Filene

REPORT

The Credit Union of the Twenty-First Century

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Executive Summary

Overview

This report begins the process of reimagining the 1934 Federal Credit Union Act and aligns the credit union manifesto with twenty-first-century norms—economic, social, and technological—so that credit unions can envision how they can transform to meet the needs of consumers in the future.

MEET THE AUTHORS

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What Is the Research About?

Credit unions in the United States were originally established to promote savings and thrift and, in particular, to provide people of limited means access to credit in order to pursue productive investments. As we approach the Federal Credit Union Act's centennial in 2034, the role of credit unions in providing secure, fair access to financial services, especially for individuals of small and moderate means, remains as important as ever. While many of the socioeconomic factors that drove the credit union system in the last century remain salient, more recent changes—especially technological innovations that have fundamentally changed how financial institutions interact with consumers—encourage us to reimagine the role that credit unions will play in the United States' financial services landscape over the next decades. Through a series of in-depth interviews with industry professionals, consultants, and regulators and an extensive examination of over 100 secondary sources, the researchers imagine a not-too-distant operating and regulatory future for credit unions. The research paints a future credit union landscape that is both enabled by technology and altered by changing economic conditions and consumer attitudes. Some of the most important socioeconomic transformations include the following:

- The increase in the proportion of precarious workers and rise of a "1099" workforce.
- Growing income volatility and financial fragility.
- Growing income and wealth inequality.
- Generational divisions, leading to what the researchers call the "two tails" problem of concentrated need among the young and elderly.

Some of the key drivers of changes in consumer preferences and expectations include the following:

- The emergent role of payments as the key entry point into financial relationships.
- A shift away from traditional branching delivery channels.

- Significant advances in and consumer adoption of sophisticated voice and video capabilities.
- Radical enhancements in data analytics and automation.
- Consumers' changing relationships with automobiles.

What Are the Credit Union Implications?

These trends result in a potentially new (and radically different) operating and regulatory model for credit unions in this century. From an operational perspective, credit unions need to adopt impactful technologies that are already changing consumers' relationship with their financial services provider. The authors recommend credit unions prepare for this future by developing and deepening four models for the provision of consumer financial services:

- **Relationship banking,** differentiated by credit unions' deep knowledge of and responsiveness to the needs of members and their communities. As one interviewee put it, "This is something deeper than a deposit. This is something way, way more than a transaction. This is about being a part of your community, and giving back, and helping the community not only survive, but even thrive."
- **Ambient banking.** "Money is just a facilitator of other activities, so don't get in my way," one interviewee explained. Yet this seamlessness cannot be achieved by taking separate pockets of the banking experience mobile. Instead, the credit union of the twenty-first century may ultimately become fully ambient, even atmospheric, combining Alexa-style voice interaction with a skillful mix of artificial intelligence–driven chatbots and human handoffs.
- **Automated banking.** One of the key promises of data is in automating processes to smooth the member's path through the credit union. Member data are the fuel of automation—from the robotic processing of routine tasks, to natural language processing, to more advanced decision making and risk assessment driven by artificial intelligence and machine learning. The researchers suggest that by automating large parts of financial services delivery, credit unions can concentrate on specific member needs and relationships.

- **Concierge banking.** As the researchers explain, consumers in the early twenty-first century want to save more, but they are stymied by instability and uncertainty in their day-to-day financial lives. They want to improve their credit and start investing responsibly, with carefully personalized loan and investment recommendations; but when they start looking, they are confused and exhausted sorting through the numerous complex options that pop up on Google. They want good financial advice to help them plan for tomorrow and for the future, but they don't know who to trust. By combining data-driven recommendations and human financial advising, the twenty-first-century credit union can become members' financial concierge.

Regulatory structures will also have to evolve alongside operating models to enable credit union growth in the twenty-first century. The researchers emphasize the need to create alternative sources of capital to fuel options for growth. Inspired by their interviewees, they also begin to reimagine credit unions' fields of membership and communal common bonds to better fit in a world that, as the researchers write, is "increasingly likely to manifest [relationships] in dynamic, digital- or virtual-world contexts." The researchers ask that we rethink the creation and self-definition of credit union fields of membership: "Credit unions today do not serve only preexisting communities. Rather, communities are made and maintained, in part, through participation in credit unions."

The world is changing in exciting and unpredictable ways. This study rightfully claims credit unions need to be proactive about preparing for that uncertain future. One of the promising highlights of this research is the authors' contention that something as "old-fashioned" as the philosophy of cooperative finance will still matter well into the technology-enabled twenty-first century. Much like the comfort of a physical book in today's world of screens, that philosophy is not an anachronistic relic but a beacon that will illuminate a safe path for credit unions as they make their way into an uncertain future.

The Credit Union of the Twenty-First Century

CHAPTER 1

Introduction

We don't need a twenty-first-century strategy, we need a strategy for a twenty-first-century world. We don't know exactly what that world will look like. —A CREDIT UNION SENIOR VICE PRESIDENT

Credit unions in the United States were originally established to promote savings and thrift and, in particular, to provide people of limited means access to credit in order to pursue productive investments. At the turn of the twentieth century, many Americans could not obtain credit through formal financial institutions, leaving them at the mercy of predatory loan sharks and usurious interest rates. By organizing groups of individuals, such as factory workers or public employees, in cooperative associations and using their deposits to underwrite loans to fellow group members, credit unions became vehicles for stabilizing and ameliorating members' financial lives. The advent of the Great Depression in 1929 further demonstrated the need for reliable and inclusive financial services, bolstering

the case for credit unions and their mission to promote economic independence through cooperation. During the Depression's early years, several states passed laws allowing credit union charters, and in 1934 the US Congress passed the Federal Credit Union Act (FCUA), which enabled credit unions to incorporate in any US state or territory and strengthened the relationship between the credit union system and the federal banking system.

As we approach the FCUA's centennial in 2034, the role of credit unions in providing secure, fair access to financial services, especially for individuals of small and moderate means, remains as important as ever. The global financial crisis (GFC) of 2008 and subsequent Great Recession, like the Great Depression, exposed the precarious circumstances of many American households. Income irregularity, wage stagnation, and large-scale transformations of the labor market all contribute to the continued relevance of the credit union model. While many of the socioeconomic factors that drove the credit union system in the last century remain salient, more recent changes—especially technological innovations that have fundamentally changed how financial institutions interact with consumers—encourage us to reimagine the role that credit unions will play in the United States' financial services landscape going forward.

As we approach the FCUA's centennial in 2034, the role of credit unions in providing secure, fair access to financial services, especially for individuals of small and moderate means, remains as important as ever.

That reimagining requires that we revisit the central principles of the original FCUA. What would an updated FCUA, one that more adequately reflects today's financial services ecosystem, look like? Would changes to the act better enable credit unions to compete in the socioeconomic and technological world quickly coming into being? New consumer-facing financial technologies are at the heart of this transformation, the challenges facing credit unions today, and, by extension, our vision of a twenty-first-century FCUA—and a twenty-first-century credit union. Building out from the technology question, a host of other issues arise, such as the rules regarding capitalization, lending, and—above all—the definition of "membership" or "community" itself. In this report, we draw on ongoing ethnographic fieldwork in the payments and consumer financial services industries and original research—including a survey of credit union professionals, in-depth interviews with credit union system stakeholders, and a review of secondary literature—to explore these questions.[1]

At the beginning of the credit union system, credit unions were most often organized around preexisting institutions, such as workplaces; one of the first credit unions in the United States was formed by Edward Filene's employees at his department store in Boston in 1909. The original 1934 FCUA allowed credit unions to incorporate not only through the

common bond of occupation but also through associational bonds and/or one's belonging to a local community, delimited geographically. Today, occupational, associational, and community common bonds are increasingly less permanent and increasingly less tied to any specific geographic location. Changes in how common bonds manifest and are made meaningful, and the implication of such shifts for credit unions' fields of membership, have been shaped by broader socioeconomic changes in the United States, such as the frequency with which workers move from place to place or from one employer to another. Such changes are also closely related to innovations in telecommunications platforms, especially as financial services have sought to take advantage of those platforms. As mobile and online banking channels become more common and more sophisticated, what constitutes a community and its membership changes as well. Communal common bonds are today increasingly likely to manifest in dynamic, digital- or virtual-world contexts. As one of the credit union system consultants with whom we spoke put it, "Even the employer-based credit unions that are most progressive today are serving virtual communities."

Communal common bonds are today increasingly likely to manifest in dynamic, digital- or virtual-world contexts.

We contend that credit unions today do not serve only preexisting communities. Rather, communities are made and maintained, in part, through participation in credit unions. As we approach 2034, credit unions have become more like platforms that constitute their own communities, whose members are tied together in ways that exceed narrowly defined occupational, associational, or geographical relationships. By harnessing new and emerging consumer-facing financial technologies and their back-end platforms, credit unions can more effectively realize these self-defined communities. However, they will also need a reimagined FCUA that can address those changes.

Credit unions today do not serve only preexisting communities. Rather, communities are made and maintained, in part, through participation in credit unions.

In the next chapter, we outline several significant socioeconomic trends that will challenge the credit union system in the near future, drawing on recent research about how structural changes in the US economy are remaking the everyday financial lives of credit union members and potential members. Next, we detail current trends in consumer-facing financial technologies, focusing on the trends our survey respondents and interviewees identified as most significant, as well as lessons they have learned from adopting new technologies. In the final two chapters, we outline recommendations for a twenty-first-century credit union business model and lay the groundwork for rethinking the FCUA in ways that would support this model.

Emerging Socioeconomic Trends and Challenges

At a Glance: Twenty-First-Century Socioeconomic Trends

1. The Precarious Future of Work
2. Rising Income Volatility and Difficulty Saving
3. Inequality: Income, Wealth, Access
4. The Two Tails
5. Credit Union Growth and Consolidation

Ten years have passed since the outbreak of the GFC in 2008 and the subsequent onset of the Great Recession. According to the US National Bureau of Economic Research, the Great Recession ended after 19 months in June 2009. Recent macroeconomic reports have spelled good news for the US economy, and headlines tout economic growth,[2] rising wages,[3] and falling unemployment rates.[4] There are, however, gathering doubts about the sustainability of these improvements and, more worryingly, questions about how they have been distributed. Even as growth has picked up, the effects of the crisis and downturn—social and political as well as economic—have persisted for many.

The fate of credit unions in the twenty-first century is tied directly to the financial behavior and well-being of their members. Here's how one credit union system analyst put it:

> *If a credit union is to have a sustainable financial performance, the membership has to have a solid economic base. A credit union has limited opportunity to change its lending profile and, for the most part, can't add new members at will. So any and all trends that affect the financial well-being of households (the nearly 20% who use a credit union as their primary financial institution or the nearly 35% of households that have some affiliation with a credit union) will affect credit union performance.*

Below we identify four trends we believe will have the greatest effect on credit union members and potential members in the coming decades: (1) precarious work, (2) financial fragility, (3) socioeconomic inequality, and (4) generational divisions. At the same time, credit union membership in the coming decades will be increasingly concentrated among larger institutions with more diverse memberships. This represents a fifth important trend,

one familiar to credit union system stakeholders: the growth of credit union membership in the context of increasing institutional consolidation. How credit unions respond, individually and collectively, to the shifting socioeconomic landscape of the post-GFC United States will determine the future of the credit union system in the twenty-first century.

1 The Precarious Future of Work

Despite rosy headlines about decreasing official unemployment rates, alternative measures of joblessness and workforce underutilization are less optimistic.[5] Millions of Americans are either unemployed or underemployed, even when they do not figure into official statistics (because, for example, they have given up looking for work). "Livelihood disruptions" owing to layoffs and irregular hours are today a normal experience, as job security has declined and part-time and impermanent work has increased since the middle of the twentieth century.[6] As a result, new understandings of work are emerging, positioning employees themselves as businesses with brands and assets who deliver services to companies on short-term contracts.[7] These trends are especially acute for women, young people, and people of color.

The most dramatic contemporary workforce trend over the past several decades has been the rise in temporary work. Recent estimates suggest that a large proportion of the US workforce is already made up of temporary workers with nonpermanent contracts. A 2016 study found that 94% of net jobs created between 2005 and 2015 were in the form of "alternative work arrangements" (freelancers, contractors, and on-call and temp agency workers).[8] A January 2018 NPR/Marist survey found that one in five workers in the United States is a contract employee; over 50% of these contractors did not receive any sort of benefits—health care, retirement, and so on—from their jobs.[9] A 2017 survey found that over a third of the US workforce—more than 57 million people—freelances in some way.[10]

__94%__ of net employment growth between 2005 and 2015 was in the form of freelance, contract, on-call, or temp agency jobs. __20%__ of all workers today are contractors. __Over 50%__ of contractors do not receive benefits from their employers.

