

The Coronavirus (COVID-19) Recession & its Impact on Credit Unions¹

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¹ The CUNA Forecast and this white paper is based on data as of April 3rd. Given the rapidly evolving situation, we plan to update our forecast and the white paper at least every two weeks.

I. Executive Summary

Due to the coronavirus (COVID-19) pandemic, the U.S. economy has rapidly entered a recession. Under relatively optimistic assumptions that the virus will be mostly contained by mid-2020 and that Congress and the Federal Reserve will continue to implement aggressive fiscal and monetary policy, we forecast:

- A significant fall in real GDP in 2020, largely concentrated in the second quarter.
- A large spike in unemployment beginning in the second quarter.
- Substantially reduced demand for consumer loans—particularly auto loans—and business loans.
- Relatively strong demand for mortgages, especially refinances, given the low interest rate environment.
- Positive but significantly slower credit union loan and membership growth.
- A deterioration in credit union portfolio quality and earnings, but not to the extent of the Great Recession.

However, there is significant uncertainty regarding any forecast and recent data suggest the outcomes could be much worse. The impact on your credit union will vary based on size, portfolio composition and financial health, location and the industries it serves.

As in past recessions, the current crisis presents both a significant challenge as well an opportunity for credit unions to demonstrate the transformative power of cooperative finance. Numerous examples illustrate how credit unions are already arising to creatively meet their members' needs. Credit unions can implement various strategies to mitigate the negative effects of the crisis on their members, employees and operational performance.

II. Coronavirus (COVID-19) and the Economy

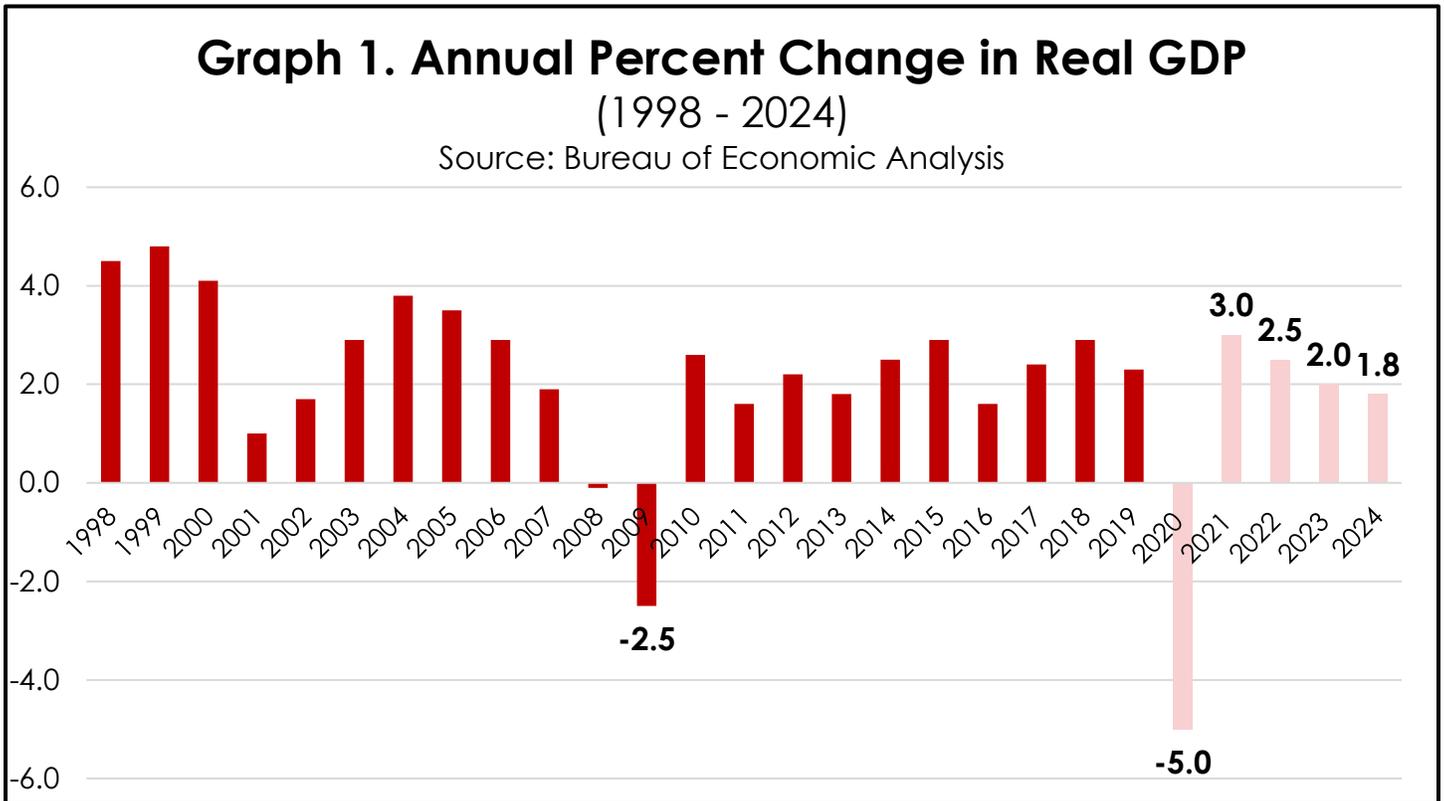
The U.S. economy has suddenly and unexpectedly entered a recession as a result of the novel coronavirus (COVID-19), which has caused both widespread human suffering and severe economic disruption. Social distancing, event cancellation, school closures and “stay at home” orders—all of which are critical to controlling the public health crisis—have dramatically reduced routine economic activity. The most immediately-impacted industries—recreation, transportation, food services and accommodation—alone add up to \$2.1 trillion in annual spending (14% of total consumption spending).ⁱ Although the crisis is still unfolding, early estimates of the economic impact of the coronavirus predict that U.S. real GDP will decline between 2.0% to 6.0% in 2020, including as much as 38% in the second quarter alone.ⁱⁱ

On April 3rd, CUNA economists revised our 2020 and 2021 [forecasts](#) for the economy and credit union operations based on the rapidly evolving situation. Critical to our forecasts are three main underlying assumptions:

- 1) **Social distancing, “stay at home” orders and other measures will slow the spread of the virus, which will peak in the second quarter of 2020, gradually recede and not return to any significant degree later in the year (or next year).** We assume the epidemiological path of the virus in the U.S. lies somewhere between South Korea—which has been successful at containing new cases and flattening the epidemic curve—and Italy, where the number of new cases increased at a fast rate, causing many deaths and significant isolation measures.
- 2) **Congress and the Federal Reserve will rapidly respond with aggressive fiscal and monetary policy.** The Federal Open Market Committee (FOMC) has already reduced the federal funds target rate to a range of 0.00% to 0.25%, and the Federal Reserve announced it will purchase hundreds of billions of dollars in government debt and mortgage-backed securities. We expect the Federal Reserve to continue these and other measures to support the economy. In parallel, Congress recently passed (and the President signed) a massive fiscal stimulus that includes a provision requiring paid sick leave for workers affected by COVID-19, increased unemployment benefits, payments to individuals, support for hard-hit sectors, and loans to businesses, among other provisions. Expect further Congressional action to buttress the economy in the near future.
- 3) **No other major events affect the economy**, such as significant natural disasters, new international conflicts, or increased trade barriers.

Given these assumptions, it seems reasonable to expect a modest contraction in annualized real GDP in the first quarter of 2020 followed by a historically unprecedented decline in the second quarter. Our most recent forecast from April 3rd predicts an annualized drop in real GDP of 20.00% in the second quarter (annualized).ⁱⁱⁱ Assuming the coronavirus peaks in the second quarter and the U.S. gradually resumes economic activity shortly thereafter, economic growth should bounce back slightly in the third and

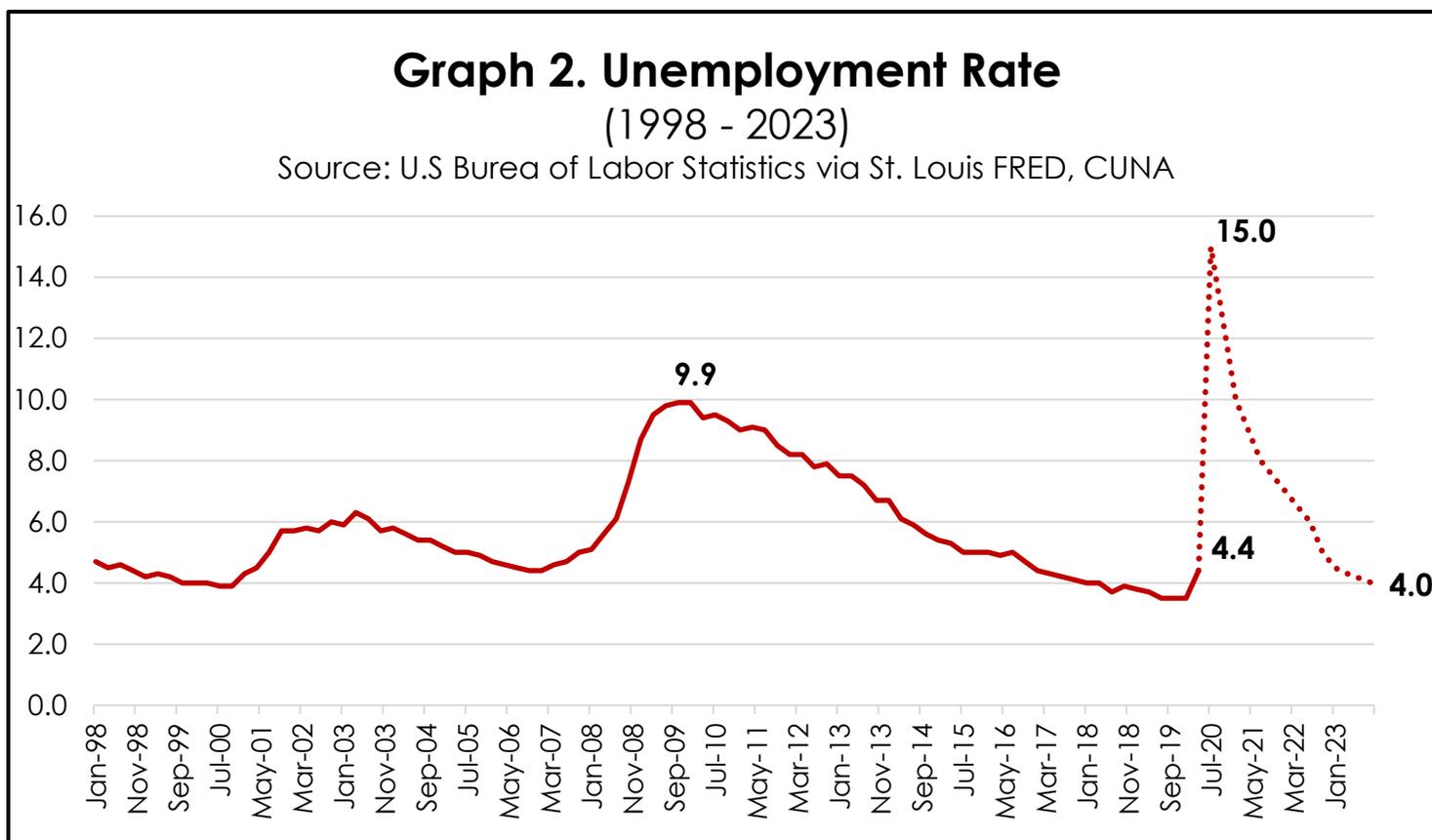
fourth quarters. Growth, however, is likely to remain muted throughout 2020 as supply chains rebuild, many businesses close indefinitely, and consumers remain cautious. Our April 3rd forecast predicts an overall annual decline in real GDP of 5.00% in 2020, a significantly bigger drop than in 2009. Nonetheless, under our assumptions, economic growth will rebound gradually in 2021 with production and service-sector activity resuming, and pent up consumer demand driving growth. Moreover, unlike during the 2007 – 2009 financial crisis, financial markets should remain intact which—combined with historically low interest rates—will further stimulate the economy. Therefore, we expect relatively strong growth of 3.0% in 2021 followed by a gradual return to the long-term sustainable growth rate of approximately 2.0% by 2023.



