literature review databases) pertaining to the small business and gig economy.

likelihood of a recession looming, or not. As such, this present research is necessarily conceptual in nature.

The paper is organized in the following manner. Context to our literature search strategy and approach is reviewed, noting the building of an extensive local database including extant literature and secondary data sources. Next a review of COVID-19 and the turbulence (Reed, 2022) and opportunities it created within the business environment is presented. An extension into the impact of what we are referring to as a "long-COVID economy" (Bach, 2022) is discussed (including labor shortages, lingering supply chain disruptions, and drops in consumer and small business confidence). These factors' contributions to inflation are discussed and further analysis into the unprecedented increases in short- (e.g., "basket of goods" as measured by CPI), mid- (e.g., car loans), and long-term funding (e.g., home loans) sources are explored in juxtaposition to U.S. consumers' rising debt to record levels (*Quarterly report on household debt and credit: Q 4*, 2023). Finally, amidst difficult economic conditions, growth in the number of businesses in the U.S. has reached record applications. Many businesses also pivoted and redirected their capacity toward new and novel outputs through innovation (Adam & Alarifi, 2021; Gurchiek, 2020; Von Krogh et al., 2020). This is reviewed in context of entrepreneurial growth, potentially spurred by the disruption from COVID-19, and the further strengthening of the gig economy. What happens next will be influential to the conditions impacting U.S. small business. So as to aid readers in better understanding the range of subtopics which are considered relevant to this research and their organization, a conceptual framework is offered below in Figure 1:

FIGURE 1
From COVID-19 to a Recession?



LITERATURE SEARCH STRATEGY

It should be noted that this research is part of an ongoing effort and is comprised of several databases (holding artifacts collected across time). Library database collections including those from, *Ebsco ABI/INFORM and ProQuest* have been accessed. Setting limits as follows, filters were applied to these library database searches: full text available and scholarly sources. An additional filter was also applied to restrict results to business disciplines. The reasons for narrowing results to business disciplines were two-fold. First, searches for scholarship associated with COVID-19 produce millions of results across disciplines (in an unfiltered library database search, the term "COVID-19" produced 10,677,916 results). For instance, databases focusing on medical/health care disciplines are densely populated. Secondly, this present research seeks to make a targeted contribution to the literature of small business and entrepreneurship. Prior searches have incorporated terms such as: 1) small business and entrepreneurship; 2) the "gig" economy (including freelancing and similar terms); 3) new product development; and 4) innovation. Most recently, the aforementioned searches were applied in conjunction with additional terms: COVID-19, pandemic, inflation, and recession. Accordingly, 541 artifacts were entered into a primary (local) database for this present paper.

Beyond library databases indicated above, artifacts have been curated from additional sources. These include publications from research organizations (e.g., NFIB Research Foundation); consulting firms with research arms or sponsoring research (e.g., Goldman Sachs); and data from government agencies. As scholarly researchers, avoiding popular press sources would be preferable. However, in some instances these have been useful at the very least, as a starting place, especially where up-to-the-minute news is concerned. Additionally, secondary qualitative data can take the form of government reports, press sources, and television and radio output, relevant social media content, among other sources. Secondary qualitative data methods have been identified as a promising resource for understanding dynamic circumstances (Rabinovich & Cheon, 2011). This repository of extant literature frames the current environmental conditions of small business in the U.S. due directly to the lasting impacts of the COVID-19 pandemic, the sustained growth of inflation, and the efforts to mitigate a recession. Discussion of the impact of these exogenous contributors on the U.S. consumer will also be included.

THE CORONAVIRUS GLOBAL PANDEMIC

COVID-19 "caused massive dislocation among small businesses just several weeks after its onset" (Bartik et al., 2020, p. 17656). The pandemic "generated disconnected supply chains, logistics challenges, shortage or unavailability of key resources, extreme price distortions, government restrictions on the functioning of many industries and markets, the need to redesign the working processes for many industries, consumer pessimism, and erosion of trust in global trade" (Morgan et al., 2020). While some small businesses were able to pivot (Knowles et al., 2020; Manolova et al., 2020) in response to what was clearly an exogenous shock to the global

economy (Cowling et al., 2020; Morgan et al., 2020; Roper & Turner, 2020), others were not, resulting in closures and failures (Barone, 2021; Fairlie, 2020; Greene & Rosiello, 2020).

As observed by Fairlie (2022) in work published by the Ewing Marion Kauffman Foundation, such upheaval also resulted in new startups: "The large-scale damage to the economy that began near the end of March 2020 showed up in more movement into and out of self-employment and new business activity during 2020 than in previous years" (p. 6). However, Fairlie also distinguished two different scenarios regarding these startups. Some were based on perceived opportunities, whereas others were due to necessity (such as unemployment). Considered one of the fundamental theories capturing the motivation for pursuing entrepreneurial endeavors, the post-COVID-19 economy inform conditions that contribute to the push-pull theory of entrepreneurship (Gilad & Levine, 1986). This theory classifies the entrepreneurial motivation to pursue ventures based on a push condition (out of necessity) or pursue ventures based on a pull condition (through observed opportunity) (Alam et al., 2021).

A 'LONG COVID' ECONOMY, BUT HOW LONG?