Not only have the temporary and freelance workforces grown more quickly than regular, permanent work over the past decade, but the percentage of temporary or contingent workers is expected to continue growing. The greatest number of jobs that have been added since the GFC are in the "temporary help services" industry, composed of temp agencies

and staffing companies.[11] Intuit predicts that the share of contingent workers in the United States will exceed 40% by 2020,[12] while another study predicts that the majority of workers will freelance in some capacity by 2027.[13]

***Within the next 10 years**, a majority of workers will have temporary or contingent jobs.*

Though freelance work is sometimes characterized as a choice, this is not an entirely accurate representation. Changes in regimes of work reflect changing values and aspirations among some workers, especially skilled workers, many of whom report valuing the time flexibility and social freedom that come with the ability to set one's own schedule. Yet many of these workers also emphasize the downsides of uncertainty and insecurity, which disproportionately affect lower-skilled workers.[14] Freelance workers are sometimes called "1099 workers" because they do not receive a W-2 Wage and Tax Statement from their employers but instead use a 1099 form to report miscellaneous earned income. This arrangement allows for more individual flexibility, but it also means that workers are often paid less and lack a social safety net, in that they do not receive health care or retirement benefits, they are not guaranteed a minimum wage, they are less likely to receive other benefits like sick days, paid vacation, or parental leave, and they often do not have access to direct deposit, scheduled bill pay, or payroll tax and social security deductions made through their employers.

The Challenges of Temporary Work

Temporary workers:

- Are not likely to receive employer-provided benefits, such as health insurance, retirement plans, pensions, liability insurance, and disability and life insurance.
- Are not entitled to unemployment insurance and other state and federal benefits.
- Are not likely to receive sick time, paid vacation, or parental leave.
- Face fluctuating and unpredictable income and workload, leading to increased uncertainty and insecurity.
- Tend to receive lower pay and have fewer opportunities for raises or bonuses.
- Have difficulty compelling timely payment and managing client expectations.
- Experience increased isolation and fewer channels for professional recognition.
- Have few opportunities for training and professional development.
- Are less likely to receive access to direct deposit, scheduled bill pay, or payroll tax and social security deductions made through employers.
- Find it costly to hire accounting, legal, and other administrative support services.
- Are ineligible for membership in unions, and do not benefit from collective bargaining efforts.

Serving 1099 workers' financial needs represents a significant opportunity for credit unions not only to grow their membership but also to update and advance the credit union system's original mission. Yet as a former regulator-turned-consultant noted, "Credit

Drivers of Temporary Work

There are many supply-side factors driving growth in impermanent work and contract labor. These factors are complicated and vary from region to region. They include the following:

- The growth of the on-demand and gig economies, especially through online work-distribution platforms (Uber/Lyft, Amazon MTurk, TaskRabbit, Upwork) and property-rental platforms (Airbnb).[15]
- Increasing workplace automation.
- Economic polarization and falling demand for middle-skilled labor.[16]
- Structural processes like deindustrialization, driven by increasing market competition and pressures to scale and reduce costs through flexible labor arrangements.
- Growing use of on-demand scheduling, such as assigning hours to retail or restaurant workers based on anticipated swings in customer demand.[17]
- De-unionization policies and declines in union membership, a trend that is likely to continue in the wake of the US Supreme Court's ruling in *Janus v. AFSCME* that it is unconstitutional for public sector unions to collect fees from nonmembers.[18]

unions and banks are not spending enough time thinking about these changes." The rise of a precarious workforce will impact credit unions in at least two fundamental ways:

1. *Effects on the financial lives of workers*. It is clear that the future of work will shift the financial needs of credit union members and potential members and, therefore, how credit unions reach and serve them. For example, the CEO of a regional league told us that members without W-2 forms change the calculus for underwriting loans, and, as a result, "we're all going to have to get creative about what does a stable income look like." We review these financial challenges—including increased income irregularity and inability to deal with unexpected expenditures—below.
2. *Effects on fields of membership*. Even more fundamentally, the decline of the single workplace and permanent workforce changes the content and boundaries of credit union membership and potential membership, as long-term work-based affiliations become even less common. As one credit union system analyst told us,

> *An industry that was birthed in the traditional go-to-the-office model—or go to the plant or go to the base—and you do your business while you're there, or else right after you get off work and head on home, [that industry] is going to be very outmoded in a 1099 world.*

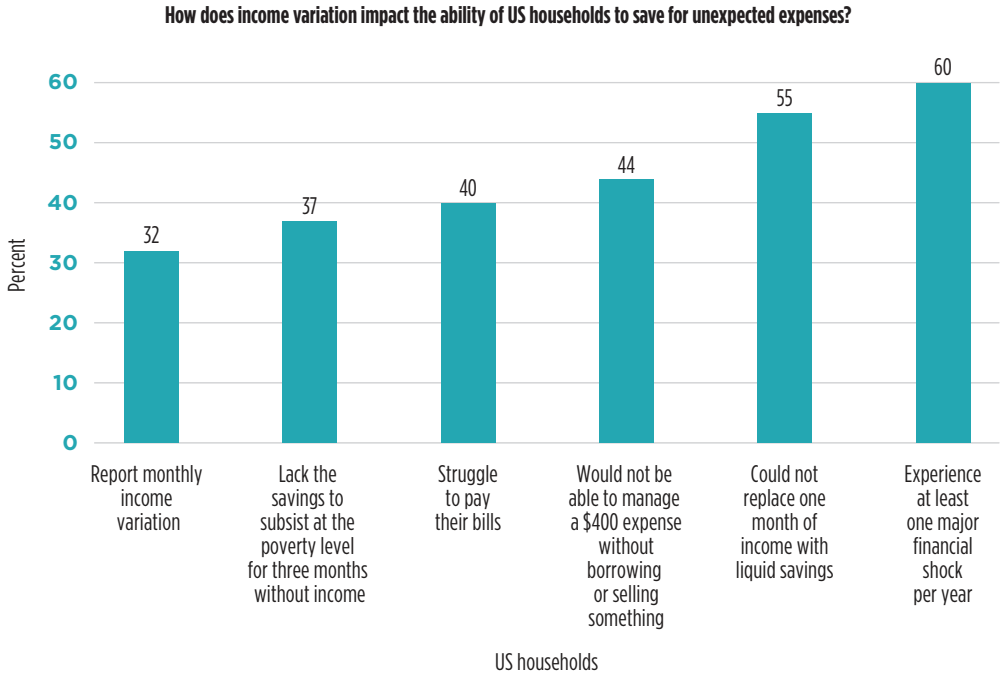
2 Rising Income Volatility and Difficulty Saving

Anxiety about making ends meet is widespread among Americans. This is due, in particular, to widespread and persistent income volatility and the challenges that such volatility poses to budgeting, saving, and indebtedness. As one credit union consultant put it, "Across the economic spectrum, there are people that have cash-flow problems and have trouble with their money, regardless of their income level." The result is that many families in the United States live in and out of episodic poverty, with far-reaching economic, social, and even physical effects.[19]

Many families in the United States live in and out of episodic poverty, with far-reaching economic, social, and even physical effects.

FIGURE 1

INCOME VOLATILITY AND FINANCIAL FRAGILITY OF US HOUSEHOLDS



Sources: Board of Governors of the Federal Reserve System, *Report on the Economic Well-Being of U.S. Households in 2016*, May 2017, www.federalreserve.gov/publications/files/2016-report-economic-well-being-us-households-201705.pdf; "Liquid Asset Poverty Rate," Prosperity Now Scorecard, scorecard.prosperitynow.org/data-by-issue#finance/outcome/liquid-asset-poverty-rate; The Pew Charitable Trusts, *The Precarious State of Family Balance Sheets*, January 2015, www.pewtrusts.org/-/media/assets/2015/01/fsm_balance_sheet_report.pdf; The Pew Charitable Trusts, *Survey of American Family Finances*, March 2015, www.pewtrusts.org/~/media/assets/2015/03/fsm-poll-results-toplines_artfinal_v3.pdf.

In the wake of the GFC, high levels of household financial uncertainty and unpredictability have been linked to the increasing frequency and intensity of spikes and dips in income and expenses. As one recent study put it, the abundance of evidence now indicates that "there is no average financial month for many families, but rather periods of financial slack punctuated by regular financial shortfalls."[20] The experience of income volatility is not only annual but monthly, weekly, and sometimes even daily. A number of data points bear out this reality for many American households, including the following:

- Back-to-back (2016 and 2017) Federal Reserve reports on the economic well-being of US households found that 32% of Americans reported some kind of monthly income variation.[21]
- The JPMorgan Chase Institute found that in 2013–2014, 41% of Americans experienced monthly income fluctuations of more than 30%, and 89% experienced changes in income of more than 5%.[22]
- The Pew Research Center found that in 2014–2015, 34% of Americans surveyed reported an unexpected dip in income.[23]
- The US Financial Diaries Project found that among low- and moderate-income (LMI) households, monthly income variation is an even more familiar experience: on average, a change in income of 25% or more was registered in five months annually.[24]

Even those with secure work and adequate annual incomes experience these fluctuations, but they are ever-present and especially severe for those with low and moderate incomes. As a result, the majority (77%) of LMI households say that simple "financial stability" is more important to them than "moving up the income ladder."[25]

*77% of LMI households say that **financial stability** is more important than **financial mobility.***

Across the socioeconomic spectrum, volatility is due to both irregular earnings and irregular hours. As a result, many temporary workers are especially affected. A survey by the Aspen Institute found that of LMI households experiencing income volatility, more than half reported that an irregular work schedule was the cause. Self-employed workers and part-time workers were 58% and 35%, respectively, more likely to report income volatility than full-time workers.[26] Half of the contract workers surveyed in the January 2018 NPR/Marist poll reported that their income varies monthly or seasonally.[27]

Irregular income makes it hard to plan, budget, and save. Many need to juggle income sources, both to make ends meet and to earn extra income. Even among workers who have a full-time job, almost one-third do something else to earn additional money.[28] Sometimes this extra income comes from a second job, but more and more frequently, people are using online platforms to earn small pots of money—from selling household items on eBay,

Facebook Marketplace, or Craigslist, to renting a room on Airbnb, to driving for Uber or Lyft. Typically this supplemental money is used to reduce income volatility and smooth consumption, earning enough to cover rent for the month or buy a plane ticket to see a family member.

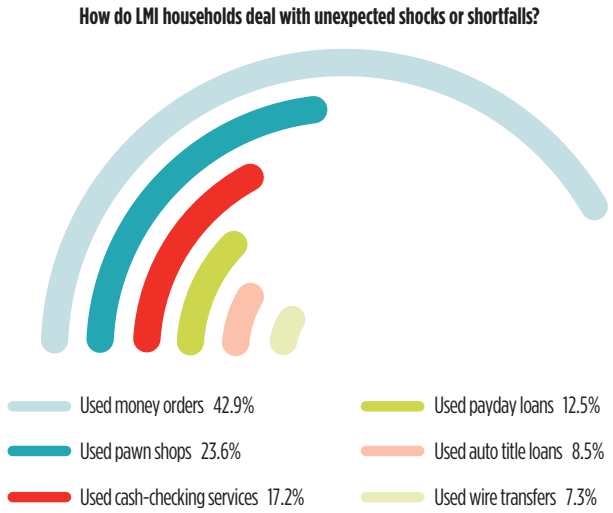
Income volatility is compounded by the unpredictability and variability of expenses, which are also rising, especially for nonwhite households.[29] One of the most prominent financial challenges in the post-GFC United States is dealing with crises, emergencies, and other unexpected expenditures from an illness, injury, or death to buying a car or house repair. Even predictable but intermittent expenditures like tax bills and holiday spending can pose a challenge. According to the Pew Research Center, 60% of American households experienced a financial shock in the previous year.[30]

Irregular income makes it hard to plan, budget, and save, and one of the most prominent financial challenges in the United States today is dealing with crises, emergencies, and other unexpected expenditures.