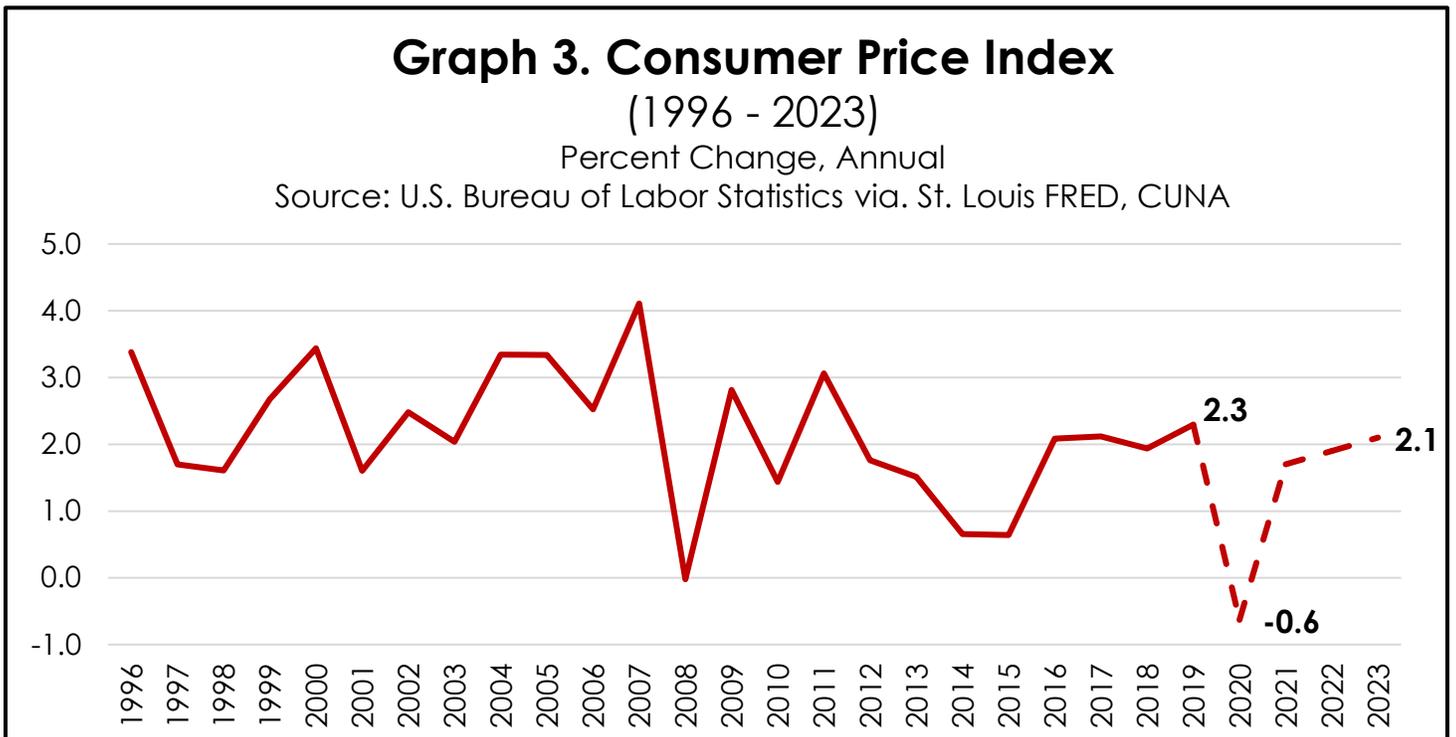
Of course, there is significant uncertainty regarding the spread of coronavirus and under various scenarios the potential ramifications for the economy could be significantly worse. For example, “stay at home” orders and social distancing could remain in place longer than the second quarter, and the coronavirus could dissipate during the warmer summer months only to return in the fall. Also, policymakers could make errors in fiscal and monetary policy, or in countering the pandemic. These scenarios indicate that there is substantial uncertainty in the economy and the downside risks are high.

Millions of Americans have already lost their jobs as a result of the coronavirus epidemic. The five most affected sectors—air transportation, performing arts and sports, gambling and recreation, hotels and other lodging, and restaurants and bars—alone account for nearly 14 million full-time equivalent employees, or about 9.2% of all U.S. non-farm employment.^{iv} And in just the last two weeks ending April 2nd, unemployment claims rose approximately 10 million, by far the highest two-week increase in history.^v The April 3rd jobs report showed that nonfarm payroll employment fell by 701,000 in March and the unemployment rate rose to 4.4%, the largest over-the-month increase since 1975. However, this figure only reflects data through March 14th, before many of the “stay at home” orders came into effect.^{vi}

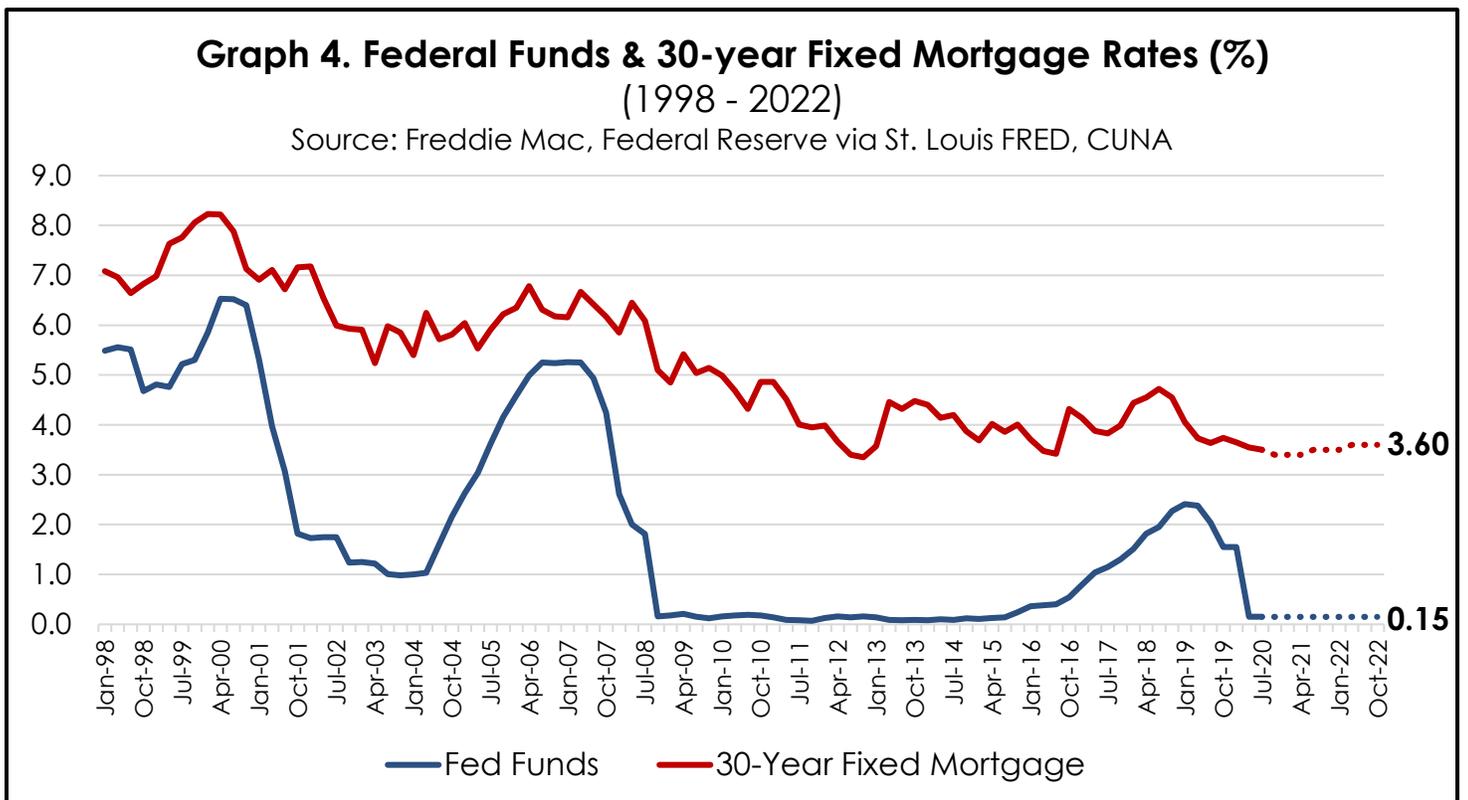
CUNA economists expect the unemployment rate to reach 15.0% by the end of the third quarter of 2020, representing the loss of approximately 18 million jobs. However, unemployment could easily climb higher under various alternative scenarios, and some economists project unemployment even higher, with up to 20 million jobs lost.^{vii} Assuming we control the coronavirus outbreak by mid-2020 and it does not return to any significant degree later in the year or next year, we expect unemployment to remain elevated in 2021 but fall towards its long-term natural rate of approximately 4.0% by 2023.



Plummeting consumer and business demand will almost certainly produce significant deflationary pressures in 2020. Inflation was already low prior to the beginning of the COVID-19 crisis. We expect inflation—as measured by the headline Consumer Price Index (CPI)—to rise just 1.0% in the first quarter followed by a 5.0% decrease in the second quarter as consumers remain mostly sequestered at home. As demand and economic activity rebound gradually in the latter half of the year, we forecast inflation to be flat in the third quarter and grow 1.50% in the fourth quarter. Overall, we predict prices to fall 0.6% for the year. As the economic recovery proceeds and we move back toward the long-run equilibrium growth path, we expect annual CPI inflation to hit 1.7% in 2021 and eventually reach 2.1% by 2023.



To encourage borrowing and spending, the FOMC cut the federal funds rate twice in March 2020 to a target range of 0.00% to 0.25%. Moreover, the average 30-year fixed mortgage rate fell to 3.29%. However, reduced liquidity in the secondary mortgage market and increased refinance demand has since raised the average 30-year fixed mortgage rate to 3.50% as of March 31st.^{viii} Nonetheless, we expect “stay at home” orders to reduce demand for both first and second mortgages through the end of the second quarter, although lenders will likely find creative ways to process mortgages remotely (particularly refinances). Overall, we anticipate mortgage rates to remain low for the foreseeable future, as longer-term Treasury yields are likely to remain depressed as investors seek safer assets. We expect the low interest rate environment to promote relatively strong mortgage growth at credit unions in 2020, particularly second mortgages.



While it is difficult to estimate, the recession will likely have unintended and longer-term effects as well, depending on the severity and length of the crisis. For instance, the coronavirus recession may accelerate longer-term trends towards the decline of retail stores, restaurants and shopping malls, and the increase in online shopping and food delivery services. Universities have also closed, forcing instructors to quickly adapt to online and remote technologies. This will likely accelerate the transition to distance-learning at institutions of higher learning. Factories and other businesses may also be incentivized to implement labor-saving technologies if workers cannot come to work in person. For example, stores might provide more self-service kiosks instead of exposing workers to the coronavirus. Other effects may move in the opposite direction. For example, early reports show that ride-sharing services like Lyft and Uber have

experienced as much as a 70% decline in ridership,^{ix} and AirBnb landlords have flooded some markets with long-term rentals due to a dearth of short-term tenants.^x

For credit unions and other financial institutions, “shelter in place” orders and the closing of bank branches is likely to accelerate trends towards mobile and digital banking, and away from in-person banking and cash. A recent SRM [survey](#) finds that 79% of institutions have provided more education on the use of remote channels as a means of weathering the crisis, and 82% rated their online and mobile channels as “vital” to operations during the pandemic. As households are forced to adopt to online and mobile banking, financial institutions may find more demand for these services after the crisis as well. Credit union should prepare for a variety of effects from the present recession, many of which will linger well beyond the coronavirus pandemic.