At this present point in time, the pandemic cannot be dismissed as completely abated, although many aspects of life (and business) have returned to a "next normal" (McLaughlin, 2022). Besides variants, a report from the Brookings Institute analysis of primary data from the US Census Bureau, stated that a phenomenon called "long COVID" affected 16 million working-age Americans (according to estimates) with returning, ongoing or new health problems. The estimate of the impact of long COVID has been as high as 4 million persons who are still being impacted by this virus and unable to work due to the associate symptoms (Bach, 2022).

It should also be noted that while many individuals are experiencing long COVID, based on the economic conditions whereby U.S. small businesses trade goods and services it appears that we are experiencing an economic version of long COVID. Meaning, there are still lingering impacts of the pandemic affecting current economic conditions, e.g., labor shortages (Ferguson, 2022), subsequent supply chain lags and breakdowns (Santacreu & LaBelle, 2022), increased costs attributed to inflation (Rubin & Harrison, 2022; *Survey: Small business challenges worsen amid record inflation and workforce shortages*, 2022), and increasing interest rates associated with loans for homes, cars, and small businesses (Holgate, 2022; *Minutes of the Federal Open Market Committee [FOMC] September 20–21, 2022*, 2022; Stauffer & Reed, 2022). It seems that the enduring economic impacts of COVID-19 (long COVID) continue to make long-term funding (home loans), medium-term funding (car loans), and short-term real time costs (CPI) more difficult to access and use. For example, directly long COVID is impacting the availability of workers as nearly 4 million workers in the U.S. are battling health effects and are still sidelined (Bach, 2022).

While in 2021 businesses reported an unprecedented total number of 3.8 million new jobs created, the workforce remains nearly equally and oppositely down at roughly 3.3 million workers available (Ferguson, 2022). Thus, year-to-date, there are around 3.8 million more jobs than the year before, but roughly 3.3 million fewer workers in the market to do the work. Contributing to this discrepancy between "more jobs" and "fewer workers" is the 2.4 million

excess retirements (representing more than half of those who left the labor force from 2020-2021) induced directly to COVID-19 through 2021-2022 (Faria-e-Castro, 2021). Compound this with the impacts of long COVID on the nearly 4 million workers within our economy and the labor supply challenge begins to make even more sense. Observed evidence of this can be found on almost any Main Street across the U.S., whereby it is a common occurrence to see signs on businesses stating, "Labor Shortage, we are closed," or "Be prepared for longer waits due to labor and staff shortage," and "Labor Shortage, we are hiring."

From vacancies associated with labor shortages observed in the restaurant industry to the percentage of vacancies across manufacturing jobs still being much higher than pre-pandemic rates, there are not enough workers to fill the positions (*Job openings levels and rates by industry and region, seasonally adjusted*, 2022). In turn, there is not enough 'people power' to manufacture the products and serve the existing demand. Cripple (or couple) this with tapering supply that is becoming increasingly costly to produce — and deliver, due to additional labor shortages in the transportation sector — and it is evident that there are still symptoms associated with the impacts of the global pandemic (Nummela et al., 2020; Salisu & Akanni, 2020) that are affecting both consumers and small business. In context of supply chain logistics and management, long COVID is still present.

INNOVATION AND PIVOTING

Reed (2022), from a survey of 656 firms nationwide, found that almost a quarter (23%) of businesses actually benefited in their financial performance from COVID-19, observing that opportunities can still be "identified and exploited even when environmental turbulence appears high or short-lived" (p. 604). Similarly, other researchers have documented the many instances of pivoting among both large and small businesses as well as other organizations, such as government offices, places of religious worship, and on the part of non-profit organizations (Lahm Jr., 2021). While the pandemic in some instances caused organizations and society at large to adopt and implement changes that were uncomfortable, other adaptations have produced lasting effects. As examples, while telemedicine was foreseen as a long-term trend, COVID-19 rapidly accelerated its adoption, and online shopping with curbside pickup options expanded substantially (Smith, 2020). The march of change continues on many fronts. "Technology and digitalization come as new entrepreneurship opportunities and bring new solutions and possibilities for innovation (3D print, IoT, Artificial Intelligence; Blockchain, etc.)" (Carvalho & Madeira, 2021, p. 2). Ferasso et al. (2018) observed that while certain industries have increased potential for new business opportunities (nanotechnology, biotechnology, and aerospace were indicated, but there are many more, such as A.I. and robotics as applied to myriad uses from services to manufacturing), knowledge and resources from around the globe may also be required.

Along these lines, Golder et al. (2009) discussed the relevance of core technologies. Examples would include vacuum tubes in early radios, televisions and computers, which were then superseded by new ones: first transistors, and next, microprocessors. Bezhovski et al. (2021) noted that while traditional means of developing business ideas (e.g., brainstorming,

design thinking) are well represented in published scholarly literature, new opportunities have arisen due to information and communication technologies (ICT). Examples they regarded as the most prominent included "entrepreneurial communities, online marketplaces, social networks (as bases of customers), random idea generators, surveying tools and services, tools based on search engine data, competition analyzing tools, idea crowdsourcing, idea mining techniques, idea management systems, etc." (Bezhovski et al., 2021, p. 325).