While households with savings can absorb such financial shocks, many (if not most) US households do not save enough to cover these expenditures when they arise. In 2017, the Federal Reserve estimated that 44% of Americans would be unable to manage an unexpected $400 expense without borrowing or selling something (down from 50% in 2013).[31] Pew found that the majority (55%) of American households could not replace even one month of income if they needed to.[32] These levels of "liquid asset poverty" leave poor households especially ill prepared to deal with unforeseen expenses or loss of

FIGURE 2

COPING WITH INCOME VOLATILITY



Source: Stephen Roll, David S. Mitchell, Krista Holub, Sam Bufe, and Michal Grinstein-Weiss, "Responses to and Repercussions from Income Volatility in Low- and Moderate-Income Households: Results from a National Survey," The Aspen Institute, December 2017. assets.aspeninstitute.org/content/uploads/2017/12/ASPEN_RESEARCH_CIV_03_digital.pdf.

With generous support from the Ford Foundation and Visa, Filene recently executed two rounds of its program incubator. The Filene incubator develops and pilots programs to serve financially vulnerable populations, then tests these programs in collaboration with US and Canadian financial institutions. Throughout the pilot durations, the programs are evaluated on their relative demand, consumer impact, scalability, and financial sustainability. Filene's most recent incubator targeted improving financial access for minority households. Several concepts were tested, among them: alternatives to payday loans, small-business microloans, and a lending program using an ITIN (Individual Taxpayer Identification Number). Forty credit unions succeeded in incubating these programs and issued a total of $84.8 million in loans to 18,559 consumers. Through developing programs, producing implementation guides, and shepherding incubators through financial institutions, Filene strives to improve the financial lives of at-risk populations while supporting the growth of cooperative finance.

income.[33] Among the LMI households studied by the US Financial Diaries Project, more than 40% had no emergency savings whatsoever, and only 7% were satisfied with their emergency savings.[34] Pew, meanwhile, found that low-income households had less than two weeks' worth of income on hand in case of emergency.[35]

Such challenges appear even for full-time workers whose jobs are not in immediate jeopardy. Many poor people in the United States are working Americans, and many more fall into a category the United Way terms "asset-limited, income-constrained, employed," or ALICE: those whose income does not fall in absolute terms below the poverty line but who nonetheless struggle with financial hardship and basic needs, from housing and transportation to health care and child care.[36] At the same time, given their income fluctuations, temporary workers are particularly vulnerable to savings challenges. A survey of contract workers found that freelancers use their savings more often than full-time workers.[37] Gig economy workers are thus in special need of a financial service provider that can help them access and manage payments coming and going. A consultant for a state-chartered commercial bank shared how his financial institution is meeting this kind of demand:

> *One of our partners is Uber, and trying to meet the needs of Uber drivers who may not want to wait to get paid until payday two weeks from now. Whereas, they've already earned the money, they can push a button, get paid for the pay that they've earned, and those transactions are processed through us on behalf of Uber.*

Households with extra income and savings can turn to those assets or trim nonessential consumption in the face of unexpected expenses, but households that are savings-limited and liquid-asset poor must choose between cutting back on essential expenses and taking on debt, especially small-dollar credit, to make ends meet. This may have economic effects down the road, since in the absence of personal savings and access to small-dollar credit, many people turn to social networks. For those without access to these networks, many then turn to fringe financial services, formal and informal.[38] The real and perceived effects of post-GFC economic recovery may also influence such behavior in potentially unsound ways. An economist working at a major credit union trade association shared with us a recent conversation that he had during a taxi ride:

> *I asked the driver, "Well, do you have any money set aside for a rainy day? Like, if something bad were to happen, have you put any money aside for that?" And his response, it was really telling. He said, "Well, why would I do that?" And I almost responded, and then he came back and said, "You know, interest rates are so close to zero, I'll just get a loan if I need any money." And I thought, "Well, I wonder how prevalent that idea is these days."*

Households that are savings-limited and liquid-asset poor must choose between cutting back on essential expenses and taking on debt, especially small-dollar credit, to make ends meet.

The US Financial Diaries found that almost a third of the LMI households studied resorted to alternative sources of credit when faced with a shortfall in income.[39] The Aspen Institute also found a link between income volatility and indebtedness: households that experienced persistent income volatility were about three times more likely to turn to fringe or alternative financial services—payday loans, check cashers, prepaid cards, pawnshops, nonbank remittances—than households that did not experience such volatility.[40] For many Americans, credit cards fill the gap, and in March 2018, US households collectively held around $1.026 trillion in revolving consumer credit—surpassing previous records set in 2008 at the outset of the GFC.[41] The reliance on small-dollar credit points, in short, to the need for liquid short-term savings products to counter rising income volatility and debt burdens.[42] Given their history of protecting consumers against usurious lending, credit unions are well positioned to serve individuals and households in need of access to small-dollar credit at fair interest rates.

Given their history of protecting consumers against usurious lending, credit unions are well positioned to serve individuals and households in need of access to small-dollar credit at fair interest rates.

3 Inequality: Income, Wealth, Access

There are several ways to break down the current state of socioeconomic inequality in the United States, and a variety of ways to measure it.[43] We highlight two broad approaches: *income share* and *wealth accumulation*.

The distribution of income up and down the socioeconomic ladder has become increasingly unequal, and this inequality intensified in the wake of the GFC. Economists Thomas Piketty, Emmanuel Saez, and Gabriel Zucman (from the Paris School of Economics, the University of California, Berkeley, and the National Bureau of Economic Research) have studied the share of national income that goes to different income classes over time. These studies show that over the past several decades, the share going to the wealthiest Americans has spiked. For example, pretax incomes for the top 1% jumped 204% during the 34-year period between 1980 and 2014. For the richest of the rich, these gains have been even more marked. The incomes of the top 0.001% surged 636% over the same time span; for the top 0.01%, that increase was 453%, and for the top 0.1%, it was 320%. Meanwhile, the

FIGURE 3

INCOME INEQUALITY IN THE UNITED STATES

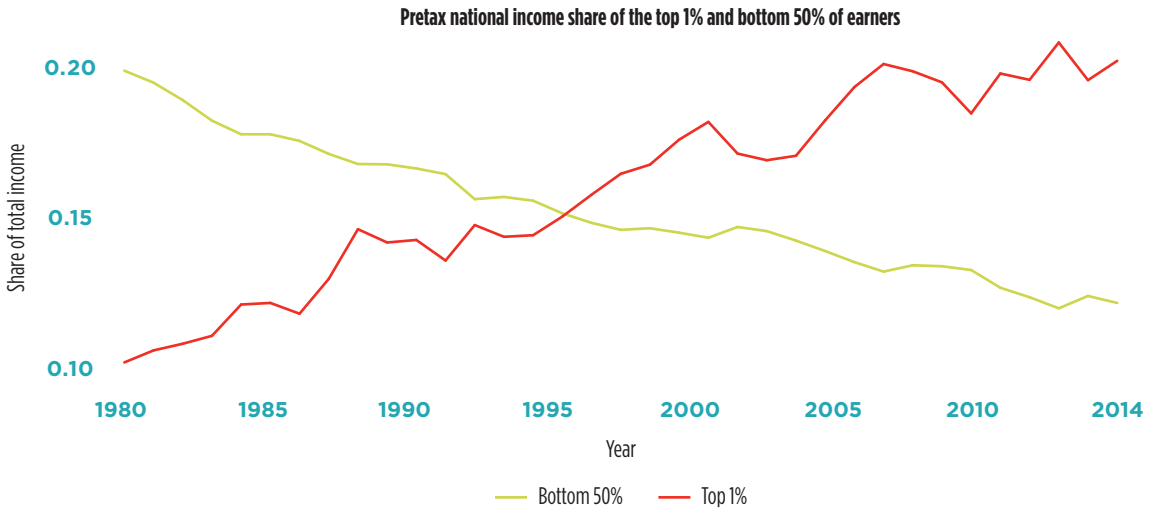
	Pretax income growth		Post-tax income growth	
Income group	1946–1980	1980–2014	1946–1980	1980–2014
Full population	95%	61%	95%	61%
Bottom 50%	102%	1%	129%	21%
Bottom 20%	109%	–25%	179%	4%
Next 30%	101%	7%	117%	26%
Middle 40%	105%	42%	98%	49%
Top 10%	79%	121%	69%	113%
Top 1%	47%	204%	58%	194%
Top 0.1%	54%	320%	104%	298%
Top 0.01%	76%	453%	201%	423%
Top 0.001%	57%	636%	163%	616%

Note: Between 1980 and 2014, the average pretax income of the Top 10% grew by 113%. Pretax national income is measured after the operation of pension and unemployment insurance systems (which cover the majority of cash transfers) but before direct income and wealth taxes. Post-tax national income is measured after all taxes, transfers, and government spending.

Source: Thomas Piketty, Emmanuel Saez, and Gabriel Zucman, "Distributional National Accounts: Methods and Estimates for the United States," *Quarterly Journal of Economics* 133, no. 2 (2018): 553–609, gabriel-zucman.eu/files/PSZ2018QJE.pdf; data available here: https://wir2018.wid.world/part-2.html.

FIGURE 4

INCOME INEQUALITY IN THE UNITED STATES, 1980–2014



Source: World Inequality Database (WID.world), "USA," accessed October 4, 2018.

incomes of the bottom 50% stagnated, growing only 1% over the same time period. The share of national income going to the bottom 50% thus dropped from about 20% in 1980 to 12% in 2014, with little impact from government redistribution programs. The result is that the income share of the top 1% is now almost twice as large as the share going to the bottom 50%, and the former earn 81 times more than the latter (up from 27 times more in 1980).[44] These differences were even more profound for women[45] and people of color.[46] An important result of rising income inequality is the hollowing out of the US middle class, traditionally a key pillar of credit union membership. In 2014, according to the Pew Research Center, there were fewer US adults in middle-income households than in lower- and upper-income households, and this disappearance of the middle was mostly driven by the share of aggregate income (49%) going to upper-income households (up from 29% in 1970).[47]

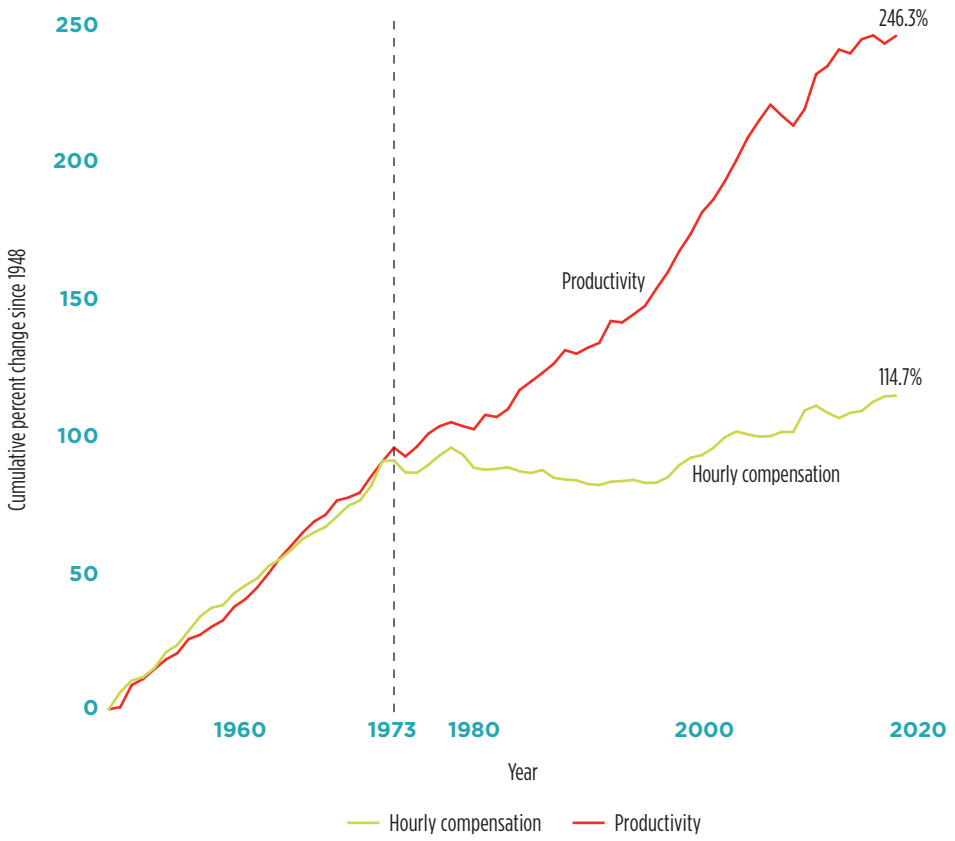
As these data suggest, a central component of income inequality is *wage stagnation*, as earnings growth and purchasing power for most Americans have flatlined and income from work has dropped relative to income from other nonwork sources. Data from the Federal Reserve show that since the 1970s, there have been only modest gains in median weekly real earnings for full-time wage and salary workers (adjusting for inflation), from $335 at the beginning of 1979 to $350 during the first quarter of 2018.[48] In other words, wages have remained more or less stagnant for the average American worker for nearly 40 years. Even as unemployment drops and productivity increases, paychecks are not increasing. A series of studies from the Economic Policy Institute found that from after World War II until the 1970s, workers' earnings grew in concert with the economy. Since around 1973, however, even as productivity continued to rise and the economy continued to grow, average pay did not.[49] From the early 1970s to 2016, net economic productivity rose more than 73% while hourly compensation grew only around 12%.[50] This gap is what the sociologist Lane Kenworthy calls "America's great decoupling,"[51] and the result is that even as wages at the top of the income distribution have soared, the share of economic production that workers and middle-income households receive has fallen.