III. Impact of Coronavirus Recession on Credit Unions

a. Overall Impact on Credit Unions

How will the current health crisis impact U.S. credit unions? Given the uniqueness and uncertainty of the current crisis, this is a difficult question to answer. However, previous recessions provide some insights into what credit unions might expect during the current economic downturn. Based on our baseline forecast assumptions we now consider, in turn, the effects of the recession on credit union loan and membership growth, savings growth and liquidity, portfolio quality, and earnings. Although in this sub-section we focus on the credit union industry as a whole, in the following sub-section we consider the potential effects on subsets of credit unions, such as small credit unions and credit unions that primarily serve directly affected and vulnerable communities.

i. Loan & Membership Growth

Economic contraction, increased uncertainty, and heightened consumer caution will depress credit union lending despite historically low interest rates. We expect a significant slowdown in consumer and commercial loan growth, particularly auto loans. Auto loans make up roughly one-third of credit union loan portfolios and have accounted for roughly 40% of the growth in credit union loan portfolios during the past decade. However, auto loan growth was already falling prior to the coronavirus outbreak. New auto loans at credit unions grew just 0.1% in 2019 compared with 11.7% in 2018, and used auto loans grew only 4.1% last year compared with 9.1% growth in 2018. Early predictions are that overall auto sales may fall as much as 15.3% in 2020 due to the crisis.^{xi}

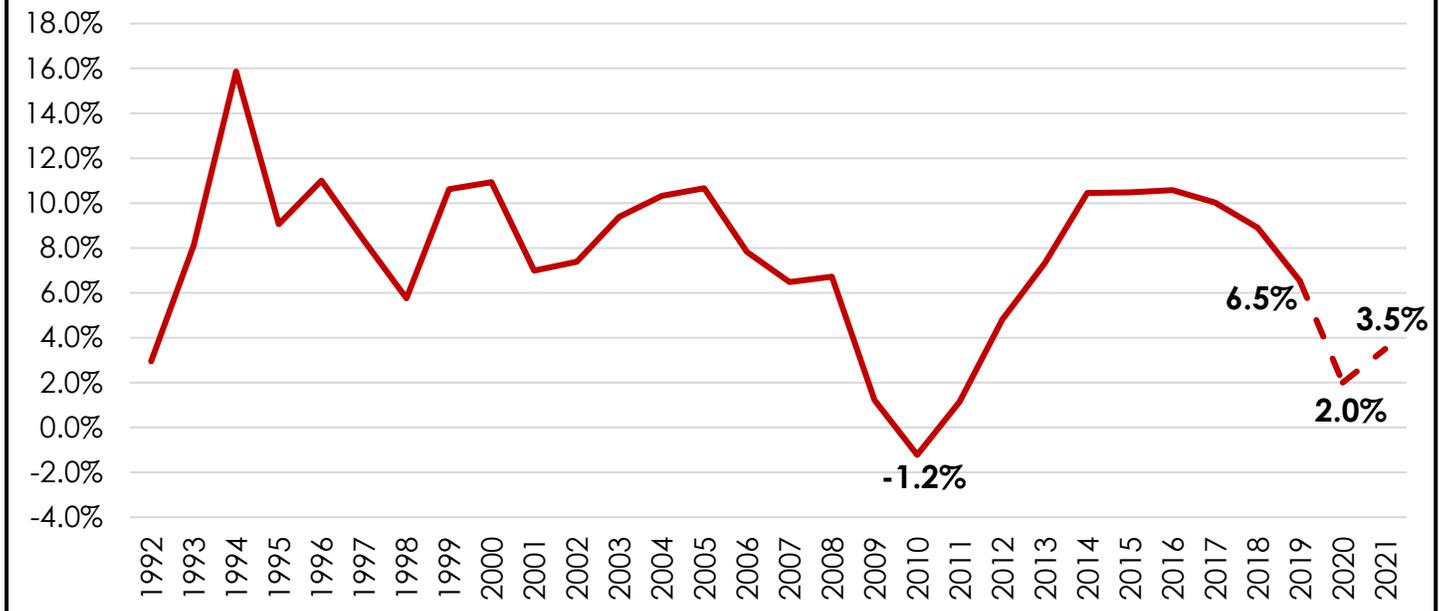
Nonetheless, low interest rates should stimulate mortgage lending, particularly refinances, which will help support some credit unions. Overall, mortgages make up approximately 50% of credit union loan portfolios, and even more at larger credit unions. However, 75% of credit unions engage in no mortgage lending whatsoever. We also anticipate that some members will use existing lines of credit—such as credit cards and home equity loans—to cover short-term and emergency expenses, especially those who lose their jobs.

Overall, we expect credit union loan growth of 2.0% in 2020, down significantly from 6.5% in 2019. Loan growth will be particularly slow in the first half of the year before rising slightly in the third and fourth quarters. We expect credit union loan growth to rebound in 2021 and reach 3.5% for the year, slightly better than 2020 but still below the long-term average growth rate of 6.8%. Given current information, we do not expect loan growth to fall to the levels seen in the Great Recession—when credit union loan portfolios declined 1.2% in 2010. This is because credit and housing markets remain relatively healthy, credit unions are larger and more diversified today, mortgage lending is a bigger part of credit union loan portfolios, and the effects of the pandemic are expected to be relatively short-lived.

Graph 5. Credit Union Loan Growth

(1992 - 2021)

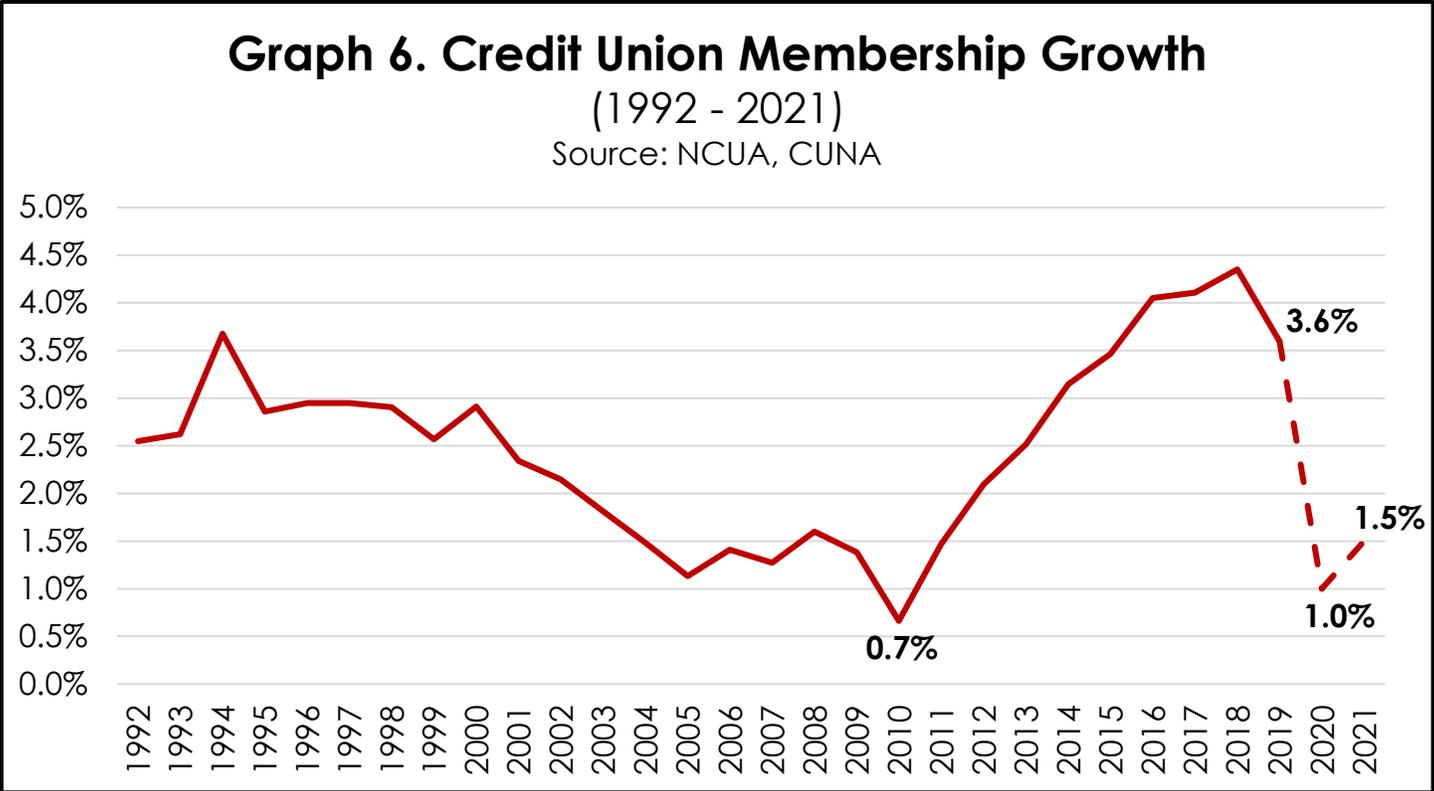
Source: NCUA, CUNA



Credit union membership growth should follow a similar pattern: Membership growth has been incredibly strong since the Great Recession, with three straight years of growth over 4.0% and six straight years over 3.0%. Considering population growth of just 0.7%^{xii}, credit union memberships have grown roughly five to six times the rate of population growth over the past six years. Nonetheless, we estimate that approximately 25% of membership growth over the past decade has been due to indirect auto lending, which has already been declining and is expected to fall even more dramatically during the coronavirus crisis. The general fall in consumer loan demand and reduced economic activity also means fewer potential new members will enter credit union lobbies or apply online, at least temporarily. Therefore, we predict credit union membership growth of just 1.0% in 2020—down from 3.6% in 2019—before rebounding slightly to 1.5% in 2021.

Graph 6. Credit Union Membership Growth (1992 - 2021)

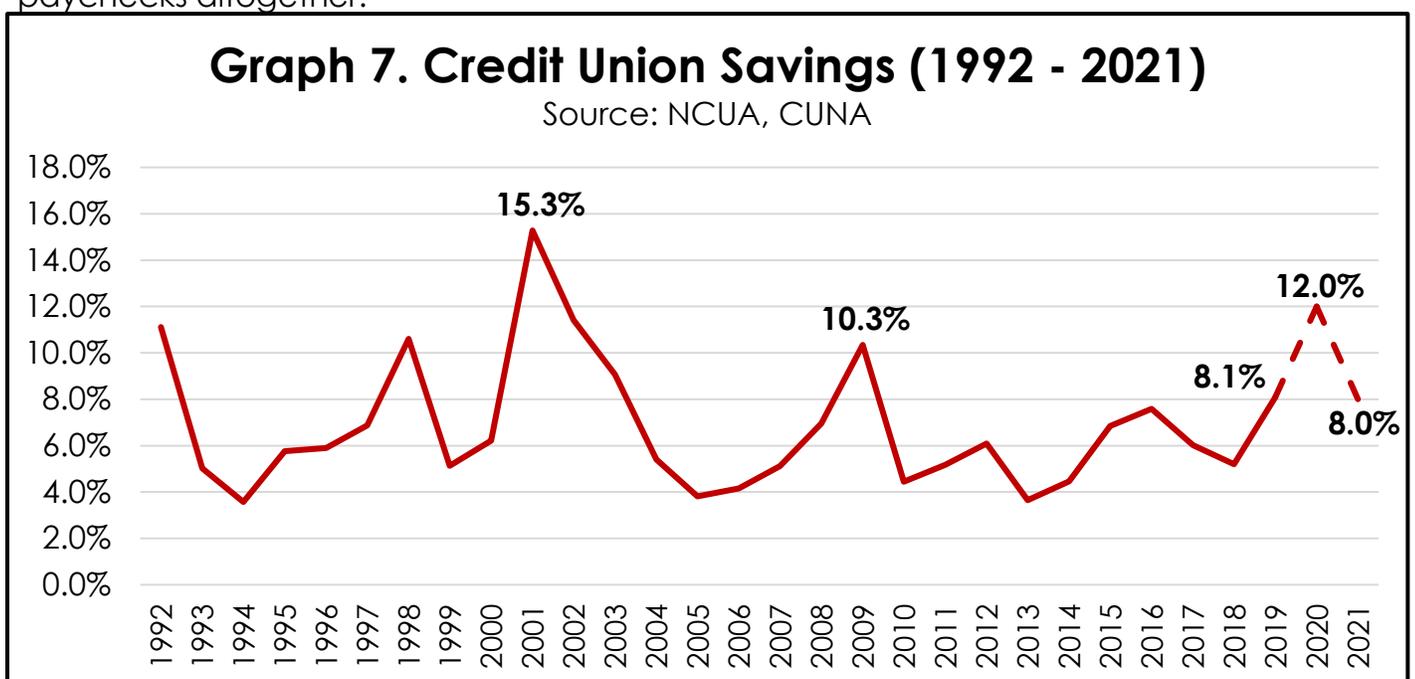
Source: NCUA, CUNA



ii. Savings Growth & Liquidity

We expect exceptionally strong savings growth at credit unions in 2020 as consumer demand dries up, discretionary spending declines, and the volatile stock market makes investments less attractive. Moreover, Congress recently approved a bill to provide approximately \$500 billion of economic stimulus directly to consumers, including checks of \$1,200 per adult and \$500 per child to most Americans.^{xiii} We expect these transfers to increase credit union deposits—particularly in the second quarter—as some credit union members will not immediately spend the relief money. In fact, credit union members may be better able to withstand the recession compared with other groups of consumers. According to data from the Federal Reserve's Survey of Consumer Finances (SCF)^{xiv}, only 8.1% of households who primarily use credit unions are self-employed versus 11.6% of households who primarily use banks. Overall, credit union members are more likely to have jobs, to have an employer, and to have some college education or higher—relative to bank users. This indicates that credit union members may be more likely to maintain their employment and income during the recession, and thus less likely to immediately spend stimulus income.