Corporations (at least those with the wherewithal to collect and leverage big data) have also been increasingly focusing on business intelligence (Demir, 2018, p. 13), with many using systems incorporating A.I. (Marion et al., 2020; Thiel & Masters, 2014). Also, several e-commerce (e.g., store) platforms are available for business start-ups (Raj & Athaide, 2022), such as Etsy, Shopify, Google Play Store, eBay and Amazon; these have made it easier than ever to establish a business presence and engage in transactions through their respective payment processing systems. "As advanced economies transition through various phases of economic value creation, e.g., from products to processes, from tangible goods to intangible experiences, they can leverage technological innovations to improve efficiency and enhance effectiveness" (Raj & Athaide, 2022, p. 487).

NEXT INFLATION

Analysis in a series of *Wall Street Journal* articles first published in April 2022 and updated every few weeks since then noted that "U.S. inflation accelerated to an 8.6% annual rate in May, its fastest pace in 41 years" (Rubin & Harrison, 2022). This figure was based on the most recent Consumer Price Index (CPI) at the time, before seasonal adjustment, from the U.S. Bureau of Labor Statistics (BLS). According the CPI (then, in May), "the [inflation] increase was broad-based, with the indexes for shelter, gasoline, and food being the largest contributors" (*Consumer Price Index - May 2022*, 2022). June was even worse as, "the all items index increased 9.1% for the 12 months ending June, the largest 12-month increase since the period ending November 1981" (*Consumer Price Index - June 2022*, 2022). Although percentages have been coming down from their highs in 2022, the CPI has continued to remain higher than the Federal Reserve's (2 percent) target. Additional data are presented in Table 1, below:

TABLE 1[3]
U.S. Bureau of Labor Statistics CPI - All Items Index (March 2022 – February 2023)

Month of Report	Percent Increase	Largest Contributors
March – 2022	8.5%	gasoline, shelter, and food
April – 2022	8.3%	shelter, food, airline fares, and new vehicles
May – 2022	8.6%	broad-based, with the indexes for shelter, gasoline, and food being the largest contributors
June – 2022	9.1%	broad-based, with the indexes for gasoline, shelter, and food being the largest contributors
July – 2022	8.5%	all items index unchanged over the month
August – 2022	8.3%	shelter, food, and medical care indexes were the largest of many contributors
September – 2022	8.2%	shelter, food, and medical care indexes were the largest of many contributors
October – 2022	7.7%	shelter contributed over half of the monthly all items increase, with the indexes for gasoline and food also increasing
November – 2022	7.1%	shelter was by far the largest contributor
December – 2022	6.5%	gasoline was by far the largest contributor
January – 2023	6.4%	shelter was by far the largest contributor to the monthly all items increase, accounting for nearly half of the monthly all items increase, with the indexes for food, gasoline, and natural gas also contributing
February – 2023	6.0%	shelter was the largest contributor to the monthly all items increase, accounting for over 70 percent of the increase, with the indexes for food, recreation, and household furnishings and operations also contributing

The CPI is based on urban consumers' out-of-pocket expenses (*Differences between the Consumer Price Index and the Personal Consumption Expenditures Price Index*, 2011; McCully et al., 2007). Additionally, the BLS CPI Calculator computes the value and purchasing power of an amount of money in alignment with a market basket of consumer goods and services through a year-to-year comparison. For example, if a consumer had $100 in August 2016 to purchase a market basket of goods and services, this individual would need $106 in August 2019 (6% increase in costs). To purchase that same market basket of goods and services from 2019 in

[3] Table developed using Consumer Price Index (CPI) data taken from monthly reports, before seasonal adjustment, from the U.S. Bureau of Labor Statistics (BLS). Retrieved from https://www.bls.gov/bls/news-release/cpi.htm#2022

2022, one would need $116 (16% increase in costs), approaching 3x's the previous comparable interval.

Table 2 presents the percentage increase in cost associated with an identical market basket of goods and services according to the CPI. Specifically, it demonstrates the purchasing power of $100 in the starting year and then demonstrates how much a consumer would need to pay to purchase the same market basket of goods and services 3-years later. Each time interval represents a 3-year period running from September to September annually starting in 2001 and running to 2022. The most recent 3-year interval from 2019-2022 represents the highest increase in costs (example of inflation) in the past 20 years by at least half in all but one other interval (with 2004-2007 at 9.72%). Additionally, this represents a pre-COVID-19 to post-COVID-19 snapshot and the impact that has accrued during this time. The data depicted demonstrates the increasing costs and decreasing purchasing power that a consumer has with their dollar and is a supportive indicator of inflation.

TABLE 2[4]
U.S. Bureau of Labor Statistics CPI since 2001 in 3-year intervals

September to September	Starting Value	Ending Value	Percentage Change
2019 – 2022	$100	$115.60	16%
2016 – 2019	$100	$106.35	6%
2013 – 2016	$100	$103.11	3%
2010 – 2013	$100	$107.19	7%
2007 – 2010	$100	$104.77	5%
2004 – 2007	$100	$109.79	10%
2001 – 2004	$100	$106.51	7%

As examples of observed consumer price increases (via authors' own experience using Amazon.com) illustrate, the price of a Motorcraft oil filter was $3.97 at the end of April; by mid-June it was $5.93, and as of October 2022 it increased to $9.99 before settling back to $5.93 once again. A store brand (Walmart, "*Great Value*") jar of mayonnaise went from $1.94 at the end of May; by mid-June it was $2.80; and by late-September it was $3.48 (months cited are all in 2022 and based on purchase histories maintained by merchants in online user accounts). Such increases are far more than the 8.2 percentage rate reported by the BLS Statistics (covering the period from September 2021 to September 2022) and even greater than the 15% increase identified with the CPI calculator. It is evident that much of the past 3-year's (pre- to post-COVID-19 economies) has occurred in the past few months. Additionally, these examples, do not address the widely used strategy known as shrinkflation, "reducing the amount of product provided while the price remains the same" (Yao et al., 2022).