Wages for the average American worker have remained ***virtually unchanged*** *for nearly* ***40 years****.*

More recent wage stagnation may be linked, in part, with the Great Recession, which put millions out of work and in a position to take whatever job came their way, regardless of pay. Other factors include those shaping the future of work, outlined above: increasing temporary/part-time work, shorter hours and more long-term unemployment, and automation and other technological changes. But unequal pay patterns have also been affected by decreasing competition among employers for workers, owing to industry consolidation, the proliferation of noncompete agreements, and declining union membership, which undermines minimum-wage policies and collective bargaining. The lack of competition gives businesses advantages over workers when it comes to hiring

FIGURE 5

THE GREAT DECOUPLING OF PAY AND PRODUCTIVITY (HOURLY COMPENSATION GROWTH VS. PRODUCTIVITY GROWTH, 1948–2017)



Notes: Data are for compensation (wages and benefits) of production/nonsupervisory workers in the private sector and net productivity of the total economy. "Net productivity" is the growth of output of goods and services less depreciation per hour worked.
Source: EPI analysis of unpublished Total Economy Productivity data from Bureau of Labor Statistics (BLS) Labor Productivity and Costs program, wage data from the BLS Current Employment Statistics, BLS Employment Cost Trends, BLS Consumer Price Index, and Bureau of Economic Analysis National Income and Product Accounts. Updated from Figure A in Josh Bivens, Elise Gould, Lawrence Mishel, and Heidi Shierholz, "Raising America's Pay: Why It's Our Central Economic Policy Challenge," *Economic Policy Institute* (Briefing Paper #378), June 4, 2014.

and wages, and so unemployment rates can fall while wages remain relatively steady. As Marshall Steinbaum of the Roosevelt Institute writes, "If employers don't have to compete with one another for workers, they can pay less, and workers will be stuck without the outside job offers that would enable them to claim higher wages."[52] One recent study by Steinbaum and his colleagues found that, on average, regional labor markets in the United States are extremely concentrated around a small number of employers, exceeding the threshold for "highly concentrated" markets used by antitrust regulators. This results in what economists call "monopsony," when the high concentration of buyers undermines competition and leads to lower wages for new jobs.[53]

Income inequality has been accompanied by growing wealth inequalities as well. In the United States, wealth is even more unequally distributed than income, because while income is earned primarily through work, the accumulation of wealth produces its own momentum through the rents and returns generated by owned assets and through the transfers of those assets across generations. Income opportunities, in fact, are partially determined by the wealth accumulated by one's parents and grandparents; the children of wealthy parents are much more likely to be wealthy themselves, and the children of poorer parents are much more likely to be poor.[54] A range of studies, many relying on data from the triennial Federal Reserve Survey of Consumer Finances,[55] have found similar inequalities in the proportion of wealth gains that have gone to wealthy versus LMI households, as well as similar rates in the growth of this gap:

- The Economic Policy Institute estimated that in 2010, the wealthiest 1% of Americans held just over 35% of the country's wealth. Between 1983 and 2010, the wealthiest 5% accounted for nearly three-quarters of all wealth growth, while the bottom 60% actually experienced a decline in their wealth.[56]
- The Pew Research Center similarly found that "virtually all" of the increases in wealth held by US households since the early 1980s have gone to the highest end of the income distribution. In 2013, the median net worth of these upper-income households was almost 70 times the median net worth of lower-income households and almost 7 times that of middle-income households.[57]
- A study by the Institute for Policy Studies found that in 2016, nearly one in five US households had zero or negative net worth.[58]

*The wealthiest **1%** hold over **one-third** of the wealth in the United States.*

Our conversations with credit union leaders suggest that the effects of income and wealth inequality will become increasingly important for credit unions in the future. For credit unions, the challenge is not just serving individual members but attending to the financial well-being of entire communities. As one credit union executive put it, "How are we going to solve the problem of the financial well-being arguably of the country? That's the thing, I think, to keep in front of us." Another explained, "I think everyday Americans are underserved. If we traditionally served the underserved, there may be a whole lot more underserved people to be serving."

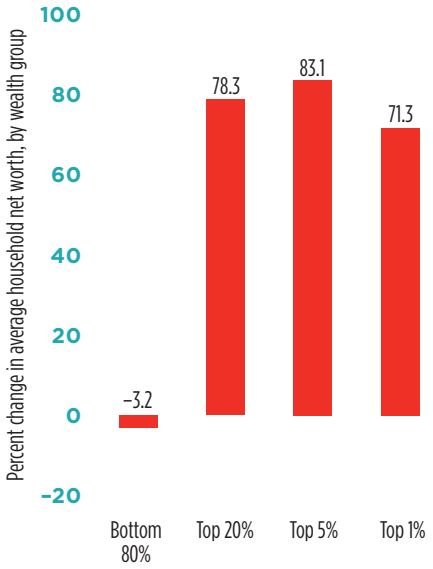
*Nearly **1 in 5** US households have **zero or negative net worth.***

The number of credit unions serving low-income communities has grown steadily since the GFC and Great Recession, according to the National Credit Union Administration (NCUA).

The number of low-income designated credit unions (LICUs) reached an all-time high in 2017 at over 2,500, around 46% of all federally insured credit unions.[59] As this number continues to grow, credit unions will be forced to take on the challenging dynamics of income and wealth inequality. This may be especially difficult for institutions serving communities of color, who are disproportionately affected by such inequality, resulting in a stark and intransigent "racial wealth gap."[60] For example, the Institute for Policy Studies reports that over the past three decades, the average wealth of white households has grown at a rate that is three times that of black households and 1.2 times that of Latino households.[61] Yet the number of NCUA-designated at minority depository institutions—which serve historically underserved populations, such as African Americans, Hispanic Americans, Native Americans, and Asian Americans—is on the decline, and these institutions remain concentrated in just a few states.[62]

FIGURE 6

WEALTH INEQUALITY IN THE UNITED STATES, 1983–2010



Note: Net worth = household assets minus debts.
Sources: Economic Policy Institute, "Change in Average Wealth, by Wealth Group, 1962–2010 (Thousands of 2010 Dollars)," *The State of Working America*, updated August 20, 2012; Edward N. Wolff, "The Asset Price Meltdown and the Wealth of the Middle Class," *National Bureau of Economic Research* (Working Paper No. 18559), November 2012.

"I think everyday Americans are underserved. If we traditionally served the underserved, there may be a whole lot more underserved people to be serving."

The financial status and capability of existing and potential credit union members is being remade by the growth in income and wealth inequality. But a third kind of inequality is also important for thinking about members' financial needs: inequality in access to financial services. Much recent commentary focuses on financial inclusion and exclusion, detailing the costs of not having a bank account, from fees for check cashing to high rates on small-dollar credit.[63]

*Over the past **30 years**, the average wealth of white households has grown at a rate that is **three times** that of black households.*

Yet financial exclusion also includes marginalization for other, less widely recognized services, such as personal financial management, investment services, and portfolio optimization tools. For example, households with incomes less than $50,000 per year account for just under half of all American households, yet only 17% of them own mutual funds.[64] While it stands to reason that wealthier households would have more disposable income for investing, this explains only part of the disparity. With less income and less wealth comes less access to the budgeting tools and management advice that might otherwise, over the medium and long term, ameliorate income and wealth inequalities and

generate socioeconomic mobility. As a recent report from the Samuel DuBois Cook Center on Social Equity and the Insight Center for Community Economic Development argues, "Wealth provides individuals and families with financial agency and choice; it provides economic security to take risks and shields against the risk of economic loss."[65] We add that since wealthier households generally enjoy increased access to better financial services, they enjoy not only more favorable terms for credit and savings products but also better investment advice and other wealth management services. The majority of Americans may not be wealthy, but they are nonetheless in need of—and would benefit from—help in growing and managing their wealth.

4 The Two Tails

Credit unions have focused for a decade or more on the importance of attracting younger cohorts of members, especially those belonging to the millennial generation (born between 1981 and 1996).[66] Credit union membership (like that of financial services generally) still tends to skew older for many credit unions. Our survey respondents reported that only 19% of their members were in the under-35, core population of millennials, while nearly half (49%) fell between 35 and 65. These results are in line with general perceptions of the age breakdowns of credit union membership. According to internal calculations by the Credit Union National Association (CUNA), in 2016 the average age of a credit union member was 50.7, and only 20.92% of members were less than 35 years old.[67]

*The **average age** of a credit union member is **around 50 years old**.*

Attracting more millennials has been identified as a crucial driver of growth for credit unions, and as they move further into the twenty-first century, younger cohorts like the so-called post-millennials or Generation Z (born after 1996)[68] will remain important to that growth. The effect of the GFC and Great Recession on millennials' life choices, financial behavior, and future outlook has been well documented. Unemployment trends, wealth losses, and debt burdens hit millennials the hardest of any age group; some suggest that the impact of the Great Recession on hiring, wages, and wealth accumulation will last throughout millennials' lives.[69] In 2017, nearly half of all millennials were engaged in some sort of freelance work.[70] Millennials are, as a result, worse off—in terms of wealth and income, poverty and savings, student debt and job security—than their parents (and sometimes grandparents) were at the same point in their life cycles.[71] One report suggests that the prospect of people born in the 1980s earning more than their parents was around 50%; for those born in the 1940s, the chance was 92%.[72]

Unemployment trends, wealth losses, and debt burdens hit millennials the hardest of any age group.

***92%:** The chance that someone born in 1940 will earn more than their parents during their lifetime.*

***50%:** The chance that someone born in 1980 will earn more than their parents during their lifetime.*

Yet millennials also tend to be more diverse, socially minded, and mission oriented than their older counterparts. Members of the Gen Z cohort show similar tendencies toward diversity and social and political commitment.[73] One high-level credit union executive told us, for example, that his credit union found that the "missional" or "cooperative" principles of the credit union were "resonating with an important part of the market," especially younger members. He explained that these members are increasingly expecting that organizations "have a point of view" and "take stands" on social and political issues, even those that may not be directly related to financial services.

Millennials have also developed a reputation for being more technologically savvy and, in some cases, less interested in typical big-ticket lending products. As a result, some

FIGURE 7

LIFE-CYCLE FINANCE: FINANCIAL NEEDS OF THE YOUNG AND THE OLD

Young consumers

Borrowing
- Student loan assistance and student loan relief
- Credit-builder programs, debt reduction services, and accelerated repayment plans
- Emergency loans/small-dollar loans, secured credit cards, loan options with no or thin credit files

Saving and planning
- Low-value savings and investment products
- Targeted or "name your own" home/auto/vacation savings tools (such as round-up programs)
- Budgeting and income-smoothing tools
- Child care and health care assistance
- Financial literacy games and apps

Payments
- Peer-to-peer money transfer, especially crossborder remittances
- Automated bill pay

Insurance
- Unemployment insurance
- Renters and pet insurance

Older consumers

Borrowing
- Debt consolidation and other debt management services
- Emergency/small-dollar loans

Saving and planning
- Wealth management, especially retirement planning and inheritance/estate planning
- Prescription drug cost management tools, end-of-life care and long-term care coverage insurance
- Tools for budgeting, saving, and income smoothing on a fixed income
- Financial products that liberate funds for life experiences like travel and family events

Insurance
- Unemployment insurance
- Life insurance

credit unions have catered to millennial consumers by revamping their digital and mobile strategies and expanding their offerings of loan and account types.[74] Similarly, growing up in the wake of the smartphone revolution, members of Gen Z also display higher levels of technological proficiency with mobile devices, and, as the same credit union executive above suggested, they have higher expectations when it comes to the "speed, convenience, and elegance" of digital experiences. "People have no patience," one credit union service organization (CUSO) executive told us; "they just expect." These expectations take shape through interactions with a wide variety of businesses and organizations, not just financial institutions, but retail (especially online) as well. Yet as we discuss below, younger cohorts also expect an integrated experience with a mix of interfaces, both online and offline.