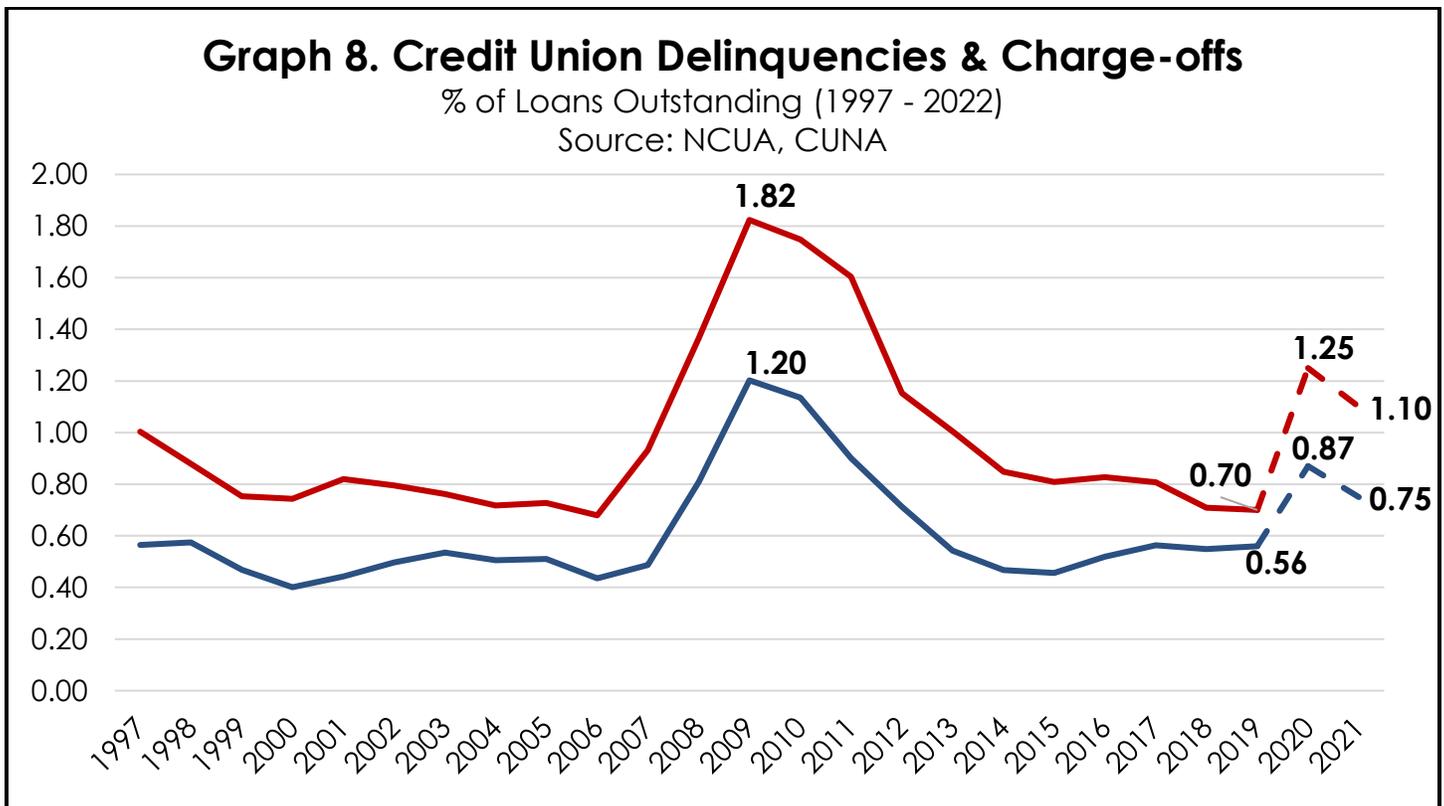
As in previous recessions, credit union savings growth will spike during the current recession. Graph 7 shows that savings growth at credit unions rose 10.3% in 2009 during the Great Recession, and 15.3% during the 2001 recession. We expect 2020 savings growth of 12.0%, with most occurring in the first half of the year. This includes 5.3% growth in the first quarter (when savings growth is normally strong due to tax refunds), and 3.9% growth in the second quarter (due to stimulus checks and decreased borrowing). Asset growth will follow a similar pattern and reach 10.0% growth in 2020. We anticipate both savings and asset growth falling to 8.0% and 7.0% in 2021, respectively, as the economy rebounds and consumers increase spending and borrowing. However, we note that credit unions that serve a large proportion of hourly workers may experience significantly less savings growth if many of their members become unemployed and stop receiving paychecks altogether.



The combination of strong savings growth and weak loan growth will substantially increase liquidity at credit unions in 2020 and 2021. We expect the loan-to-share ratio to fall from its 2019 year-end level of 84.4% to 77.7% by the end of 2020, and to 75.5% by year-end 2021. This will appease regulators and put credit unions in good shape to ramp up lending in 2021 and 2022 as the economic recovery builds momentum. However, in the short-term, credit unions will struggle to find ways to lend out their deposits

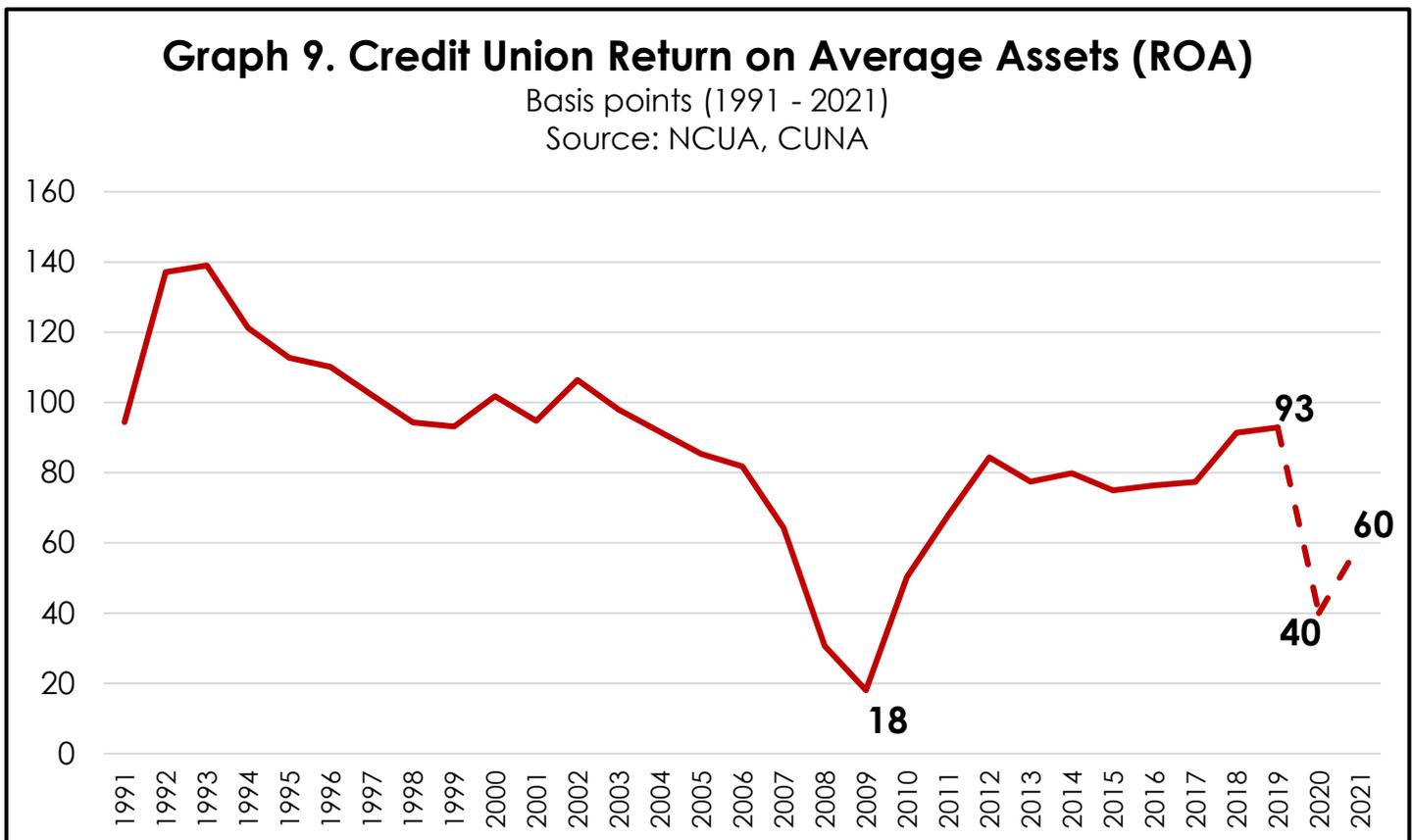
iii. Portfolio Quality

As a result of the economic slowdown and steep escalation in unemployment and underemployment, we anticipate many households will find it difficult to stay current on their loan payments. This will undoubtedly cause credit union loan delinquencies and charge-offs to rise. We expect the large rise in unemployment to lead to a corresponding deterioration in portfolio quality, as historically credit union delinquencies and charge-offs tend to be strongly correlated with the unemployment rate. However, there are a couple of mitigating factors during the current recession, including the (hopefully) temporary nature of the crisis and strong fiscal stimulus. Moreover, credit unions are already allowing skipped payments, forbearance, loan modifications, and other means to help borrowers, and there is no indication that home prices will fall as significantly as they did during the Great Recession. Therefore, we predict a relatively modest increase in delinquency and charge-off rates to 1.25% and 0.87%, respectively, by year-end 2020, before falling to 1.10% and 0.75% by year-end 2021.



iv. Earnings

As the economy slows and interest rates fall, credit unions' net interest income will decline, putting downward pressure on earnings. In addition, credit unions will need to raise provisions for loan losses as the probability of delinquencies and charge-offs increases. We also expect less interchange income as consumers generally spend less and engage in fewer transactions. Nonetheless, credit union earnings will benefit from strong mortgage refinancing and an increase in gains on sales to the secondary market as credit unions seek to diversify their portfolios away from long-term mortgages. Overall, our forecast estimates ROA of 0.40% for 2020, well below 2019's year-end figure of 0.93% and the lowest since the Great Recession. Nonetheless, given that the economy is not experiencing a financial crisis and mortgage demand is likely to remain strong, we do not expect earnings to fall to the range of what occurred in 2009 and 2010. However, this estimate includes a great degree of uncertainty, and some credit unions are likely to face additional challenges, such as credit unions that do not offer mortgages or who serve severely impacted communities.



b. Credit Union Performance by Asset Size and Field of Membership

i. Credit Unions that Serve Particularly Vulnerable Populations

The above analysis focuses on the credit union industry as a whole. However, some credit unions will clearly be more impacted by the coronavirus recession than others. Industry statistics are skewed by particularly large credit unions, which tend to have faster loan and membership growth, more diversified loan portfolios and higher earnings. Financial and operating results at larger credit unions are generally not indicative of the diversity and variety of credit unions and, in fact, most credit unions are quite small—this is reflected in a median credit union asset size of just \$36 million. Moreover, approximately 40% of credit unions operate with five or fewer full-time equivalent employees, and these are almost exclusively small credit unions. Thus, smaller credit unions face the specter of greater workforce disruptions during the pandemic as the entire staff could be easily exposed to the virus.

Compared to their smaller counterparts, large credit unions tend to enjoy significant economies of scale and economies of scope, giving them the ability to do more and engage in a variety of activities for a given level of inputs. They bring more technology to bear and are more likely to have amenities such as drive-up facilities and virtual teller kiosks. In the current environment, credit unions without technology and drive-up facilities are almost certainly facing greater impacts. In addition, larger credit unions tend to serve broader and more diversified populations, which is often not representative of smaller credit unions or credit unions with more restrictive fields of membership.

We review a few populations that credit unions serve that might be particularly impacted by the coronavirus recession. However, within each group there is a wide diversity of credit unions and many individual credit unions serving these populations are performing exceedingly well (with fast growth, high earnings and high capital buffers). Other credit unions within these groups, on the other hand, were already struggling prior to the start of the COVID-19 recession. Still, if experience in prior recessions is a helpful guide, most credit unions are likely to do just fine during the current economic downturn. Even so, it is critically important to recognize that credit unions face different and unique circumstances, and some will need more support than others.

In general, low-income and low-wealth households are especially vulnerable in recessions, and some credit unions serve a relatively large proportion of low-income members. These are not always easily identifiable, but one way is to define them as credit unions that locate 50% or more of their branches in CDFI Qualified Opportunity Zones (QOZs). QOZs are census tracts that are identified as “Low-Income Communities”—or are directly contiguous to Low-Income Communities—based on data from the American Community Survey.^{xv} According to this definition, there are 9.5 million credit union members at credit unions that primarily serve low-income areas. Unfortunately, as in past recessions, the coronavirus recession is likely to impact low-income households the hardest. For instance, they tend to have less access to high-quality, affordable health

care, and they are more likely to experience job disruptions arising from the need to care for elderly family members or children.

Additionally, low-income households reflect less job security, partly due to generally lower levels of education. According to data from the U.S. Bureau of Labor Statistics, during the Great Recession the unemployment rate rose to just 5.0% for individuals with a bachelor's degree or higher, but it rose to 11.0%—over twice as high—for people with just a high-school diploma and 15.8% for individuals that had not completed high school. Unlike past recessions, this recession is first impacting the service industry, which is largely made up of workers with lower levels of educational attainment and relatively low wages, such as waiters, hairdressers, hotel workers, retail sales workers, fast-food workers, parking-lot attendants, bus drivers, taxi and Uber drivers, and ushers, among others.^{xvi} As these workers are furloughed or unemployed, the credit unions they own are likely to reflect their struggles.