[4] Table developed using Consumer Price Index (CPI) data, before seasonal adjustment, and a "CPI Inflation Calculator" from the U.S. Bureau of Labor Statistics (BLS); percentage change figures are rounded. Retrieved from https://www.bls.gov/data/inflation_calculator.htm

There are numerous explanations as to the root causes of inflation, but given that the cost of fuel impacts nearly all goods, and services such as airline passenger transportation (*What are the possible causes and consequences of higher oil prices on the overall economy?*, 2007), it is a major contributor. According to the U.S. Energy Information Administration's data, as of July 11, 2022, the average price for diesel in the U.S. was almost $5.57, and the average cost of gasoline was $4.65 (*Gasoline and diesel fuel update*, 2022). While the price of gasoline decreased over the summer from a high of over $5.00 in June, the current (as of writing) pricing ($3.42) is nowhere near pre-pandemic prices, e.g., $2.53 per gallon in February 2020 (*U.S. all grades all formulations retail gasoline prices (dollars per gallon)*, 2022). The price of gasoline in conjunction with the increasing CPI continues to increase monthly costs for consumers and businesses.

Additional issues are labor shortages coinciding with COVID-19 (Nelson, 2021) and continuing, which are associated with supply chain disruptions (Craighead et al., 2020; Ketchen & Craighead, 2020). Disruptions in the global supply chain continue to shine new light on interdependencies (Santacreu & LaBelle, 2022). Inflation does tend to hurt those with lower wages and fewer resources disproportionately, i.e., "the costs of inflation are borne most heavily by the poor" (Nallari & Griffith, 2011). As costs increase at a faster rate than wages can keep up, any surplus in the form of savings or investments is cannibalized by increased expenses associated with inflation.

The impacts of consumer price increases may be generally associated with small business in that they change buying behavior. Findings from an April NFIB (National Federation of Independent Businesses) Research Center report indicated that 62% of small employers identified "inflation is having a substantial impact on their business" (*Small business and inflation*, 2022). The same survey found that 99% of respondents reported that energy and gas costs are having some level of negative impact on their businesses, and of these, "over three-quarters (77%) of small employers reported that rising prices for 'fuel (gasoline, diesel, fuel oil, etc.)' is a substantial contributor to higher costs."

For consumers, the increased costs in accessing funding by way of loans for homes and cars are also rising and may become increasingly prohibitive for investment. Both high inflation and rising interest rates have led to mortgage rates that are "more than twice where they were just at the start of 2022" (Stauffer & Reed, 2022). Perhaps most interesting and telling of the economic conditions over COVID-19 and post-COVID-19 economies is that December 2020/January 2021 saw the lowest 30-year fixed mortgage rate in the history of home loans at 2.65%, based on historical data taken from Freddie Mac (*Primary mortgage market survey*, 2022).

Additionally, the increase in rates from 2.65% in early-2021 to over 7% (or more, depending on borrower capabilities) in mid-2022 constitutes one of the fastest escalations of mortgage rates in recent history, corresponding to a 185% increase over an 18-month period. According to a Mortgage Bankers Association survey (ending week of October 14, 2022): "Mortgage applications fell yet again last week, reaching their lowest level in 25 years, while mortgage interest rates hit their highest level since 1997" (Kan, 2022). Nevertheless, some are predicting a return to double digit rates in the year 2023 (Wiltermuth, 2022). Car loan average

interest rates have also increased, as have car prices (Holgate, 2022), and have yet to return to pre-pandemic rates.

In terms of purchasing power, access to long-term funding (e.g., home loans), medium-term funding (e.g., car loans), and short-term real time purchasing (e.g., market goods in the form of services and products) have all been negatively impacted by the lingering impacts of the global pandemic. All of this taken together adds up to impact lives in the present and confidence in the future of the U.S. economy (Daniel, 2022; Elmassah et al., 2022). Worker shortages and supply chain challenges impact small business's ability to create value and meet customer expectations and increased costs and stagnant wages put pressure on consumers' ability to meet their owns needs and in turn impacts their confidence in the economy's future.

Consumer's confidence is one of the leading indicators of where an economy is and where it is going in the future (Elmassah et al., 2022). Confidence in an economy's future is apropos and particularly relevant during times of turbulent political and economic uncertainties (Kellstedt et al., 2015). Analysis from a June edition of the University of Michigan Surveys of Consumers stated, "the early-June decline in consumer sentiment, settling 0.2 Index points below the preliminary reading and 14.4% below May for the lowest reading on record" (Hsu, 2022). Year-over-year (June 2021 to June 2022), the index fell by a striking -41.5%. An article on *Fortune's* website mentioned the existence of multiple other reports with similar findings (pointing to deteriorating conditions), adding: "If you ask economists, the drop is cause for concern, because consumer confidence is a key indicator of the potential for a recession" (Daniel, 2022).