At the same time, another population will become equally important for credit unions: the elderly and very elderly. As life spans lengthen and the baby boom generation ages, demographers expect a spike in the number of older Americans. By 2030, when the last of the baby boomers will have turned 65, one in five Americans will be of retirement age.[75] By 2050, when surviving baby boomers will be over 85, the 65-plus population is expected to be double what it was in 2012.[76] Between 2030 and 2050, older Americans will outnumber children for the first time in US history, and by 2060, the median age of the US population will have jumped from 38 in 2017 to 43.[77] This aging population has its own generational characteristics, including high quality-of-life expectations, which may be challenged by retirement planning and medical costs, including prescription drug costs. According to a 2016 Federal Reserve report, more than a quarter of US nonretired adults say that they have no retirement savings or pension plan; this number jumps to over half for adults making less than $40,000 a year. More than half of all adults with self-directed retirement plans—which constitute the majority of retirement savings—are not comfortable or only slightly comfortable in their ability to make the right investment decisions in planning for retirement.[78] In 2014, the Federal Reserve reported that almost half of all respondents had given little to no thought at all to planning for retirement.[79] An aging population creates other pressures as well, especially as returns on retirement savings products like 401(k) plans are expected to fall and the number of working-age people declines relative to the number of retired people.[80] As another CUSO executive told us, "Everybody is going to outlive their retirement." He continued: "Because of all the improvements in health, I don't see people doing the right things to save enough to not become a burden to their kids."

Between 2030 and 2050, older Americans will outnumber children for the first time in US history.

These "two tails" of the US population bracket the "middle market" of credit union membership, which constitutes the more traditional source of credit union depositors and borrowers. A population that is at once aging and getting younger may squeeze particular credit unions with small fields of membership. But these demographic trends

have implications for all credit unions, for the financial needs of the young and the old are unique. Fewer working-age people means less demand for the services that have typically formed the bread and butter of credit union business models. These populations share some commonalities. For example, both the young and the old are more likely to be poorer or on fixed incomes than the US population as a whole. They thus have more limited resources for investment, a lower risk tolerance, and a smaller appetite for debt.[81] Neither group offers a strong market for traditional lending products like auto loans and home mortgages. As the CUSO executive above told us, "A huge aging population is not going to take out loans! A population that is having difficulty finding jobs is not going to take out loans."

By 2035, Americans aged 65+ will outnumber those under 18. Yet almost half of all Americans have given little to no thought to planning for retirement.

At the same time, these demographics are often in need of more guidance from their financial institutions, because each group has specific financial needs and faces specific financial challenges linked to their particular life-cycle needs. The young are often in need of savings products and student loan assistance (whether acquiring or paying back); they may focus on payments, including crossborder remittances, as a core banking service. Older members, meanwhile, may increasingly demand savings and other interest-bearing accounts, as well as financial advising. Indeed, the increase in the elderly and very elderly poses special challenges. Many have not saved enough to weather financial shocks in retirement, and some will have to confront persistent debt burdens.[82] Financial institutions must adapt to meet the wealth management needs of older members who, in addition to facing these limitations, are also looking for retirement planning help, end-of-life care, and estate planning advice.

5 Credit Union Growth and Consolidation

Credit union membership has grown at a healthy rate over the past decade, and we expect membership to continue to expand. According to the NCUA, credit union membership at federally insured credit unions grew at a rate of over 4% in 2017, to more than 111 million people; that growth rate has picked up steam every year since 2010.[83] CUNA Mutual reports that membership growth will continue through 2018, pushing up credit union membership to the equivalent of one-third of the total US population.[84]

At the same time, as many have noted, the total number of credit unions has been on the decline. Consolidation has been a steady trend in the credit union system for several decades, from a peak of nearly 24,000 in 1970 to fewer than 6,000 today. Several factors contribute to consolidation. Most consolidation happens through mergers rather than failures, and as one analyst told us, many mergers are motivated by economies of scale

that allow for expanded member service. Others are the result of losing leadership to retirement, and part of the consolidation trend is due to the impact of aging executives, especially at smaller institutions. Competition from nonbank financial service providers—including payday lenders, prepaid cards, mobile payment platforms, and so on—also plays a role. At the same time, the number of new credit unions created each year has dropped significantly, from the thousands in the 1970s to less than two dozen between 2010–2017. Among credit union leaders, however, much of the blame is often attributed to post-GFC regulatory reforms, namely the Dodd-Frank Wall Street Reform and Consumer Protection Act, and associated compliance costs. Since Dodd-Frank was passed in 2010, more than 1,500 federally insured credit unions have been liquidated, put into conservatorship, or merged, representing over 20% of the industry.[85] State-chartered credit unions have not been immune to this trend either, as a former state banking regulator noted:

> *When I started at the [Division of Banks] in 1990, there were over 250 state-chartered credit unions; and today I think we're down to, what, about 67 state-chartered credit unions, and right about 100 federal credit unions left in [our state]. So there are significantly less than half of what there were 28 years ago.*

With increasing consolidation has come increasing disparities among large and small credit unions. Consolidation has affected smaller credit unions the hardest, while much of the growth in membership, assets, and lending has been concentrated among larger credit unions, especially those with more than $500M in assets. The NCUA reports that fully *half* of all federally insured credit unions had fewer members at the end of 2017 than a year before.[86] Smaller credit unions face not only rapidly declining membership but also flat or negative loan and asset growth. Credit unions located in regions with unique socioeconomic dynamics and credit unions with specific fields of membership have also faced particular challenges; one example is the number of credit unions in major metropolitan areas that found themselves overexposed to the taxi industry through medallion loans and were thus hit hard by the entrance of ride-sharing companies. Meanwhile, changes in the NCUA's field of membership rules have allowed many credit unions, especially larger credit unions, to diversify their membership.

Consolidation has affected smaller credit unions the hardest, while growth in membership, assets, and lending has been concentrated among larger credit unions.

These differences and inequalities among credit unions as institutions mean that it is crucial to avoid overgeneralizing about the credit union system and to consider the impacts of the socioeconomic trends above and the technological trends below on different asset classes, geographies, and fields of membership. While larger institutions may have

greater capacity to develop new technologies or products that expand service or smooth member experiences, they also may become more complex institutions with corresponding management challenges or become more distanced from the needs of certain subsections of their membership.

CHAPTER 3

Emerging Technological Trends and Challenges

At a Glance: Twenty-First-Century Technology Trends

1. Payments at the Center
2. Where's the Branch?
3. Voice and Video
4. All About the Data
5. The Disappearing Car Owner
6. Lessons Learned from Adopting New Technologies

When we asked a credit union system consultant what members today expect from their financial provider, he offered a one-word answer: "Amazon." Several other interviewees cited the tech giant as *the* model of rapid, seamless, and secure consumer experiences for both discovery and payments. As one executive mused, "Gee, I can get a book by this afternoon by ordering it on Amazon Prime. Why can't you get me my cashier's check tomorrow?" Many worried about Amazon's potential to partner with a bank to offer checking and other basic financial services to its already massive and committed customer base, building on its successful payments and small-business lending outfits; in fact, reports emerged during this research that the company was in talks to develop a checking account–like product with JPMorgan Chase.[87] One consulting company suggested that with a consumer-facing banking service, Amazon could end up with more than 70 million banking customers.[88]

The groundwork for Amazon's and other technology companies' entrance into financial services was laid in the years following the GFC by the volcanic development of the

financial technology, or "fintech," sector. Investments in fintech grew from $2.4 billion (B) to $19.1B from 2011 to 2015 as thousands of new companies were launched.[89] Fintech investments hit a new high in 2017, with $31B invested.[90] A variety of reports have shown how this investment, much of it venture capital, has supported ongoing experimentation targeting payments, lending, insurance, crowdfunding, investing, and personal financial and wealth management.[91] In the process, fintech has dramatically changed the nature of competition in financial services.

Even though most start-ups have not scaled individually to a level that would pose a direct challenge to banks or larger credit unions, as a group they have achieved high levels of adoption. Fintech has thus transformed the competitive landscape—unbundling banking by targeting particular financial services with niche value propositions, improved user experience, smooth mobile interfaces, enhanced use of data, online marketing, clever branding, and transparent pricing.[92] By inserting themselves between consumers and their financial institutions, fintechs have shifted expectations and established control over consumers' transactions and personal finance experiences. According to one report, today almost three-quarters of millennials in the United States say they would be more excited about a financial product offered by Amazon, Google, Square, or PayPal than by their bank; one-third said they did not need a bank at all.[93]

Fintechs have unbundled banking and inserted themselves between consumers and their financial institutions, shifting expectations and establishing control over consumers' transactions and personal finance experiences.

In our conversations with credit union stakeholders, we were also told that credit unions could learn from the mobile experience of apps like Uber's, and that peer-to-peer payment platforms like Venmo might become their primary competitors. Indeed, the threat posed by fintech may be especially marked for credit unions, since the majority of credit union members also use other financial services providers. According to the NCUA, "Of the nearly 20% of households that use a credit union as their primary financial institution, 60% also use a bank for some type of financial service."[94] As fintechs have attracted more customers, people have become even more familiar with mixing and matching financial services and institutions. At the same time, other credit union leaders drew our attention to growing awareness and concerns around personal financial data, in the wake of not only the scandals involving Wells Fargo and Experian but also the more recent revelations about Facebook's relationship with Cambridge Analytica.

***60%** of credit union member households also use a bank for financial services.*

When assessing members' needs and how they might be addressed via consumer-facing financial technologies, credit unions look far and wide for inspiration and lessons that they can put into practice. In this section, we detail six key financial technology trends that emerged in our survey responses and conversations with credit union leaders and observers.

1 Payments at the Center

Providing a seamless member experience with an interface that is quick, easy to use, and accessible anytime, anywhere, and from any device is the aspiration of many credit unions' technology strategies. Those strategies begin not with deposit taking or lending—historically banks' and credit unions' core business activities—but with payments. In the past, financial institutions did not deal with consumers' payments directly; most were handled in cash. But as more and more people received their income electronically (e.g., through direct deposit) and paid their bills online with a card or transfer, they began to rely on their financial institution to manage the sending and reception of payments. Today, payment transactions represent the majority of consumers' interactions with banks (80% in 2014, according to McKinsey).[95] Consumer expectations have risen as a result, and most people rely on real-time, 24/7 payments for their everyday financial needs. Payments, in many ways, has become a public service, and mobile and digital offerings have transformed how that service operates. Indeed, 93% of our survey respondents reported that they currently offer mobile and/or online money transfer and bill pay services, by far the most prevalent types of service across credit unions, as well as the ones with which they are most satisfied.

Payments has become a public service.

The growing importance of payments in the credit union system parallels their importance in fintech, as many new fintech start-ups have jump-started their business by leveraging a streamlined mobile experience to build out new front-end payment interfaces. According to the EY FinTech Adoption Index, money transfer and payments is the most-used fintech service.[96] This includes Peer-to-Peer payments (Venmo is the most famous example) as well as retail, bill pay, investment, and debt repayment. For these companies, payments provides a platform for other personal financial services, from "maintaining deposits" to "making or brokering loans," as the NCUA puts it.[97] This is a strategy that was pioneered outside the United States.[98]

As a result, as with prepaid and loyalty cards, many companies have amassed large amounts in funds receivable and customer account dollars through the often small

FIGURE 8

CREDIT UNION MOBILE AND DIGITAL OFFERINGS

Respondents were asked: Of the areas listed below, select those in which your credit union offers one or more consumer-facing mobile or digital products or services.