Race and ethnicity also come into play. For various reasons—including a history of segregation, redlining, implicit bias and institutionalized racism—minority communities tend to benefit the least from a strong U.S. economy, and suffer the most when the economy falls into recession. For example, at \$171,000 the net worth of the typical white family is nearly ten times greater than that of a typical Black family (\$17,150)^{xvii}. Moreover, during the Great Recession, minority communities experienced unemployment rates that were significantly higher than other groups, with the African American/Black unemployment rate rising to 16.8% at the height of the financial crisis, and the Hispanic/Latinx unemployment rate jumping to 13.0% (versus a high of only 9.2% for the White population). Some credit unions with a focus on helping racially and ethnically diverse members will find those members especially challenged.

Rural areas are also a concern. Many are characterized by long-term declining trends in agriculture and manufacturing employment and have experienced population loss, increased unemployment, lower wages and an aging workforce, with a greater proportion of households living below the poverty line.^{xviii} Here we identify rural credit unions by credit unions that have 50% or more of their branches located in “rural areas” as defined by the FHFA.^{xix} Under this definition, roughly 4.0% of credit union members belong to credit unions that primarily serve rural communities. So far, the coronavirus outbreak has been mostly concentrated in urban areas and rural communities may find it easier to engage in social distancing. Nonetheless, rural economies will almost certainly be impacted by the outbreak and—regardless of the extent of the local spread of the virus—their economies will suffer under social distancing and “stay at home” orders.

As noted above, a variety of industries are especially vulnerable in the coronavirus recession and some credit unions have fields of membership (FOMs) that are more likely to be directly and immediately impacted. These include those that, according to NCUA classifications, can be identified as primarily serving workers employed in transportation, transportation manufacturing and oil/petroleum sectors. “Stay at home” orders, reduced air traffic, and travel restrictions have led to significantly less transportation and a tremendous fall in demand for energy. Combined with an oil export boost by Saudi Arabia, the fall in demand has caused the price of oil to fall below \$20 a barrel, close to

the lowest level in 18 years.^{xx} It is estimated that very few oil shale companies are able to remain profitable if prices remain this low for a protracted period.^{xxi} This means that layoffs in the energy sector are more likely to be permanent relative to other sectors. About four million members belong to credit unions that have FOMs focused on the transportation and oil/petroleum sectors. However, we expect that the negative impacts are generally applicable to any credit union serving large proportions of members working in the energy sector.

Finally, households that live in areas whose economies are heavily reliant on the tourism industry are at higher risk. These include credit unions who have more than 50% of their branches located in Nevada, Hawaii, Washington DC and Alaska, and in cities such as San Diego, San Francisco, Miami and Orlando, among others. There are approximately 6.8 million members at these credit unions.

Of course, each of the above four groups is not mutually exclusive and there are many cases of, for example, credit unions that serve both low-income and rural communities, or credit unions located in both low-income and tourism-dependent areas. If we exclude such double counting, we estimate that the total number of credit unions serving or located in particularly vulnerable communities is 2,263 (42.3% of all credit unions) representing \$285 billion in assets and 18.6% of credit union members.

ii. Credit Union Operating Performance by Asset Size during Past Recessions

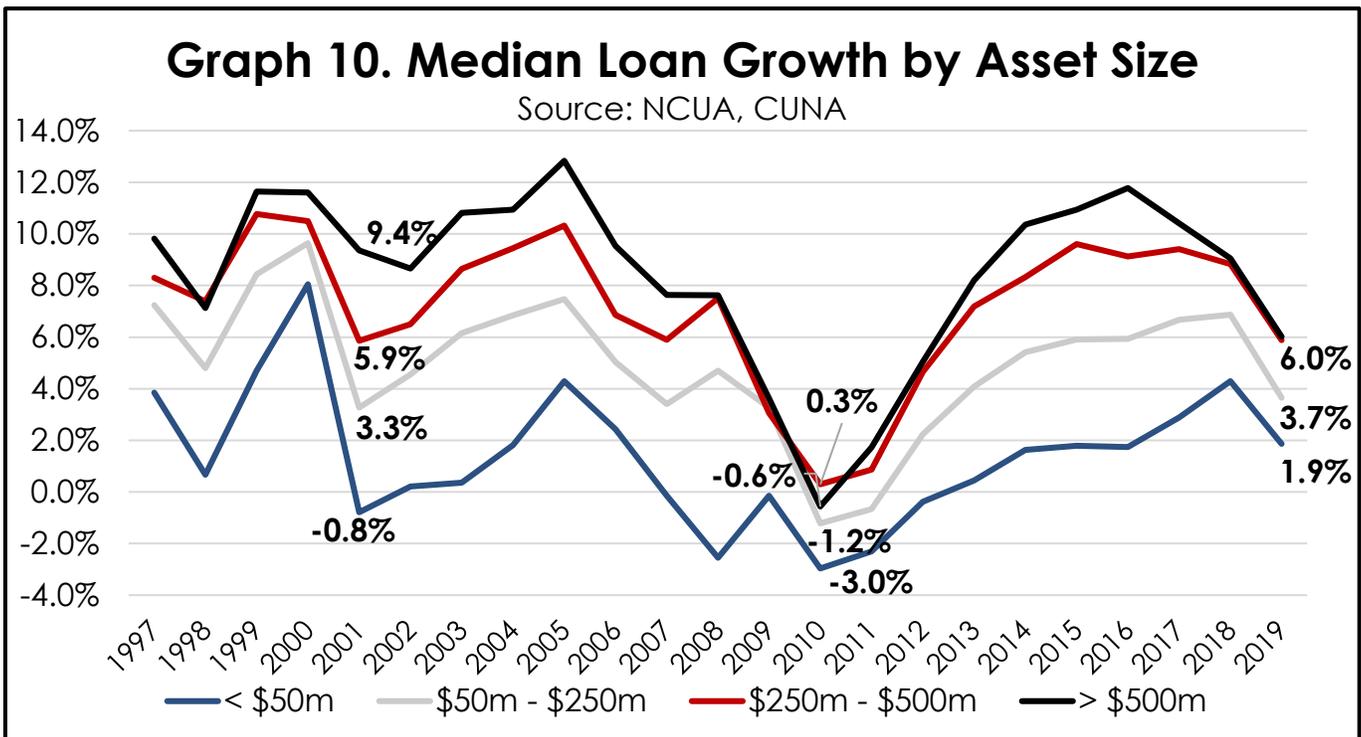
In this section we review the performance of credit unions of different asset sizes during the past two recessions in 2001 and 2007 – 2009. Although each recession is unique, we can glean some insights as to how credit unions of different sizes may perform during the current recession. The 2001 recession was precipitated by a burst of the dot-com stock market bubble—which many predicted—but was further exacerbated by the unexpected terrorist attacks of September 11th, 2001. However, the 2001 recession was relatively short-lived and shallow, lasting only eight months, and the economy recovered relatively quickly following Federal Reserve action to reduce interest rates and fiscal stimulus.^{xxii} The Great Recession of 2007 – 2009—caused by excessive subprime lending and a housing bubble—was significantly deeper and longer, lasting from December 2007 to June 2009, and the recovery was particularly slow. Since the Great Recession was also a financial crisis and directly impacted the banking sector, credit unions were affected much more than in prior crises.^{xxiii} Nonetheless, credit unions were more resilient than banks, largely because they engaged in substantially less risky subprime lending.

The following analysis compares operating results during the past two recessions between four categories of credit unions: 1) Small credit unions with under \$50 million in assets; 2) Mid-sized credit unions with between \$50 million and \$250 million in assets; 3) Relatively large credit unions with between \$250 million and \$500 million in assets; and 4) The largest credit unions with over \$500 million in assets. We consider loan and membership growth, deposit growth, earnings (ROA), portfolio quality (delinquency rates), and capital

adequacy levels from roughly 1997 to 2019. We use median figures as opposed to averages since medians better represent the experience of the typical credit union within each asset category, and to prevent undue influence of outliers.

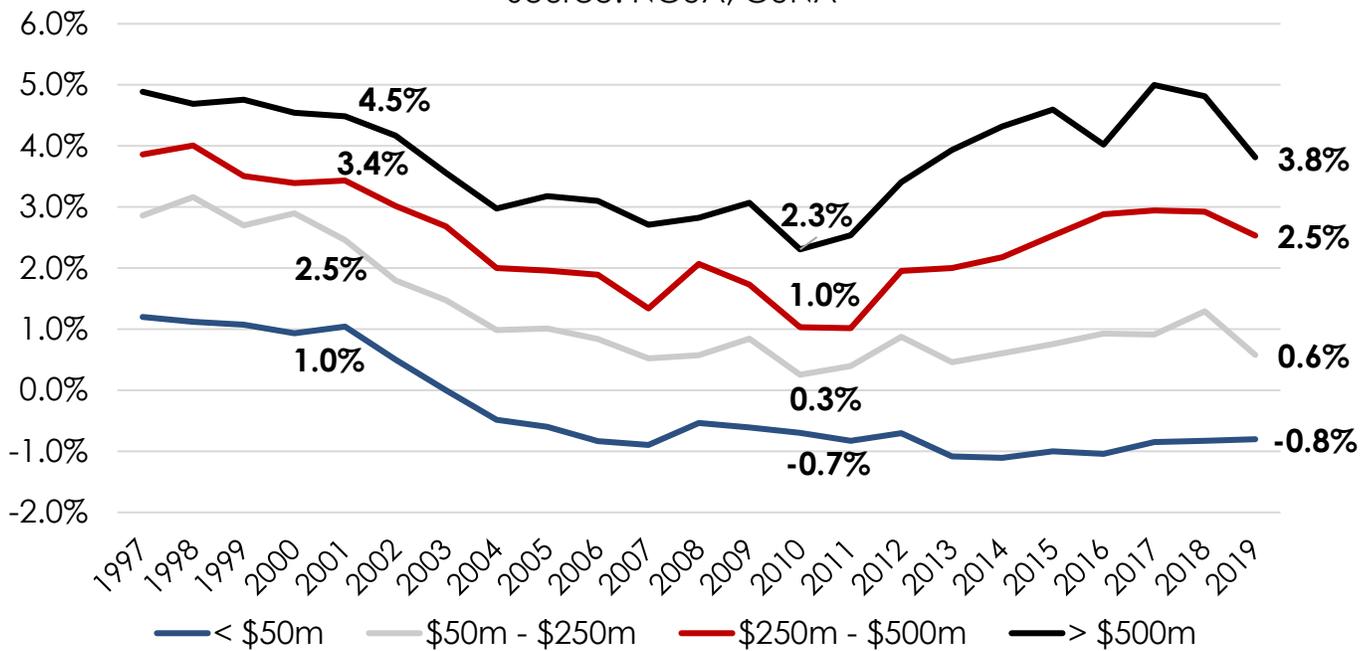
Graphs 10 and 11 present the median loan and membership growth rates by asset size from 1997 to 2019. We emphasize growth rates in 2001, 2009-2010, and 2019. As is clear, smaller credit unions grew slower in terms of loan portfolios and memberships in every year. Small credit unions (<\$50m in assets) were hit particularly hard by the past two recessions, with negative loan growth rates in both 2001 and 2010, and negative membership growth in 2010. In fact, since the early 2000s, the median small credit union has not experienced positive membership growth and in 2019 underwent membership growth of -0.80%. Many of these credit unions will be particularly hard hit by the coronavirus recession.

Larger credit unions weathered the previous two recessions relatively well. In fact, besides the smallest credit unions, no other asset size group experienced negative membership growth during either of the past two recessions, and the largest credit unions (>\$500m in assets) even maintained positive loan growth during the worst of the Great Recession. However, it is important to note the downward trend for the median credit union in all asset categories over the past year, largely due to a dramatic fall in auto lending.