While there are numerous compounding economic factors that have been exacerbated by COVID-19's lingering impacts, there have been positive signs pointing towards growth. According to the BEA the U.S. in 2022 Quarters 3 and 4 realized a 3.2% (Q3) and 2.7% (Q4) annualized increase in GDP, which was a bounce back after 2022, Quarters 1 and 2 which reported consecutive negative GDP growth (this scenario is typically regarded as being indicative of a recession). Couple this bounce back in GDP with a 50-year low in unemployment (3.4% in January and 3.6% in February 2023) these are some signs suggesting stabilization (*United States unemployment rate: March 2023 data*, 2023). Additionally, it should be noted that the U-6 (an indicator that documents those people who want to work but have given up searching and those working part-time because they cannot find full-time employment), is also at an 20 year low at 6.9% as of the end of 2022 (*Local Area Unemployment Statistics (LAUS): Alternative measures of labor underutilization for states, 2022 annual averages*, 2023). These optimistic observations do not overshadow the challenges still being experienced within the post-COVID-19 economy, and they contribute to the mixed signals being observed nationally.

CONSUMERS: BORROWING TO SURVIVE

To only report erosion in savings would be an inadequate portrayal, for it is also the case that consumers have increasingly been going deeper into debt. While current data does not necessarily capture an increase in small business borrowing and debt, there is a possibility that these realizations are still some months away. The Brookings Institute noted that, "both the

overall macroeconomy and business survival fared much better during the pandemic than initially feared or historical experience would have predicted" (Chodorow-Reich et al., 2022). Authors attributed this to the use of videoconferencing, COVID-19 testing protocols, the quick development of vaccines, and massive and unprecedented policy responses providing support for business. Among these policy responses were the creation of the Paycheck Protection Program (PPP), Economic Injury Disaster Loan (EIDL), targeted aid to industries most affected (such as airlines and the restaurant industry), expanding corporate bond purchase authorizations through the Corporate Credit Facilities (CCFs), and providing loans through the Main Street Lending Program (MSLP) to midsize corporations. Beyond survival, many businesses were able to partially or fully reopen sooner than anticipated. The U.S. Small Business Administration's (SBA) EIDL program provided support for nearly four million small businesses and nonprofits through its disbursement of $390 billion in loans (*Four million hard-hit businesses approved for nearly $390 billion in COVID Economic Injury Disaster Loans (EIDL)*, 2022).

The issue is that once consumers continue to feel the impacts of inflation along with a highly anticipated, if not current, recession, on their pocketbooks, plus rising interest rates (*Minutes of the Federal Open Market Committee [FOMC] September 20–21, 2022*, 2022; Serwer & Croll, 2022), businesses will certainly be impacted, and it is possible that we are still some months away from this. The additional cost of living has pushed many into deeper debt. According to a report by the New York Federal Reserve on the total national household debt across housing and non-housing debt, it is evident that the accumulated growth in each debt type "reflects increased borrowing due to higher prices" (*Quarterly report on household debt and credit: Q 2*, 2022). It was also observed that in the report, which was based on Equifax credit data, that household debt reached $16.15 trillion, which represents a record high (Caporal & Albright, 2022). Moreover, according to an article posted to *Liberty Street Economics* (a blog site connected with the Federal Reserve Bank of New York), authors observed increasing delinquency rates, especially in lower income areas and among sub-prime borrowers: "We are seeing a hint of the return of the delinquency and hardship patterns we saw prior to the pandemic" (Haughwout et al., 2022).

"Prices for both homes and motor vehicles have been rising, and the borrowing amounts have risen in tandem – in fact, the average dollar amount for new purchase originations of *both* autos and homes is up 36 percent since 2019" (Haughwout et al., 2022). Credit card debt balances have also been visibly affected by inflation. A $46 billion increase in balances on credit cards in quarter two were among the largest documented in the New York Federal Reserve dataset since 1999 and this demonstrated the largest year-over-year percentage increase in source of debt (credit cards) in more than 20 years (*Quarterly report on household debt and credit: Q 2*, 2022).

This visible manifestation of inflation through credit card debt has been attributed to the purchase of consumer goods and services purchased on the cards. Finally, as illustrated in Table 3, the growth in total household debt from 2021 to 2022 was 2-5 times any other year's increase in the past eight years.

TABLE 3[5]
U.S. National Housing and Non-Housing Debt from 2015-2022 (in trillions of dollars).

YEAR Q1	Housing Debt	Non-Housing Debt	Total Debt	% Increase year-to-year	Housing Debt % of total	Non-Housing Debt % of total
2022	$11.71	$4.45	$16.16	10.31%	72.46%	27.53%
2021	$10.50	$4.15	$14.65	2.44%	71.67%	28.32%
2020	$10.10	$4.20	$14.30	4.60%	70.63%	29.37%
2019	$9.65	$4.02	$13.67	3.40%	70.59%	29.41%
2018	$9.38	$3.84	$13.22	3.93%	70.95%	29.05%
2017	$9.08	$3.64	$12.72	3.84%	71.38%	28.61%
2016	$8.85	$3.40	$12.25	3.37%	72.24%	27.75%
2015	$8.68	$3.17	$11.85	1.72%	73.25%	26.75%