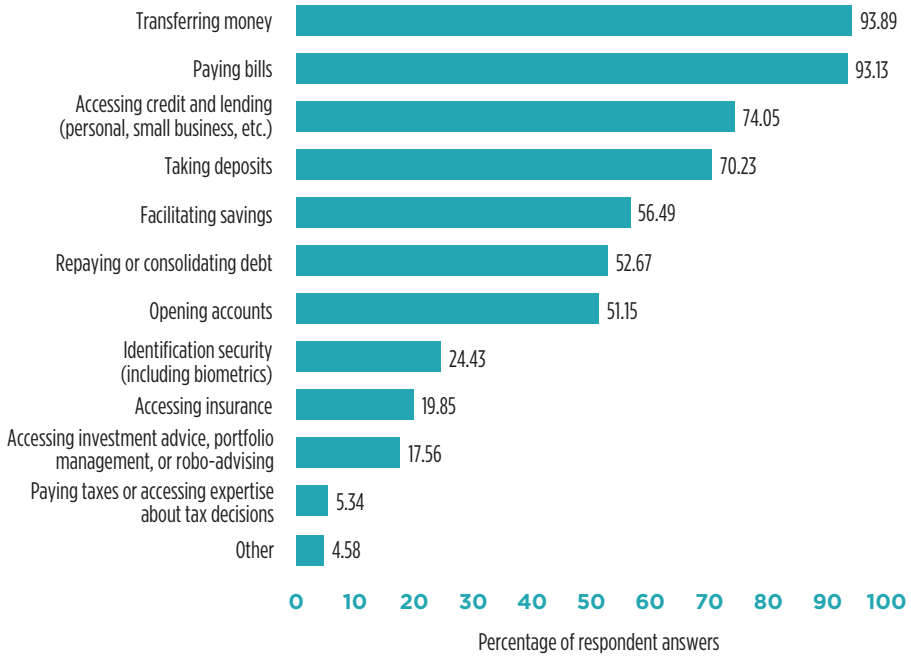


FIGURE 9

PERCEPTIONS OF FINTECH'S PROMISES

Respondents were asked: In which of the following categories of fintech do you see the most promise for your members and/or organization over the next 10 years?

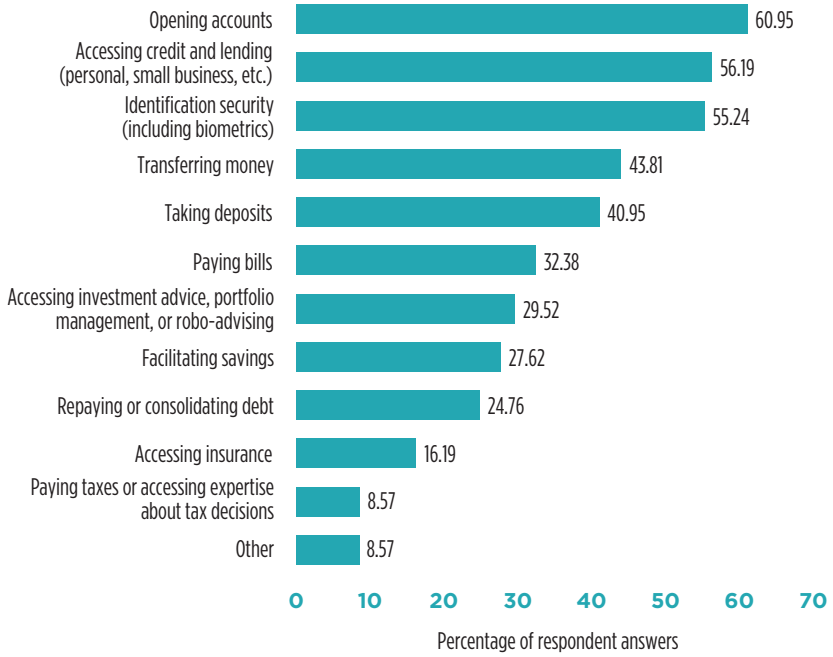
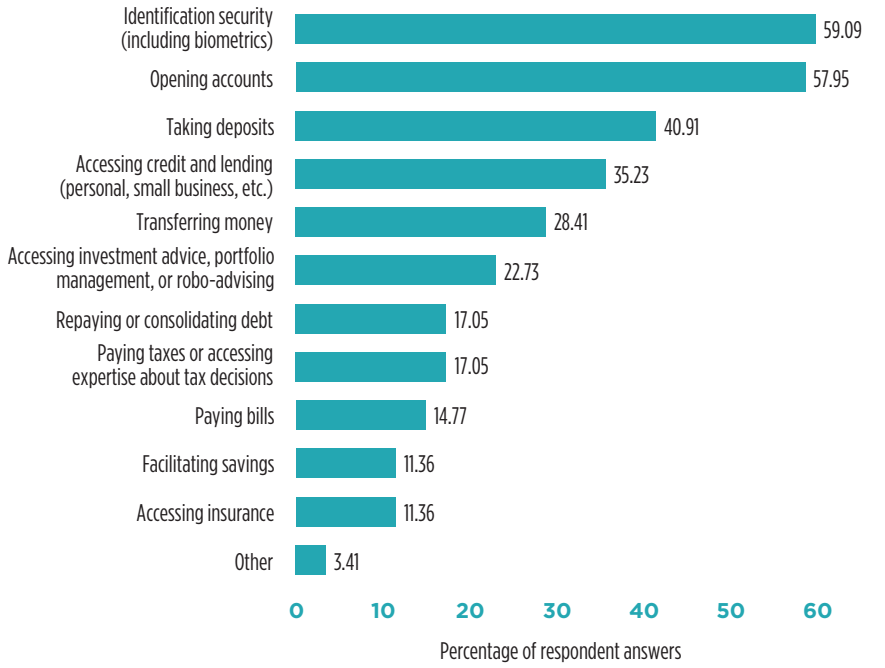


FIGURE 10

PERCEPTIONS OF FINTECH'S RISKS

Respondents were asked: Select the categories in which you see potential risks or challenges emerging over the next 10 years.



balances consumers maintain on payments applications. These balances add up: at the start of 2018, PayPal reported that it maintained over $18B in such funds, including the balances of Venmo users.[99] In 2016, Starbucks kept over $1B in consumer funds between its app and money preloaded onto cards, while Green Dot, the world's largest prepaid debit card company, maintained $560M in customer funds.[100] Although such money is typically kept very liquid, it is not insured by the FDIC. According to Ron Shevlin, Cornerstone Advisors' director of research, who spoke at the Money 20/20 conference in 2017, this "deposit displacement" is undermining the checking account as the core product of consumer banking. "Payments represent the beachhead for the entire banking relationship," McKinsey analysts wrote in 2014, "and this beachhead is under attack."[101] As one credit union regulator told us, "Why do you need a bank or credit union if you can open an E-Trade or Fidelity account online, and you can drop all your money in there, and you can send it wherever you need to send it, and you can make investments, and write checks out of it?"

Customer funds held by . . .

*PayPal in 2018 = **$18B***

*Starbucks in 2016 = **$1B***

*Green Dot in 2016 = **$560M***

The growing importance of payments represents a challenge and an opportunity for credit unions. A senior credit union executive explained that putting payments at the center of credit unions' offerings makes sense because payment is "an activity that's regular; it's got consistency, it's sustainable, [and] it creates engagement." He used a football metaphor to elaborate on the advantages that good payments offerings have for growing membership and enhancing member engagement:

> *If this is the payment, then there's other pieces that spider out of that. I'm never going to get a chance at your auto loan, or I'm never going to get a chance at your mortgage or your retirement planning if I can't get those blocking and tackling pieces done.*

Deposit displacement is undermining the checking account as the core product of consumer banking, as the balances that consumers maintain on payment applications and prepaid cards continue to grow.

In that sense, the credit union's other products and services are increasingly built on top of its payments offerings. One survey respondent noted:

> *Payments play a key role in ensuring our members use our services for all their financial decisions. I see each of the other areas as natural links in the payments chain (account opening, robo-advising, security) which either need money movement services to complete the interactions or need strong security to ensure account and member safety.*

Payments thus offers the point of entry for credit union members into financial services more broadly. It also presents opportunities to reach a broader membership—mimicking how fintechs have customized payments solutions for particular populations: small merchants, young people, temporary workers, and LMI households—and build up a reserve of transactional data that can then be leveraged to tailor other services to members' individual needs. The regulator cited above suggested that mobile payments

> *is how you serve that [low-income] population. Most of that population still has a smartphone. That's a cheap commodity nowadays. And if you can put the money on the smartphone, and you don't have to be connected to a bank to do that, now your channel to get to those folks, get them into the financial mainstream, is through the airwaves.*

2 Where's the Branch?

The proliferation of mobile financial services platforms—in conjunction with credit union consolidation—has changed the role of the brick-and-mortar branch in today's financial services ecosystem, and this trend is unlikely to change anytime soon. One credit union senior vice president (SVP) did not mince words: "Mobile—and by mobile I mean mobile, not pad or desktop—is the single most transformative thing we're working through right now."

Many of the people with whom we spoke explained that their younger members in particular preferred to interact with them through virtual channels rather than coming into a branch. According to a credit union consultant, "When a millennial or a younger person that's coming into the banking industry, once they're exposed to that high level of technology that regionals and nationals offer, it's very difficult for them to fall back into the credit union that still hasn't quite reached that point of accessibility." Branches are less important than a full suite of mobile offerings when it comes to competing for a share of the millennial and Gen Z markets, as one survey respondent outlined:

> *The upcoming generations are very comfortable with technology, and in many cases prefer technology over human, face-to-face interactions. This paves the way for fully interactive, full-service electronic branches, full-service mobile capabilities, including pay-by-phone, remote or electronic receipt-printing/generation, etc. These generations are also focused on one-stop shopping. The more an organization can provide all of the related services a member might want in a single location (or more specifically, electronically), the more likely the member will select that organization and stick with them, especially after they have everything set up with that organization.*

The twenty-first-century credit union, a CUSO executive told us, "would be an all-mobile credit union. I haven't been to my credit union, you know, ever." Similarly, one credit union CIO/COO told us that if he had his way,

> *I would have no branches whatsoever. I would go completely virtual; I would have a mobile-first, mobile-only strategy. Personally, I think the savings that you would have on not having brick-and-mortar and being totally virtual, I could turn that capital around and invest it into really pumping out some pretty good apps/experiences.*

Moving away from branches and toward mobile channels has material benefits for both members and credit unions alike thanks to their cooperative ownership model, as this CEO explained:

> *You walk into the branch, it costs me $4 to do a deposit over the counter versus about 70 cents to do it on the phone when you take a picture and send it, right? So, I saved you time, and you saved the cooperative a ton of money, so now I can give it back to you as you like it, because that's our model. It's not to give money to shareholders, it's [to give it] back to you.*

More convenient and secure mobile offerings are not just a value proposition for millennials and Gen Z members, though. For example, several survey respondents and interviewees noted that remote deposit capture (RDC) is fast becoming a necessity for customers in rural areas. Mobile account opening, loan origination, and money transfer services are valuable for members who do not live near a branch, regardless of their age. Additionally, changes in the time of day that people perform "financial chores" (as several interviewees put it) like checking account balances, making deposits, transferring funds, and so on make having to travel to a branch inconvenient for many members. A vendor consultant observed,

> *A lot of us bank between 10pm and 11am, or we like to check our balance when we wake up in the morning at 6am, and you can pay your bills at 2am. So, that's how I see financial services in the twenty-first century. There's no boundary. You're not fixated to going to the branch on the corner and doing all this stuff. You can do it anywhere, anytime, anyplace.*

Mobile account opening, loan origination, and money transfer services are valuable for members who do not live near a branch, regardless of their age.

However, rather than predicting the wholesale demise of brick-and-mortar branches, a number of interviewees believe that branches still have an important role to play; credit unions, like any other financial institution, are simply adjusting to changes in what that role is for their members. Metaphorically speaking, rather than being the trunks from which other member engagement channels grow, branches are now quite literally the *branches* of a credit union tree rooted in the mobile experience.

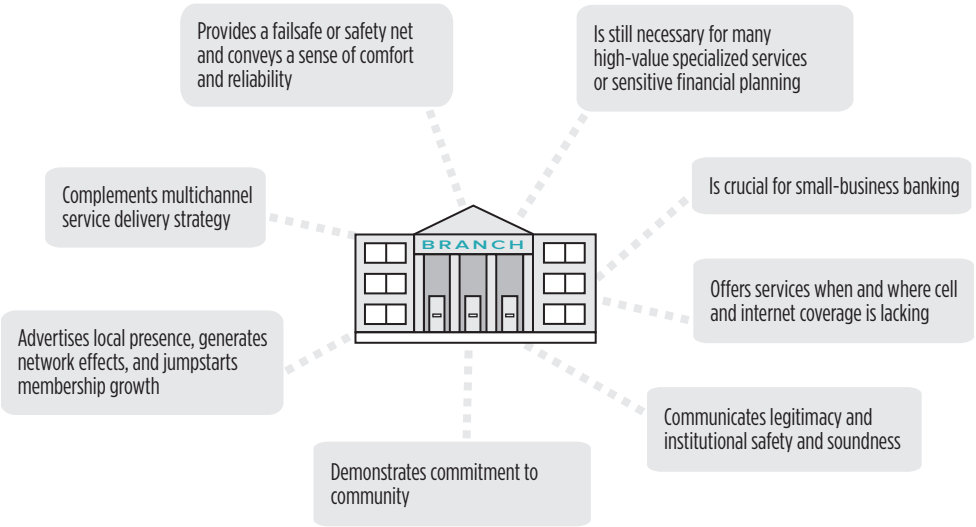
"A lot of us bank between 10pm and 11am, or we like to check our balance when we wake up in the morning at 6am, and you can pay your bills at 2am. So, that's how I see financial services in the twenty-first century. There's no boundary."