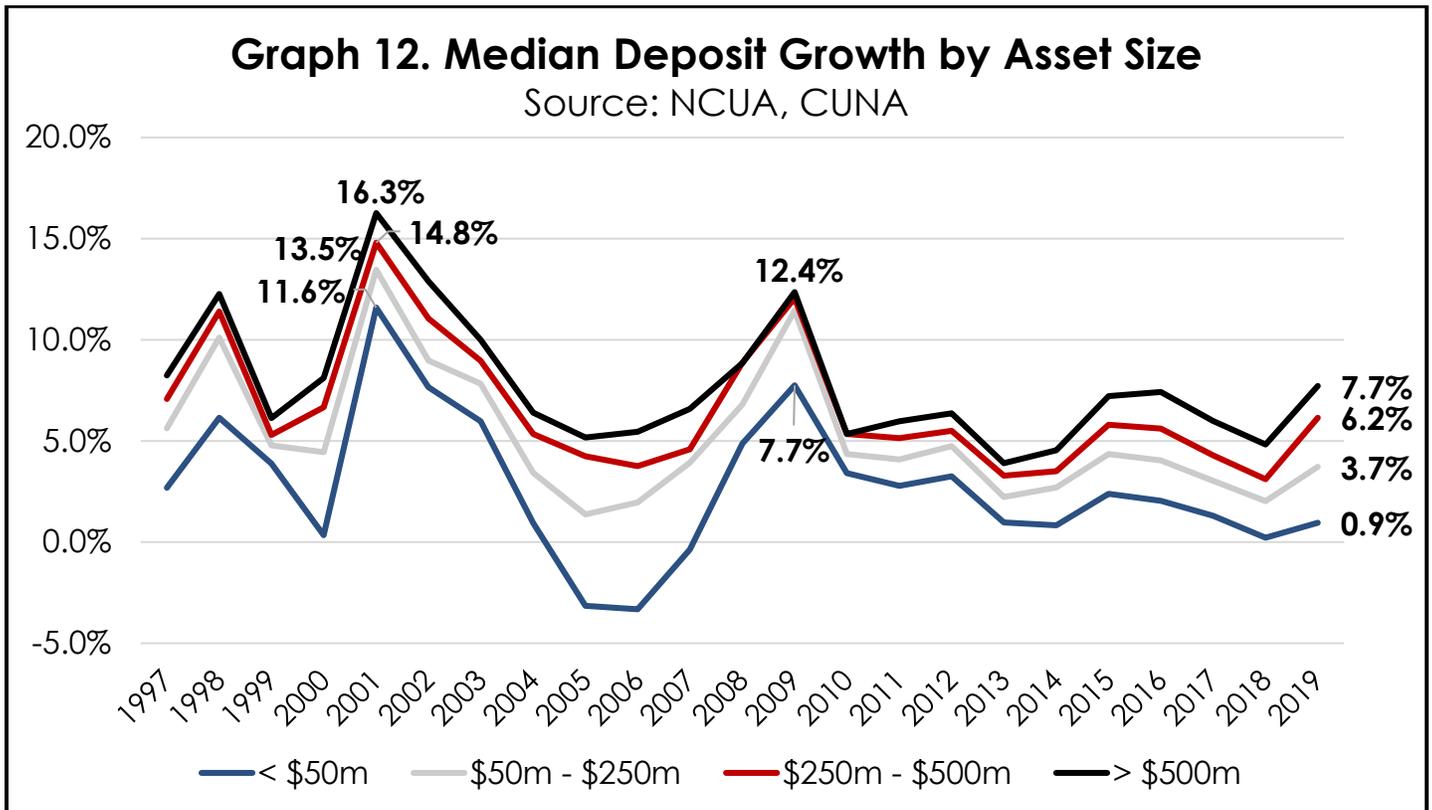


Graph 11. Median Membership Growth by Asset Size

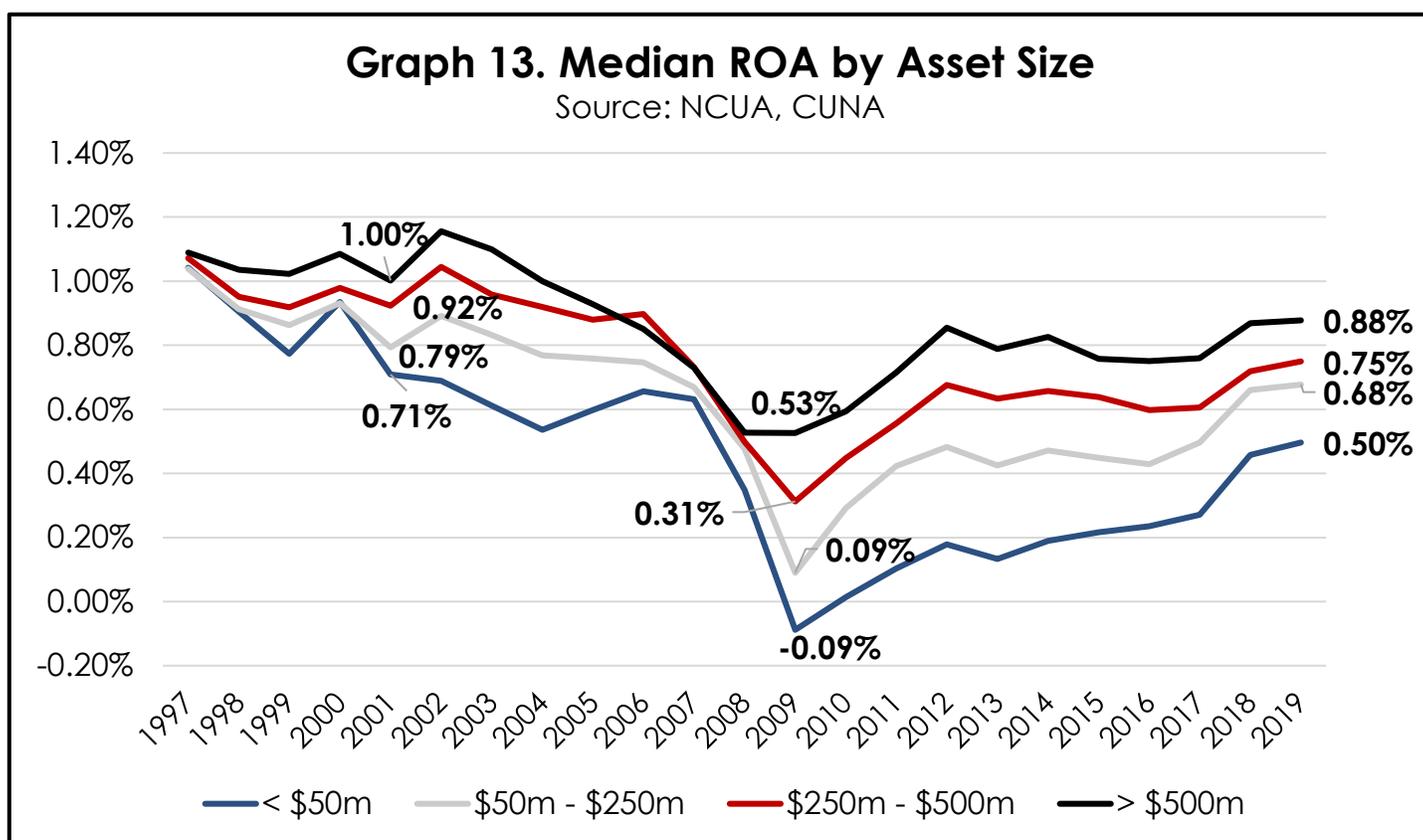
Source: NCUA, CUNA



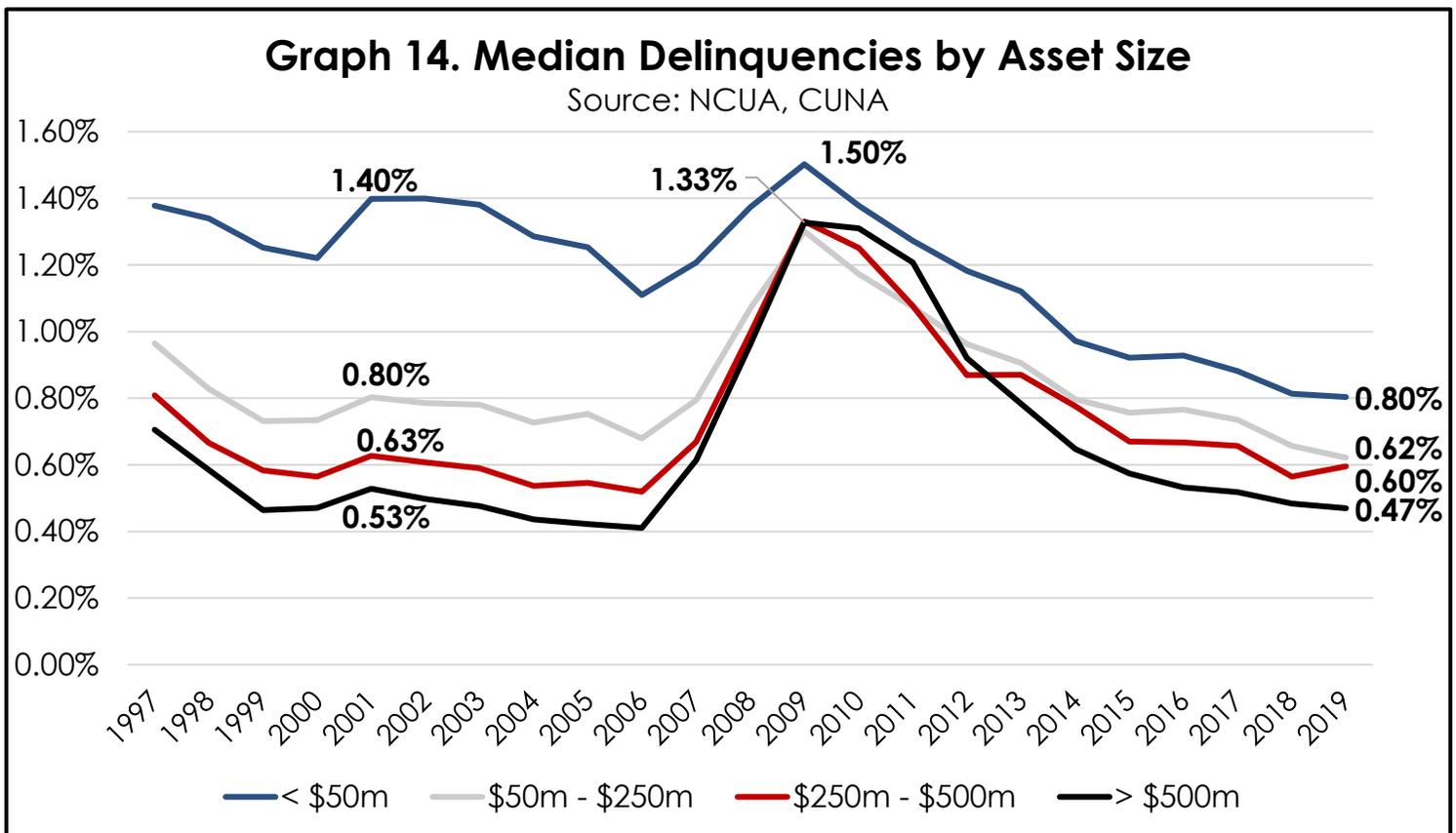
As was noted above, credit union deposits tend to grow dramatically during recessions—when households pull back on spending and borrowing—and fall during economic expansions. This is particularly noticeable in Graph 12, where every asset category experienced dramatic increases in deposit growth in both 2001 and 2009. However, deposit growth at the smallest credit unions has been much slower than at larger credit unions, with just 0.9% deposit growth in 2019 compared to 3.7%, 6.2% and 7.7% deposit growth among the mid-sized, large and largest credit unions.



Credit union earnings are displayed in Graph 13. Once again, we see the large disparities in earnings among credit unions of different asset sizes, with the median small credit union experiencing ROA of just 0.50% in 2019 versus 0.88% at the median largest credit union. Moreover, the typical small and mid-sized credit unions saw ROA fall all the way to -.09% and 0.09%, respectively, in 2009, whereas the median large credit unions managed to maintain earnings in excess of 0.30% during the Great Recession. During the 2001 recession, credit union earnings stayed relatively strong, with ROA in excess of 70 basis points and only slight dips in earnings for the typical credit union in each asset category. We expect the industry ROA to fall to 0.50% in 2020, but it will likely fall significantly more for credit unions with under \$50 million in assets.