STARTUPS SURGE

According to Robert Fairlie, the lead researcher for the Kauffman Indicators of Early-Stage Entrepreneurship (and an economics professor at the University of California, Santa Cruz), based on 2021 data "the nation's startup spirit remained strong" (Meyers, 2022). But Fairlie also noted that due to factors such as unemployment and limited other options, many startups were likely born out of necessity. Over the most recent three-year period (2020, 2021, & 2022), small business growth has continued to outpace total pre-pandemic growth at an accelerated rate, e.g., 2018 – 3.5 million and 2019 – 3.5 million; growth was 2020 – 4.4 million, 2021 – 5.4 million, & 2022 – 5.1 million) (*Business Formation Statistics (BFS)*, 2022)[6]. Important to note is a majority of the new businesses that have been started are not considered high-propensity businesses. The U.S. Census classifies those businesses that have a "have a high-propensity of turning into businesses with payroll" (*Business formation statistics: Definitions*, 2022) as high-propensity. Such businesses are identified by the acronym, HBA, which refers to High-Propensity Business Applications; one tool to identify businesses that are likely to have employees is through declarations in the IRS form SS-4: Application for Employer Identification Number (EIN).

Among other data, an EIN application form collects responses to questions such as, "Highest number of employees expected in the next 12 months"[7]. Other indicators of a likelihood having employees include the NAICS industry code (i.e., type of business) with which

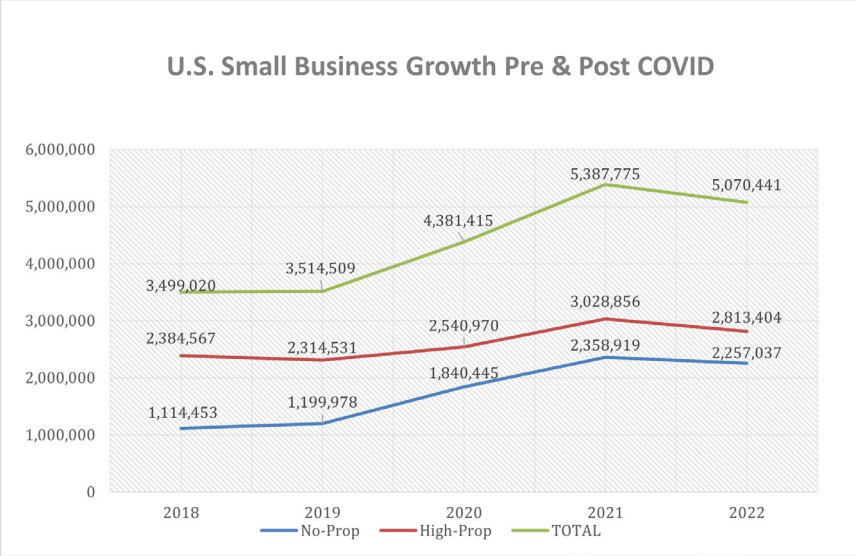
[5] Table based on data taken from https://www.newyorkfed.org/microeconomics/hhdc. Retrieved October 28, 2022.

[6] Numbers are rounded.

[7] Taken from line 13, online version of IRS form SS-4, current as of October 22, 2022. Retrieved from https://www.irs.gov/pub/irs-pdf/fss4.pdf

a startup is associated. Growth is evident in both high-propensity and no-propensity businesses, but a majority of the celebrated new small business growth is in businesses that are likely to *not hire* employees or manage associated payrolls. More precisely stated, according to the U.S. Small Business Administration's (SBA) most recent reporting, 81%, or 26,485,532 firms, have no employees (the SBA uses the term "nonemployer firms") whereas 19%, or 6,055,421 firms, have paid employees (identified as "employer firms") (*Frequently asked questions about small business*, 2021).

FIGURE 2[8]
U.S. small business growth – Pre & post COVID-19



While most of these results were prior to the proximity to realized inflation and recession on the horizon, attributing the challenges to the pandemic is appropriate, but there also seems to be a perception and action-orientation focused on opportunity associated with it as well. This phenomenon has been attributed to what disaster sociologist Charles Fritz (1996) identified as a "form of societal shock" (p. 55). It is possible that the challenging conditions associated with COVID-19 have impacted entrepreneurs to do what entrepreneurs do: take into hand and create value from difficulty. As the adage goes, "necessity is the mother of invention" (with origins often attributed to Plato's *Republic*) and is demonstrated each time individuals, nations, or people in the world at large have faced adversity. For those with an entrepreneurial mindset, the

[8] Table developed using U.S. Census Bureau, Business Formation Statistics (Web form based calculator at, https://www.census.gov/econ/currentdata/dbsearch?program=BFS&startYear=2004&endYear=2022&categories=TOTAL&dataType=BA_BA&geoLevel=US&adjusted=1&notAdjusted=1&errorData=0) – Total for all NAICS: U.S. (seasonally adjusted business applications 2018-2021 – to date), data extracted October 7, 2022.

flip side of any challenge is a potential opportunity, which often arises from creating solutions to problems. There has been a strong correlation suggested between opportunity and the conditions attributed to natural and human-made disasters.