Even if a member never sets foot inside a branch, having the option of doing so provides a sense of comfort and reliability. "It's a verifier of legitimacy, if you will," one CUSO consultant argued. "I mean, even millennials, they want to know that it's real, and having a confirmation once in a while is okay." Similarly, another CUSO leader explained that "the hardest thing, when you don't have brick-and-mortar, is how you brand yourself, how to create that safety and soundness concept that a big building that looks expensive probably gives people." In this sense, then, brick-and-mortar branches are necessary backstops; "practically or psychically," one credit union executive explained, "there's a desire for a fail-safe, a safety net, that I can go to if I need it." Branches also communicate presence and longevity in a local community, and they can drive potential members to inquire about joining.

Rather than being the trunks from which other member engagement channels grow, branches are now quite literally the branches of a credit union tree rooted in the mobile experience.

FIGURE 11

THE VALUE OF BRICK AND MORTAR



At the same time, branches are not purely symbolic; they can still offer practical services for their members, particularly in areas of the country where mobile telecommunications or broadband internet coverage is lacking. As a national representative for credit union professionals put it,

> *Main Street needs to go somewhere to make change, and to deposit cash, and to do those types of things. So, even beyond the general population's access to banking and fintechs via their phones, for a lot of communities the need to have an actual financial institution there, particularly if you look at some of the rural parts of the country, it's critically important to those communities as well. And whether that's a community bank or a credit union, I think it's important not to lose that brick-and-mortar importance as we look at modern financial services.*

Moreover, according to a league president, "mobility and the decline in the usage of brick-and-mortar branches is offset by the fact that there's a shared branching network, and so credit unions can lean on each other by using someone else's brick-and-mortar." Indeed, one executive explained to us that in her opinion, the twenty-first-century credit union must be "networked," that is, both "connecting" and "aggregating" in order to scale and compete. This may result in what another executive called a "thin and nimble" branch network, which is fully integrated with the institution's digital experience. "The branch has to be something completely different," a CUSO executive told us, where it is possible not only to do the banking basics but also to receive banking guidance, "a one-stop shop for all the things in your financial life that you need help with." Still, even in these speculative visions, the branch does not entirely disappear; its role simply shifts to become more aligned with twenty-first-century consumer banking preferences.

3 Voice and Video

Moving member engagement beyond the branch does not stop at smartphone apps and web interfaces. Increasingly, credit unions are experimenting with other channels to "enhance the analog experience with digital tools," in the words of one executive. Many of the people with whom we spoke highlighted, in particular, a trend toward affording members opportunities for voice and video banking. Both voice and video represent "bridges" between in-person branch experiences and completely mobile or online experiences that do not involve direct, face-to-face human interaction. In other words, they combine the reliability and assurances of credit unions' relationship banking approach with the convenience afforded by virtual channels.

Both voice and video represent "bridges" between in-person branch experiences and completely mobile or online experiences that do not involve direct, face-to-face human interaction.

Many voice-based applications are inspired by recent innovations in digital voice assistants. In late 2017, Tennessee's Enrichment Federal Credit Union became the first credit union to allow its members to use Amazon's Alexa to conduct transactions.[102] We were told in conversations with credit union leaders that other institutions plan to support limited voice interactions with Alexa and similar systems by the end of 2018 and in the near future. For many of those seeking to establish such voice capabilities, the goal is to replace or leapfrog chatbox and chatbot functions, combining voice with virtual assistants powered by artificial intelligence (AI).

Similarly, harnessing video makes sense for credit unions seeking to expand or consolidate their brand, especially those trying to attract younger members. One consultant told us:

> *The generations that are coming up through middle school, high school, even college right now, these are the first generations that are comfortable in front of a camera because of the camera phone. Everyone's video-ing everybody, so it's kind of second nature now. And so that's the way we're going to have to bank to these people, is through these channels.*

Video's applications are twofold:

1. Video may afford members a new way to complete financial chores and engage with their credit union. It also offers members another option for interacting with their credit union that, like mobile and online platforms generally, extends the time and place of banking beyond the brick-and-mortar branch and conventional business hours. As the same consultant quoted above explained,

   > *[With video] you can talk to a teller no matter where you are, or a member service representative no matter where you are on planet Earth, you know? They also have these interactive teller machines—ITMs—now, where you can walk up and talk to somebody on a video screen. It may be after hours for the credit union, but a lot of us don't bank between 9 and 5 anymore.*

2. Perhaps more importantly, video affords credit unions a new way to communicate the credit union system's mission and values to existing and potential members. Video gives credit unions more options for communicating in engaging,

meaningful ways. Several interviewees expressed just how difficult it can be to easily and concisely make the case for the credit union model's advantages over other financial services. As a vendor consultant put it,

> *There's no "Just Do It," like Nike, type of message to get out there to explain credit unions. People are still like, "Gosh, how do we explain ourselves in 10 seconds?" where it makes sense and people go, "Oh! Cool, let me join."*

A league president elaborated on this point, telling us, "What we all say about the definition of what a credit union is is heartwarming, but [it] doesn't necessarily inspire either action or loyalty per se." By producing their own video content and sharing it on their websites or through social media, credit unions can put the voices and experiences of their members front and center. Instead of having to explain the minutiae of the cooperative ownership model or "one member, one vote," they can have members share their own practical experiences. An executive at a large credit union shared with us how video had become a crucial part of his credit union's messaging strategy:

> *We tried to get away from as much stock photography as we could so people could see you guys; if you're our members, they'll say, "Oh look, here they are!" We've really started to integrate some members into [our marketing campaigns], so they're having some fun with it because they get to make a movie. When you record it, hearing the way someone says it is very different than reading it, in my experience.*

"What we all say about the definition of what a credit union is is heartwarming, but [it] doesn't necessarily inspire either action or loyalty per se."

Moreover, credit unions can also use videos to communicate their institutional journeys to other credit unions, sharing examples of what has worked and what has not. For example, Partners Federal Credit Union has been working with Kony, an omnichannel solutions provider, to document through video its "digital transformation" and share it with others in the industry.[103]

4 All About the Data

During a recent conversation with CUNA Mutual Group, a credit union league CEO was told, "'You guys are drowning in data'—you guys being credit unions." The notion that

credit unions are sitting atop mountains of valuable member data was a common refrain in our interviews, and it was often accompanied by laments that credit unions were not optimizing their use of those data.[104] As AI, machine learning (ML), and predictive analytics technologies become more sophisticated, the credit unions that can afford to take advantage of these technologies stand to benefit, both by automating back-office operations in the service of cost reduction and by putting data to work through proactive outreach and member engagement.

Credit unions are sitting atop mountains of valuable member data.

Another potentially transformative innovation is the United Kingdom's open banking initiative, which went into effect in January 2018. Open banking requires banks to provide secure application programming interfaces (APIs) from third parties with access to their customers' transaction data, so long as customers consent to share their data. The goal is to give consumers greater control over their choice of financial products and services by making it easier to compare different offerings and receive automated advice. Credit unions could stand to benefit from open banking in the United States, as it would presumably allow consumers to discover the products and services offered by credit unions that compare favorably with those offered by commercial banks.

The Filene report *Ethical and Legal Concerns of Using Artificial Intelligence* (2018) provides an introduction to understanding the promises and the ethical and legal challenges associated with AI. With regulation of this nascent technology only in the planning stages, credit unions have an opportunity to contribute to the development of responsible AI use and to help their members and communities better understand how this technology could impact the lives of many.

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Several of our interviewees said that using their data well was one of the most important ways that they could demonstrate their value to their members. Many argued that eventually data-backed AI would make true member self-service a reality. One executive suggested that member on-boarding was an area ripe for the application of data-backed AI/ML. Another suggested that credit unions leverage their data for real-time personalization and financial advising. One COO cited how value could be shown to members through something as simple as utilizing existing data to make loan applications easier. If every

time one of his members applied for a new loan they had to provide the same basic information—name, address, social security number, and so on—then,

> *in the back of their mind they're like, "Well wait a minute, I thought you knew me! I thought we had a relationship, and now you're telling me, 'Fill out this generic form.' You're essentially telling me you don't know me." So you lose that trust.*

As exciting as new ways to utilize data are for credit unions, that excitement is tempered by ever-present threats to data security and privacy. EY reports that among banks, cyber- and data security is the number one priority for 2018.[105] Similarly, when we asked our interviewees in the credit union system which aspect of financial technologies kept them up at night, the most frequent response was cybersecurity. Our survey respondents indicated that data security and consumer protections are their primary concerns when evaluating new financial technologies; additionally, more than half said that new identification security technology poses both the greatest promise for their members (55.24% in Table 10 on p. 31) *and* the greatest risk or challenge over the next decade (59.09% in Table 11 on p. 32). Common themes around data security include fears about hacking, identity theft, and recent high-profile data breaches. The NCUA has highlighted how credit unions' increasing use of member data through new technologies has also made credit unions vulnerable to cyberattacks.[106] In addition to risks posed to credit unions' assets, interviewees expressed worries about how the current cybersecurity ecosystem might affect members' behavior. Citing the Cambridge Analytica scandal, a credit union league CEO predicted, "I think there's going to be a backlash on data privacy. Unless I'm mistaken, this whole Facebook thing is going to make people just a little more cautious about sharing data." The European Union implemented its General Data Protection Regulation (GDPR) in May 2018, mandating that any organization collecting and/or processing personal data cannot do so without the informed consent of the individuals from whom the data are collected. As the GDPR has significant implications for how the financial services industry conducts business, credit unions may look to European financial institutions as models for how to approach reforming their own data management plans, especially if similar regulations are enforced in the United States (or if they become the de facto standard) in the future.

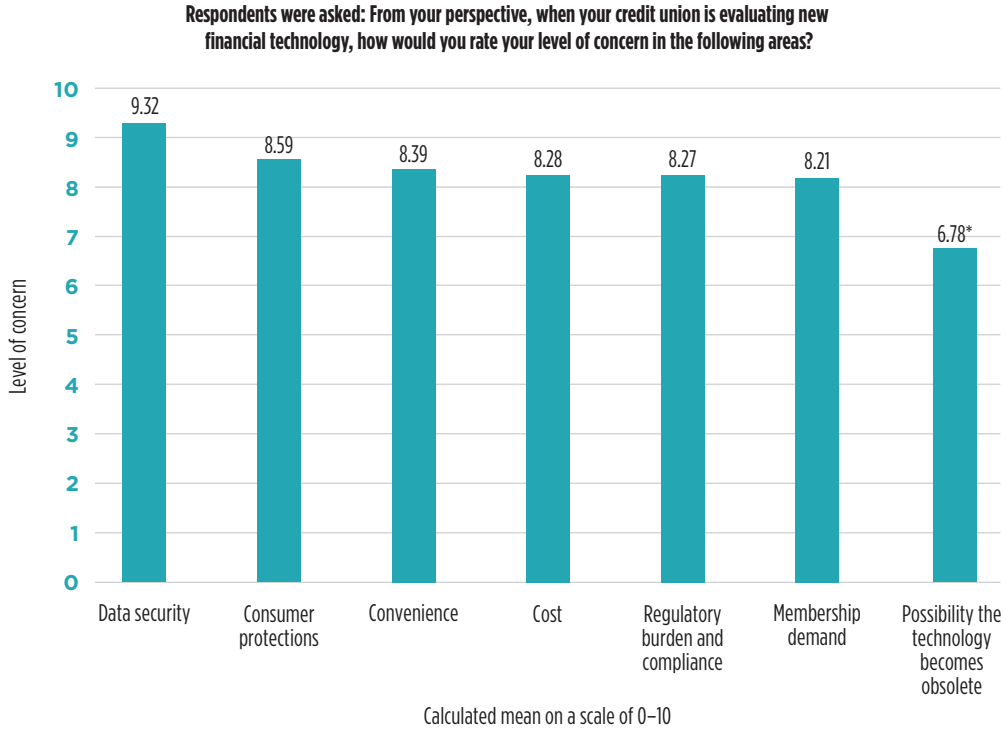
Data security and consumer protections are the primary concerns of credit union executives when evaluating new financial technologies. More than half of survey respondents said that identification security technology poses both the greatest promise for their members and the greatest risk or challenge over the next decade.