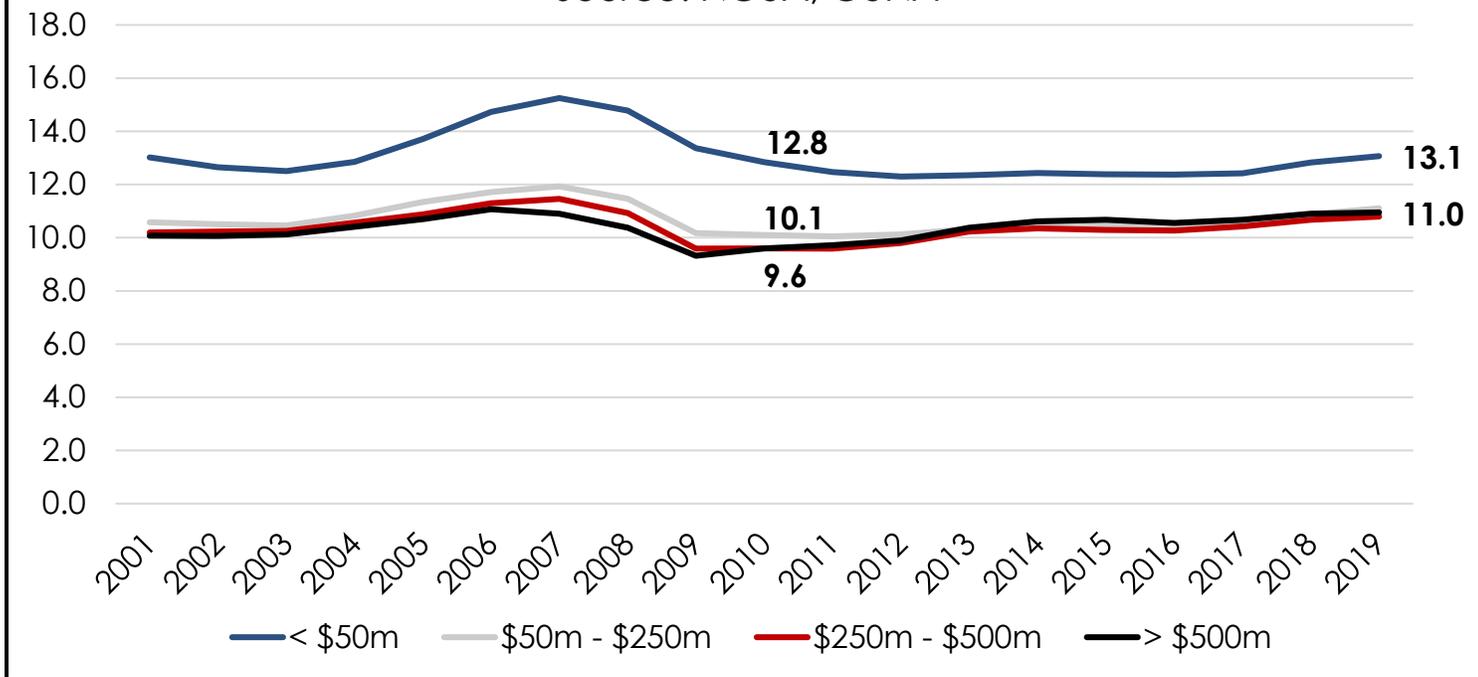


Graph 14 provides an overview of portfolio quality at credit unions of different asset sizes, as measured by delinquency rates. Once again, the small credit unions appear to be in the most precarious position, with the highest delinquency rate in every year. Interestingly, however, delinquency rates increased much more at the mid-sized and large credit unions during the 2007 – 2009 financial crisis (although delinquencies at these credit unions still did not eclipse the rate at credit unions with under \$50m in assets). Finally, Graph 15 shows that the typical credit union of all asset sizes is relatively well-capitalized. In fact, the median small credit union has a net-worth ratio of 13.1%, well above that of the median large credit union (11.0%). Nonetheless, as we discuss more in the following subsection, in absolute terms larger credit unions still have significantly more capital than most small credit unions, and even capital cushions above 15.0% were insufficient to prevent many small credit unions from liquidating or merging during the Great Recession.



Graph 15. Median Capital Adequacy by Asset Size (%)

Source: NCUA, CUNA



iii. Financial Institution Failures & Mergers during Past Recessions

In this subsection we briefly review trends in credit union consolidation during the past two recessions. Graph 16 shows the number of credit unions each year over the past 20 years as well as the annual rate of decline (1998 – 2018), with the two recessions highlighted in gray. The declining number of credit unions is due to both credit union liquidations and mergers but is mostly driven by voluntary credit union merger activity. In fact, between 2000 and 2017, 93.4% of credit union consolidation has been due to voluntary mergers, with just 4.4% from involuntary liquidations and 2.2% from assisted mergers. Note also that the rate of consolidation did not increase during either the 2001 or 2007 – 2009 recessions. In fact, fewer credit unions merged or liquidated during the 2007 – 2009 period relative to any other prior three-year period from 1998 to 2006, and the pace of consolidation activity has been significantly higher during economic expansions, such as during the mid-2000s and the period from 2012 – 2018. However, this may at least partly reflect the reluctance of larger institutions to accept mergers with underperforming smaller institutions during crises, but then allow the mergers post-crisis when financial performance and the economy are in better positions, and there is less uncertainty.

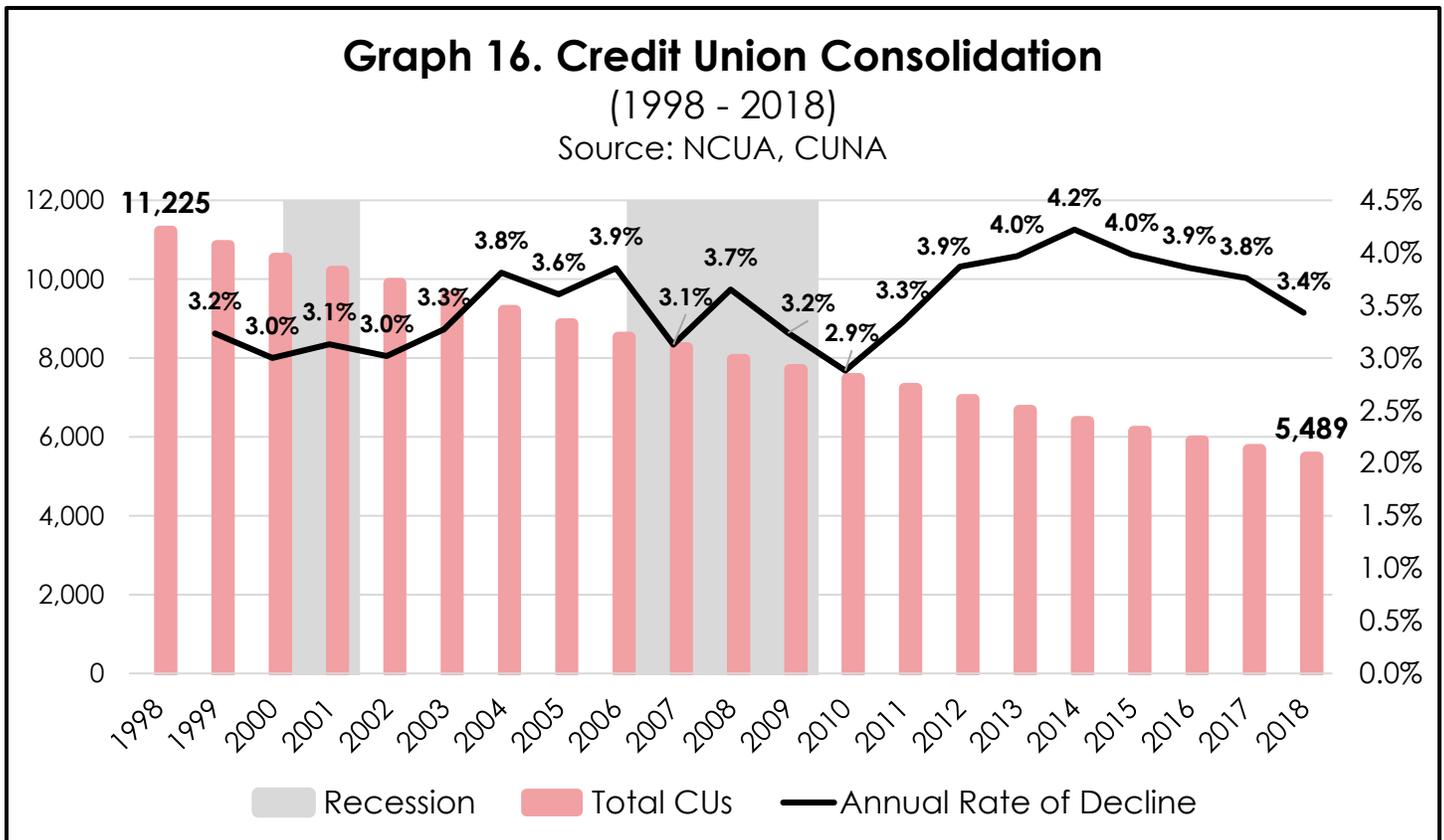


Table 1 examines the operating performance of credit unions that liquidated or merged during the 2007 – 2009 Great Recession and compares their 2006 year-end operational results with credit unions that were able to weather the financial crisis and remained in existence after the recession ended in 2010. The vast majority of credit unions (90.0%) that disappeared during the crisis actually merged and very few failed (i.e., via liquidation or involuntary merger). In total, only 93 credit unions failed between 2007 and 2010 versus 841 mergers.^{xxiv} Nonetheless, from this simple exercise, there are a few important indicators: credit unions that merged or liquidated during the Great Recession had significantly lower earnings than other credit unions, with most of these credit unions experiencing negative earnings in 2006 (the year prior to the start of the recession). Although less pronounced, these credit unions also had lower capital ratios. However, we note that even some credit unions with capital ratios well over 15.0% ended up liquidating or merging, particularly the smaller ones with under \$20 million in assets. Therefore, a strong capital cushion by itself is not necessarily sufficient to weather a recession.

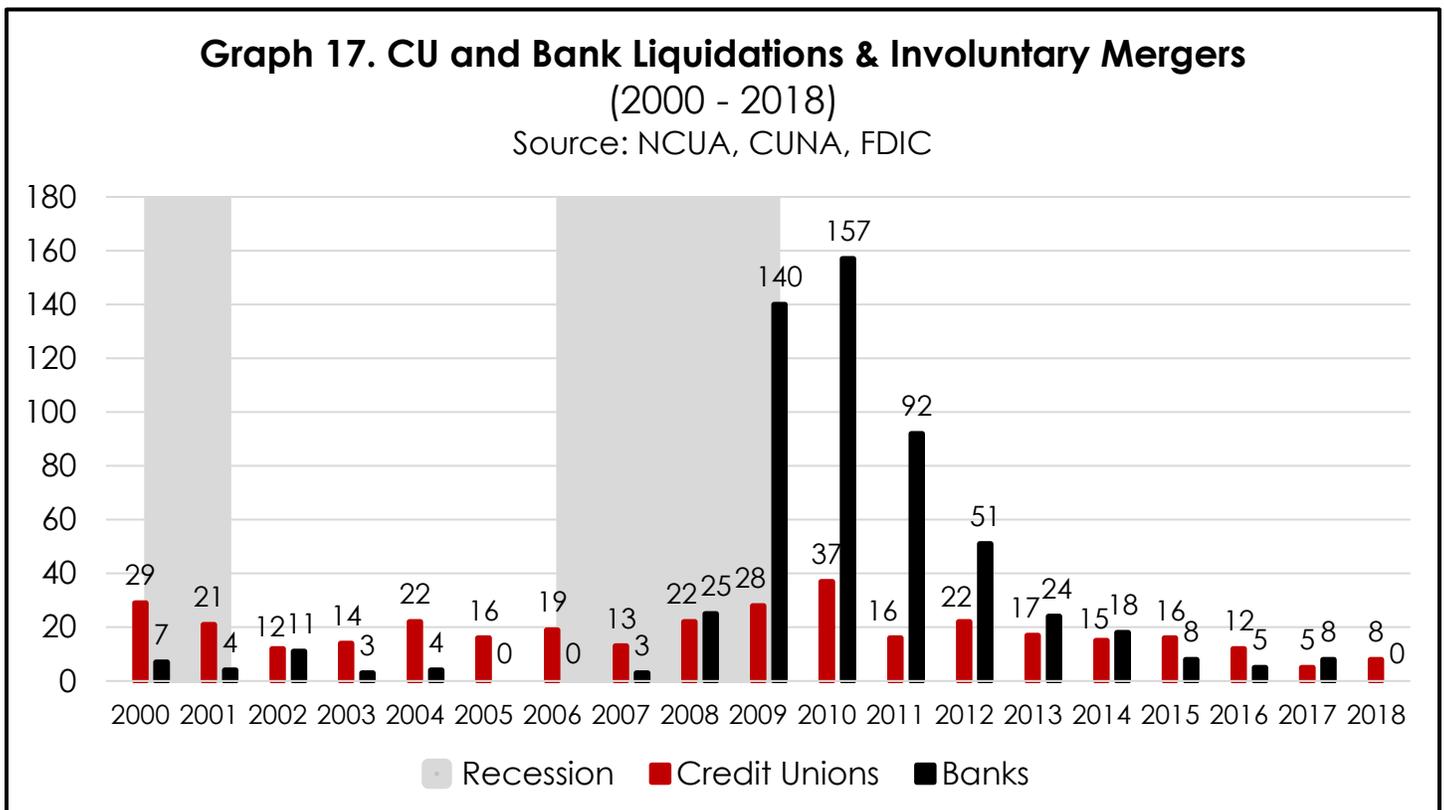
Interestingly, credit union loan and membership growth does not appear to be as strong a predictor of liquidation or merger, and in some asset categories credit unions that failed were in fact growing faster than credit unions that remained. Finally, credit unions that liquidated or merged during the 2007 – 2009 financial crisis were already encountering significantly higher delinquency and charge-off rates prior to the recession, almost double what other credit unions were experiencing. Overall, this analysis highlights that credit unions that were already struggling with low or negative earnings and poor portfolio quality prior to the current recession are more likely to merge or liquidate. Nonetheless, the vast majority of credit unions with relatively poor performance indicators prior to the Great Recession did not fail or merge. In fact, 75.7% of credit unions with negative earnings in 2006 continued to operate in 2011. Therefore, we expect that most credit unions should also be able to weather the current crisis.