In his seminal work, disaster sociologist Fritz (1996) noted that disaster "disrupts habitual, institutionalized patterns of behavior and renders people amenable to social and personal change" (p. 55). Fritz further suggested that disaster creates unstructured conditions, socially, that are amendable to innovation within a social system (Solnit, 2010). This idea that disaster can perpetuate innovation is consistent with Schumpeter's (1942) theory establishing the concept of creative destruction. This was framed as "the process of industrial mutation that continuously revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one" (p. 83). Similarly, Fritz's (1996) observations noted that one impact of natural disasters is the heightening of innovation and creativity.

Thus, adverse circumstances may lead to one of the ripest times for creativity and innovation to blossom. In times that are normal, innovation is almost pedestrian and expected. Ideas can be easily rejected with very little perceived consequence. Alternatively, in times of disaster and emergency (e.g., global pandemic) innovation and creativity may be absolutely necessary. The increase in small businesses, amidst the myriad other factors contributing to the difficulties faced, demonstrates the impact of disruption in a clear way (see the section on IMPLICATIONS FOR ENTREPRENEURIAL PRACTICE below).

SMALL BUSINESSES AND A RECESSION LOOMING?

The lingering effects of COVID-19 are continuing to contribute to inflation, and subsequently are still prevalent and active in edging the U.S. economy closer to recession. According to results from a recent survey conducted by Babson College and David Binder Research from June 20-23, 2022, and published by Goldman Sachs, the past few months (first half of 2022) have continued to take a toll on small business owners. Overwhelmingly, 93% were worried about a recession arriving in the next twelve months; almost 8 out of 10 (78%) reported that the economy has worsened in the past three months; (likely) corresponding with a worsening economy, 80% responded that inflationary pressures have continued to increase, with three-fourths (75%) indicating that their respective business has been negatively impacted in the past six months; hiring qualified workers and employee retention was reported as the top challenge for small business owners (*Survey: Small business challenges worsen amid record inflation and workforce shortages*, 2022).

Another survey conducted by NFIB Research Center also appeared to support the notion that while small businesses are still hiring (and having difficulties doing so), they do fear a recession is coming; almost two-thirds (64%) indicated that they were hiring (*Recession fears not yet hitting small business hiring or increases in compensation*, 2022). While this report did not quantify the extent to which small businesses feared a coming recession, it did characterize such an eventuality as "widely anticipated." Further, it included an observation that "owners are the most pessimistic about future business conditions in [sic] 48-year history of the survey." The most current (August 2022) NFIB Research Center survey measuring with its Small Business

Optimism Index (i.e., survey) reported the eighth consecutive month below a 48-year average (Dunkelberg & Wade, 2022). Presently, small business owners' concerns are evident and increasing inflation continues and symptomatic recession is materializing daily (Dunkelberg & Wade, 2022; *Small business and inflation*, 2022).

IMPLICATIONS FOR ENTREPRENEURIAL PRACTICE

Recognizing and understanding the conditions and the opportunities that emerge in any environment is in direct alignment with what is expected of entrepreneurs. We have been observing developments of historic proportions. These include record-setting interest rate increases by the Federal Reserve; historic household debt; inflation (record fuel prices); and declines in consumer confidence. From an anecdotal perspective, "Help Wanted" signs, closed dining areas, and difficulty buying certain products at retail, persist. These conditions suggest that documenting, analyzing, and forecasting what may come, and how to respond, is entrepreneurship researchers' responsibility. Concomitantly, this is true for practitioners. One lesson here is we do not have to fear bad outcomes will necessarily be the case in light of economic challenges.

In fact, a theory of "entrepreneurial alertness" (Valliere, 2013) codifies and explicitly identifies the value and process whereby entrepreneurs mediate, evaluate, and respond to changes in an environment. In these spaces, entrepreneurs, "impute meaning to environmental change that would not be imputed by other managers" (p. 430) in the same way. As observed by Kim and Lim (2018), not only is it necessary to recognize opportunities to innovate, entrepreneurs must also be able to exploit these effectively if they are to realize any benefits (financial or non-financial). Tang et al. (2012) identified three dimensions associated with the entrepreneurial alertness construct: environmental scanning and searching heightens entrepreneurial knowledge base, association and connection links external observations with a novel perspective, and evaluation and judgement focus to determine possible opportunity. To these ends, understanding the conditions driving the U.S. economy while viewing some of these as problems that may need innovative solutions, the entrepreneur may identify opportunities.

The perspective, disposition, and mindset of entrepreneurs who take into hand these circumstances and work to rise above and beyond is critical to their success. Difficult times often do present a plethora of teachable moments for future entrepreneurs (and educators). Finally, understanding economic conditions and opportunities is an essential aspect of entrepreneurial education. Conditions (entrepreneurial ecosystems) and opportunity (entrepreneurial response) go hand-in-hand.

CONCLUSION

Buffington, et al., predicted "that the pandemic may lead to lasting structural changes in the economy" (2021, p. 4). For instance, the adoption rate for new technologies such as, shopping apps; greater acceptance of virtual meetings and remote work (including medicine, education, and religious services); and a greatly heightened awareness of the interdependencies

we all have in a global economy. Clearly, prior to COVID-19, vulnerabilities such as microprocessor chip shortages had not been anticipated, with pervasive impacts across varied industries (e.g., automobile production, refrigerators, other consumer electronics).