Table 1. Comparison of Closed & Continued CUs during 2007 – 2009 Great Recession

Asset Size	<i>Credit Unions that Liquidated or Merged (2007 – 2009)</i>						<i>Credit Unions that Remained</i>					
	ROA	Net Worth	Delinq.	Charge-offs	Loan Growth	Member Growth	ROA	Net Worth	Delinq.	Charge-offs	Loan Growth	Member Growth
< \$20m	-0.47%	17.24%	5.16%	1.37%	0.56%	-2.12%	0.66%	17.60%	2.80%	0.67%	3.89%	-0.50%
\$20m-50m	-0.47%	11.62%	2.51%	1.03%	4.73%	-0.02%	0.68%	13.88%	1.21%	0.45%	5.20%	0.46%
\$50m-\$100m	-0.18%	10.52%	2.74%	1.06%	6.45%	3.21%	0.64%	12.70%	1.07%	0.45%	5.75%	1.33%
\$100m-\$250m	0.08%	9.98%	1.70%	0.59%	7.85%	1.37%	0.65%	12.02%	0.98%	0.47%	7.23%	2.92%
\$250m-\$500m	-1.93%	8.04%	4.94%	1.38%	13.05%	4.91%	0.71%	11.99%	0.85%	0.46%	7.63%	2.64%
\$500m-1B	0.20%	10.43%	1.36%	0.59%	4.93%	-2.48%	0.73%	11.58%	0.76%	0.41%	9.36%	3.89%
>\$1B	-0.34%	10.64%	1.68%	0.73%	9.01%	3.00%	0.65%	10.56%	0.77%	0.48%	13.90%	6.25%

Notes. Source: NCUA & CUNA. Data from year-end 2006, the year prior to the 2007 – 2009 Great Recession. In total, 691 credit unions merged or liquidated during the 3-year period from 2007 to 2009.

In a recent study^{xxv} (2019) Filene economist Luis Dopico and U.C. Berkeley economist James Wilcox examined the factors leading to failures of credit unions and banks over nearly four decades (1980 – 2018). Dopico and Wilcox use more sophisticated multivariate regression analysis and, in general, find that credit unions fail less often than similarly sized banks. The authors also find that credit unions were particularly more resilient during the most recent financial crisis of 2007 – 2009, when bank failure rates spiked. In separate studies, Dopico and Wilcox (2019) and van Rijn et al.^{xxvi} (2019) find that credit unions typically take on less risk than banks, making them more resilient during downturns. In fact, as displayed in Graph 17, banks experienced significantly more failures during the Great Recession: from 2009 to 2011 a total of 389 banks failed versus only 81 credit unions.^{xxvii}



Overall, Dopico and Wilcox find that depository financial institutions were more likely to fail when they had the following characteristics:

- Less capital.
- More delinquent loans.
- Lower return on assets (ROA).
- Smaller asset size.
- More noninterest expenses per assets.
- Very fast asset growth.
- More concentrated asset portfolios.
- Higher state unemployment rates.

However, the authors conclude that predicting and preventing failures is difficult work and many failures, if not most, involve idiosyncratic causes that are difficult to predict (such as fraud, poor record keeping, excessive portfolio concentration, etc.). Indeed, many credit unions that had the above characteristics—such as low capital, small asset size, higher delinquencies and concentrated loan portfolios—continued to exist and thrive through prior downturns. Thus, in the current recession, credit unions should be aware of these factors and monitor them, but they should not be overly alarmed if they notice some deterioration in these metrics over the coming months, which is only natural in any recession.

IV. Conclusion

How can credit unions respond to and withstand the current recession? The coronavirus pandemic is first and foremost a health and humanitarian crisis, and we are heartened by credit unions' efforts to support their members and employees during this challenging time. The ethos of "people helping people" is etched into the credit union DNA, and we are already seeing incredible examples of how credit unions are rising to the occasion. These examples include donations for [COVID-19 response funds](#), [emergency loans](#) with no payments or interest for 90 days, and support for members experiencing financial hardship via [loan modifications](#), including deferred payments for up to 120 days on car loans, personal loans, credit cards and mortgages. In fact, in a recent [CUNA survey](#), we find that 92% of credit unions surveyed are offering loan modifications and fee waivers during the crisis, 78% have created new loan products to meet members' pressing needs, and 30% have made donations or otherwise aided community organizations in response to the pandemic. Fortunately, the historic economic expansion that lasted more than 10 years allowed many credit unions to develop strong balance sheets and near record-high capital levels. Similar to the Great Recession, when credit unions continued to lend despite banks pulling back^{xxviii}, credit unions will undoubtedly continue to find new and creative ways to meet the needs of their members.

As CUNA Chief Economist Mike Schenk recently [wrote](#), "the best course of action is for credit unions to avoid knee-jerk reactions, to closely study financials, and when possible, to let the capital position do its work: to temporarily let net income fall as a result of margin pressures and modest loan losses." Moreover, he continues, "it is imperative to avoid doing unnecessary near-term harm to the credit union that would result from trying to maintain net income in the current environment. This means credit unions that have more than adequate capital should not find it necessary to penalize members of the credit union with higher loan rates, more and higher fees, lower dividend rates, service cutbacks, or layoffs just to keep net income from falling."

If the coronavirus crisis is, in fact, relatively short-lived and the economy recovers quickly—as many hope and expect—credit unions may simply need to weather the worst of the storm for several months until the economy starts to recover. However, many credit unions—such as credit unions that serve particularly vulnerable communities—may face more challenging circumstances and difficult decisions.

Based on our knowledge and experience from how credit unions across the country are responding to the crisis so far, here are a few strategies that credit unions might want to consider:

- 1) Regular communication, including with members, employees and the board.** Members should have clear information as to the plans and direction of the credit union during the crisis, any new products and services that can assist them, changes to loan payments and branch hours or closures, and how to access to their funds. Credit union employees should have an idea as to how the credit union plans to keep them safe, any changes to benefits or compensation, and expectations for work schedules and requirements. The credit union's board chair might even consider writing an inspirational message to members expressing the board's appreciation and encouragement for their work. Finally, the credit union board should be kept apprised of any major developments and how these might affect the direction and strategic goals of the credit union.
- 2) Consider how to support members.** As highlighted in the above examples, credit unions might—to the extent that they are able—consider creating new and unique products and services specifically designed to help members through the worst of the crisis, such as short-term emergency loans, skip payments for 60 or 90 days, forbearance, fee waivers, or periods of zero interest accrual. Credit unions may also want to consider how to check in on members and maintain efforts at financial education and counseling, such as via phone calls, webinars or [Financial Health Check-ups](#).
- 3) Consider how to support employees.** Credit unions are demonstrating numerous ways of going above and beyond to support their employees. For example, although not all credit unions are in the position to be able to do this, some larger credit unions are offering [bonuses and hazard pay](#). Employees might also need more flexible hours to watch children that are at home, access to retirement or other savings, or additional paid time off, such as sick leave.
- 4) Reconsider your strategic plan.** More than likely, many of your credit union's plans for 2020 will need to be set aside or delayed. Credit union leadership may need to resist the urge to press forward with long-term goals of acquisition, mergers, growth, or the development of new products and services, and refocus on simply weathering the current crisis.
- 5) Forecast different scenarios for the credit union's financials.** Although it is very difficult to predict exactly what will happen in the coming months, it is nonetheless helpful to have some idea as to the direction that different operational indicators might move. What could happen to earnings and net-worth during the recession? What about loan and membership growth? Do we expect a big jump in credit union delinquencies or charge-offs? How is the credit union monitoring these developments? Many credit unions are beginning to consider different scenarios and it is helpful to contemplate a range of possibilities, from worst-case to best-

case. As always, it is generally good advice to hope for the best but prepare for the worst, including financial stress tests that consider worst-case scenarios and how the credit union might respond. This will be even more critical for credit unions serving certain vulnerable sectors and populations, and these credit unions may need to prepare for difficult decisions.

6) Return to your credit union’s mission and vision statements. In times of crisis, it may be helpful for credit union leadership and its employees to remind themselves of why they do what they do. What is the “big picture” goal of the credit union? Most credit unions’ mission statements focus on some combination of helping people access affordable financial services, achieve financial stability, improve financial well-being, and promote financial empowerment. Reminding ourselves of this vision will help credit unions when adjusting plans and facing difficult decisions.

On that note, we close with the insights of a credit union CEO who, during the depth of the financial crisis in 2008, penned these words to his credit union’s employees and volunteers:

A year ago, we didn’t face the kind of economic uncertainty that we face today. We also weren’t dealing with operational issues of the size and complexity that we are presently dealing with.

And yet, our greatest challenge may not be the condition of the economy. Or whether we can convert data processing systems. Or even our ability to absorb or avoid hits to our loan or investment portfolios.

Our greatest challenge, unlike anything else in our history, is to see beyond our own narrow self-interest, to forego our individual agendas in favor of our common purpose, to promise ourselves that tomorrow we all pull in the same direction no matter what we did. Or thought. Or experienced yesterday.

In short: Look less in the mirror and more out the window. Because out the window are the people who need our credit union to help them manage through this mess.

We have no doubt that today—as we did then—credit unions will respond to this call.

Contact

Jordan van Rijn, PhD
Senior Economist (CUNA)
@Jordan_vanRijn
jvanrijn@cuna.coop

Endnotes

- ⁱ Source: NY Times (<https://www.nytimes.com/2020/03/17/upshot/coronavirus-economy-crisis-demand-shock.html>)
- ⁱⁱ For examples, see: <https://www.goldmansachs.com/insights/pages/us-daily-20-march-2020.html>, <https://ihsmarkit.com/research-analysis/covid19-impact-update-us-gdp-to-plunge-to-13-q2.html> and <https://www.moodys.com/newsandevents/topics/Coronavirus-Effects-007054> and <https://www.marketwatch.com/story/morgan-stanley-releases-new-forecast-showing-us-economy-may-drop-as-much-as-38-2020-04-03>
- ⁱⁱⁱ Source: <https://www.cnn.com/2020/03/31/investing/premarket-stocks-trading/index.html>
- ^{iv} Source: NY Times (<https://www.nytimes.com/2020/03/17/upshot/coronavirus-economy-crisis-demand-shock.html>)
- ^v Source: Department of Labor (<https://www.dol.gov/ui/data.pdf>)
- ^{vi} Source: <https://www.bls.gov/news.release/pdf/empsit.pdf>
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- ^{viii} According to Freddie Mac. Source: <http://www.freddiemac.com/pmms/>
- ^{ix} Source: https://techcrunch.com/2020/03/19/uber-coronavirus-update/?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAALIENg8slJ0oiNv14jgzAOiHcaxaff05iAHhM2M40_AqJ2fh8TDB-1hpJIKxJ4KU_6qf2Mkvty_fzNr4YbdeJRXwS-KhTsy2JJqKsWWdquFg_Y2AQUfs1kdscrBAX57kgkmbro4Rd88msKT65l76uZ77fPQyk-hvWlqd10RmHF7h
- ^x Source: <https://www.stuff.co.nz/national/health/coronavirus/120510118/rental-market-flooded-with-former-airbnb-properties>
- ^{xi} Source: <https://ihsmarkit.com/research-analysis/coronavirus-impact-on-global-auto-demand.html>
- ^{xii} According to the U.S. Census: <https://www.census.gov/popclock/>
- ^{xiii} Source: <https://www.washingtonpost.com/us-policy/2020/03/27/congress-coronavirus-house-vote/>
- ^{xiv} Source: <https://www.federalreserve.gov/econres/scfindex.htm>
- ^{xv} For more information on QOZs, see: <https://www.cdfifund.gov/Pages/Opportunity-Zones.aspx>
- ^{xvi} See, for example: <https://www.washingtonpost.com/business/2020/03/19/service-sector-recession-coronavirus/>
- ^{xvii} Source: <https://www.brookings.edu/blog/up-front/2020/02/27/examining-the-black-white-wealth-gap/>
- ^{xviii} Source: <https://www.ers.usda.gov/topics/rural-economy-population/employment-education/rural-employment-and-unemployment/>
- ^{xix} For more information, see: <https://www.fhfa.gov/DataTools/Downloads/Pages/Duty-to-Serve-Data.aspx>
- ^{xx} Source: <https://oilprice.com/>
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- ^{xxii} Source: <https://files.stlouisfed.org/files/htdocs/publications/review/03/09/Kliesen.pdf>
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- ^{xxvii} Source: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3506873
- ^{xxviii} See, for example: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3231614 or https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3506873