Starting in June 2022 the Federal Reserve has been attempting, via a series of interest rate hikes to address inflationary pressures of historic proportions in the economy. According to the minutes from a joint meeting of the Federal Open Market Committee (FOMC) and the Board of Governors of the Federal Reserve System at that time, it was observed that the "labor market was very tight, inflation was well above the Committee's 2 percent inflation objective, and the near-term inflation outlook had deteriorated" (*Minutes of the Federal Open Market Committee [FOMC] June 14–15, 2022*, 2022, p. 9), following its previous meeting in May. The policy action taken was that a majority of participants agreed to increase interest rates by 75 basis points (.75 percent). The FED's objective was (and has been) to tame inflation, yet it has also acknowledged this may be a difficult balancing act without creating a swing in an economic pendulum that results in a recession. Reported by *Barron's*, "The early verdict is mixed" (Cassella, 2022). As noted in the aforementioned FOMC meeting minutes, hardships due to inflation are especially the case with "low- and moderate-income households" (p. 8).

Later in the year, in its November 2 press release (corroborated by meeting minutes) Federal Reserve voted to again raise interest rates by .75 percent (*Federal Open Market Committee [FOMC] November 1–2, 2022*, 2022), as it also did in July (*Minutes of the Federal Open Market Committee [FOMC] July 26–27, 2022*, 2022) and September (*Minutes of the Federal Open Market Committee [FOMC] September 20–21, 2022*, 2022). Thus, four times in a row (at that point), the committee voted for .75 percent increases, pushing the primary credit rate to 4 percent as of November 3, 2022. The FOMC's decision to continually increase rates has been sustained but softened slightly in the first quarter of 2023 (in the wake of the second largest bank failure in history – Silicon Valley Bank), which alludes to a potential stabilization of inflation in the next year. However, once on the other side of this bank failure and response, the FED may or may not resume its aggressiveness if it remains true to its earlier statements to achieve a 2% inflation rate. Between June 2022 and March 2023, the FOMC increased the federal funds rate 9 consecutive times. These actions are second only to one other period of rate increases in the past 32 years, between 2004 and 2006. In the earlier instance, there were 17 consecutive increases, but these were at a much smaller increment (+.25% each time), ultimately increasing the federal funds rate from 1.25%-5.25% over that duration. It is noteworthy to mention that the predictable increment at that time could almost be regarded as comforting compared to the uncertainty that is brought by each FOMC meeting in present times. The prior increases were more gradual (smaller increments over a longer period), whereas the more recent series of increases were at a far more vertical trajectory. This recent level of aggressiveness towards increases has not been experienced in the U.S. economy in at least thirty-plus years and will continue to have an impact on both consumers and businesses.

Estimating the extent of a recession in terms of economic impacts on both consumers through personal spending (*Personal income and outlays, August 2022 and annual update*, 2022) and small businesses' responses (*Small business owners expect a recession, but few are ready for one*, 2022) remains daunting. An article in *Forbes* (Bushard, 2022) aggregated several

executives' sentiments about a coming recession, starting with Elon Musk, whose Twitter feed was quoted; Musk predicted a recession lasting until the spring of 2024. As the article continued, it was reported that grim economic outlooks were indicated by both Morgan Stanley CEO James Gorman and Citigroup CEO Jane Foster. Bank of America "is already 'baking in' a recession," according to its CEO, Brian Moynihan. Chase CEO Jamie Dimon, speaking to analysts and investors was quoted by CNBC to say "You know, I said there's storm clouds but I'm going to change it … it's a hurricane" (Son, 2022). Goldman Sachs CEO David Solomon predicted "a good chance of a recession" during his (different) interview on CNBC (Cox, 2022).

Besides Musk, other highly visible tech company executives have been speaking out. Meta Platforms (parent of Facebook), led by CEO Mark Zuckerberg, noted in its second quarter earnings call on July 27, 2022, that "we seem to have entered an economic downturn that will have a broad impact on the digital advertising business. It's always hard to predict how deep or how long these cycles will be, but I'd say that the situation seems worse than it did a quarter ago" (Zuckerberg, 2022, p. 1). As quoted in Fox News coverage, Amazon founder Jeff Bezos posted a response to the Goldman Sachs CEO interview on CNBC, using his Twitter feed[9]: "Yep, the probabilities in this economy tell you to batten down the hatches" (Henney, 2022).

Whether predictive evidence comes from indices of consumer or small business owners' confidence (Hsu, 2022; *Small business owners expect a recession, but few are ready for one*, 2022; *Survey: Small business challenges worsen amid record inflation and workforce shortages*, 2022), banking and other industry leaders, financial markets (e.g., inflation, debt and interest rates), or quotes captured in FOMC meeting minutes, it appears there are sustained challenges ahead for the U.S. and global economy at large. An unprecedented circumstance calls for an unprecedented response and we believe that is what we are seeing here through policy responses, but also in terms of entrepreneurial response. As our economy continues to work to recover from these conditions, it is necessary to document our recent past, and pay close attention to our present, in order to inform our future responses to the evolving consequences – both those intended and unintended and those short-lived and sustained. Small businesses need to monitor their operating environments closely, and adapt, if they are to navigate through these volatile economic conditions.

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[9] Bezos' Twitter post is captured directly, here: https://twitter.com/jeffbezos/status/1582517044020273152

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