Beyond challenges related to protecting members' personal data, survey respondents highlighted new avenues for fraudsters that change the methods and process of Know Your Customer and Customer Due Diligence compliance. Credit unions also face potential reputational risks from misuse and/or loss of data, as several examples in the commercial banking industry demonstrate. Referring to some recent high-profile cases,[107] one regulator-turned-consultant joked, "I don't think anybody's done more for credit unions in the last five years than Bank of America and Wells Fargo." Reputation is often front and center for credit unions when deciding whether to partner with third-party vendors like fintech start-ups, as we detail below. Without clear regulations governing fintechs' data strategies, not knowing how a partner will handle consumer data raises potential compliance and reputational issues for credit unions.

Without clear regulations governing fintechs' data strategies, not knowing how a partner will handle consumer data raises potential compliance and reputational issues for credit unions.

FIGURE 12

CREDIT UNION CONCERNS ABOUT FINTECH



Note: *High standard deviation means greater disagreement among respondents.

Finally, however, many credit union leaders are also hoping that AI/ML will allow for enhanced fraud detection and protection. This is a key use of ML in credit unions already, and initiatives like Co-op Financial Services' COOPER seek to use data in the service of fraud mitigation and member security.[108]

5 The Disappearing Car Owner

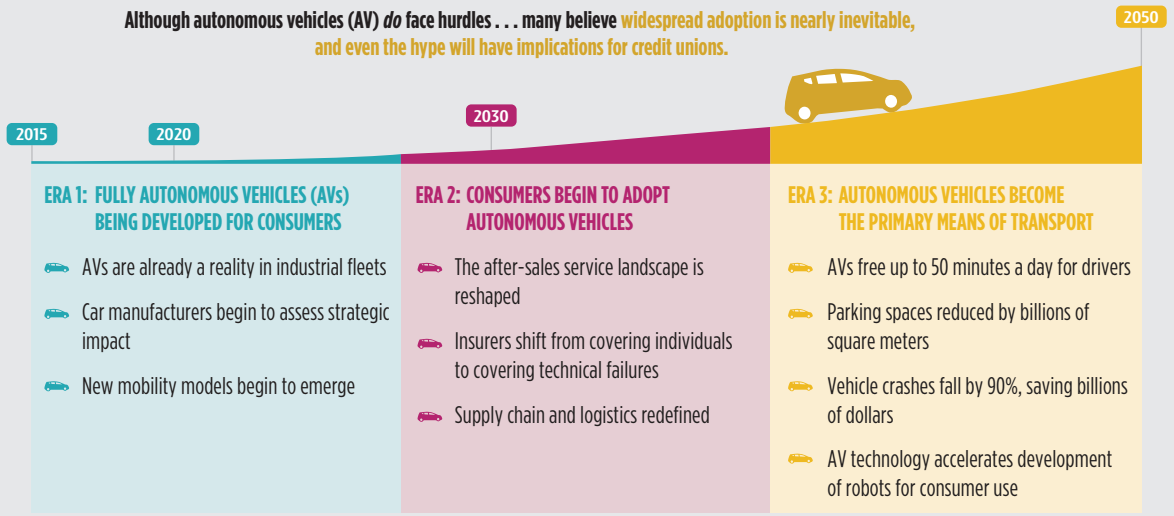
Automobile lending, along with mortgage lending, has long been credit unions' bread and butter; but a number of factors, including socioeconomic trends and a shifting regulatory environment, have led many credit union professionals to question the long-term sustainability of this business model. Many credit union leaders expressed concerns specifically about technological pressures on auto lending, such as the advent of automated vehicles.

The most common nonfinancial asset held by Americans is a car, but it remains to be seen how car ownership will evolve in the coming decades. The CEO of a CUSO specializing in auto lending explained that this evolution will involve the intersection of three trends: the sharing economy, electric vehicles, and the autonomous car. "Those three things brought together, I think, will create a lot of disruption, especially in urban areas. It's not an *if*, but *when* kind of question," he insisted. "It is going to happen." As people own fewer and fewer cars and as cars tend to last longer and longer, "eventually you're going to see a more George Jetson kind of world."

The Filene report *Consumer Insights on Autonomous Vehicles as an Impending Market Disruption* (2018) outlines the convergence of changing consumer attitudes about car ownership and driving with advances in technology that make it easier to gain transportation access via means other than car ownership. The decline in auto loans could translate to an overall loss of 35% of credit unions' loan portfolio. Along with the loss of auto loans, credit unions will lose noninterest income for complementary products (e.g., auto insurance, debt protection); perhaps most importantly, they will lose the gateway product for new member relationships, which traditionally has been the auto loan. The recommendation for credit unions is to prepare for the changing vehicle marketplace by shifting to meet new consumer demands. Options include creating new finance models for leasing and car sharing, creating new insurance offerings that meet members' changing needs, exploring opportunities within the fleet market, and leveraging the credit union reputation for trust and cooperation to explore new models.

FIGURE 13

AUTONOMOUS VEHICLE ADOPTION HYPED FOR 2050



Source: Michele Bertoncello and Dominik Wee, "Ten Ways Autonomous Driving Could Redefine the Automotive World," *McKinsey & Company*, June 2015.

These trends have implications for credit unions, as auto lending constitutes one-third of loans issued through the credit union system.[109] The NCUA's most recent Strategic Plan explicitly acknowledges this challenge: "The increase in on-demand use of auto services and the potential for pay-as-you-go on-demand vehicle rental would reduce purchases of consumer-owned vehicles. In turn, that would lead to a slowdown or reduction in the demand for vehicle loans."[110] As a league president told us,

> *I'm not sure that the economic crisis has as much to do about auto lending as the effect of consumer trends like Uber. I don't think we've seen a measurable impact yet, but moving forward, how will people look at automobile ownership, and will the advent of driverless cars change the whole economic model for auto lending?*

A CUSO consultant also pointed to the effect of these changes on credit union lending. In a world of driverless cars, he said, "credit unions having 20, 25% [of their assets] loaned out in car financing, what do you do with that? Where do you recapture that?" In the future, some interviewees mused, car loans and leases will be divided between those who own their cars and those who share them or put them to work, perhaps necessitating new forms of subleasing or joint ownership. Finally, an economist working at a credit union trade

association pointed to the larger ripple effects of these developments not just for credit unions' business models but also for the US workforce:

> *The whole driverless car thing is going to be a really big deal, and there's a significant portion of the low end of the income spectrum that's already suffering with Uber and the shared ride concept. And all that's going to suffer even more because we're not going to need Uber drivers in the future, we're not going to need long haul truck drivers in the future, and those sort of entry-level jobs that don't require a lot of education are going to be under a lot of pressure. And it's also, by the way, a big chunk of credit union lending. That generates a bunch of profits that we, at the moment, can pass back through to members. So, what's going to offset the loss of that revenue stream? How are our members going to navigate through those changes?*

6 Lessons Learned from Adopting New Technologies

"Trying to be progressive in a nonprogressive industry like credit unions is tough," a credit union COO told us. If they can afford to, progressive credit unions roll out new products and services in waves, testing them with small groups of members before initiating a full-scale launch. Creating this kind of "test environment"—the intermediate step between brainstorming and rolling out a new service—is the biggest challenge in innovation, a CUSO CEO explained. One credit union has what it calls a "virtual innovation panel" composed of members who apply to take quarterly surveys about new offerings that haven't been made public yet. This way, the credit union is able to gauge feedback from its members before investing heavily in something that might not work.

"Trying to be progressive in a nonprogressive industry like credit unions is tough."

At the same time, this credit union's CIO emphasized the importance of being willing to accept failure and learn from it:

> *Two years ago, we came out with the first ever 3D [branch] where you would go to our website and you could create your own [avatar], and you could walk through our 3D branch, where you can walk up to a loan counter and someone would actually chat with you. I thought it was going to be great, but it kind of tanked. No one wants to do that. But if you're not trying things, if you're not failing, you're never going to succeed.*

"You're not going to be able to compete for the member without the technology, and you're not going to be able to pay for the technology without the member."

When deciding how and when to adopt a new technology, credit unions often find themselves stretched between questions of cost and compliance. Cost issues are really twofold, a former credit union regulator explained:

> *The demand of technological delivery continues to grow as it has and as it will, and the cost of being on the cutting edge is going to be certainly more than the cost of waiting, but then again, there is an opportunity loss cost with waiting. So, either way you pay a cost. On the technology front, credit unions are going to have to be able to grow to afford the technology, because the cost of technology is going to be funded by the growth that comes from more members, more loans, more business, more checking accounts, more fees. You're not going to be able to compete for the member without the technology, and you're not going to be able to pay for the technology without the member.*

Because of costs incurred by technology adoption and/or avoidance, it is important for credit unions to be able to distinguish the hype from the tools that are likely to become "table stakes" in the near future. CUSOs have been and continue to be reliable partners for credit unions, because, as a credit union league president explained, "they have a responsibility to be very good aggregators and to do an excellent job of scanning the horizon and not overreacting to the hype curve." She continued,

> *So, for example, did credit unions really need a payment form factor via Google Glass? Probably not. Sorting out what is hype versus what is likely to be sustainable, and then bringing that product to market, is very much the role of the CUSO, because credit unions don't have the scale to do that unless they're really big.*

The recent explosion in the number of fintech start-ups affords credit unions opportunities for partnerships beyond CUSOs regarding technology development and adoption. All of our interviewees expressed a preference for working with CUSOs, because their incentives typically and more organically align with those of credit unions, and because CUSOs tend to understand the credit union business model and mission well. Some, however, like the CEO of a large credit union, noted that the possibility of partnering with a fintech was not as out of the question for him as it had been in the past:

> *A fintech is building the new technology, and 100% of investment is going into today's technology. You're not an incumbent, you don't know us as well, but let me tell you,*

it's really attractive to look at—when you're talking about the periphery out here—for smart and special systems, you may be bringing something that our industry can't see and do well yet. And if you're a start-up, you're not bringing old technology assets dragging behind you to slow you down. I kind of like that! I'm more willing to look at that now than I was five years ago.

However, there are some potential pitfalls that come along with a fintech partnership.[111] One survey respondent noted, "Technology is evolving faster than the regulators can regulate it or provide guidance as to how we should be compliant." Another remarked, "The constantly changing regulatory environment makes it difficult to confidently select new technology services for members." Vetting third-party fintech vendors is a costly and burdensome process, especially for smaller credit unions that are already stretched thin with respect to compliance because of personnel and expertise shortages. The NCUA does not currently have authority over vendors, which may add to small credit unions' burden.[112]

The Filene report *Weighing the Risks of a Fintech Partnership* (2018) describes the steps credit unions should take before developing partnerships with new fintech suppliers or vendors. Included in the report is a checklist for evaluating fintech partnerships.

"Technology is evolving faster than the regulators can regulate it or provide guidance as to how we should be compliant."

There is some uncertainty about how fintech partners would manage member data. One concern regards who is able to access third-party data aggregators; another is the potential exposure to "fourth-party" actors—when, say, a fintech contracts with a cloud services company—that financial institutions assume through fintech partnerships. A national representative for credit union professionals told us,

I do wonder if credit unions and banks have a higher burden when it comes to protecting consumer information than [fintechs]. If fintechs or technology companies or retailers don't have to be as responsible, that's probably a huge disadvantage to financial institutions.

One survey respondent suggested that having clearer regulatory oversight of fintechs could assist credit unions with vetting processes:

For example, a clearinghouse or "certification" that provides a review process overseen by a government agency or quasi-agency that can ease the burden on credit unions to meet this requirement regardless of size might be helpful to some degree especially for vendors who are committed to being heavily engaged in the marketplace.

As this report was being finished, the Office of the Comptroller of the Currency (OCC) announced that it would begin accepting applications from nondepository fintech companies for special-purpose national bank (SPNB) charters.[113] This chartering would offer an alternative to the current patchwork approach requiring state-by-state licensing, giving fintechs flexibility to operate nationally while requiring them to comply with existing bank regulations, such as capital and liquidity requirements. Questions remain about whether such regulations will, in fact, be equivalent to those faced by other financial institutions and how SPNB charters will work alongside state licensing and regulations. Meanwhile, some have raised concerns about the risk posed by such fintech charters for consumer protections and fair lending compliance.[114]

As fintechs continue to grow their market share in the financial services industry, credit unions will need to have strategies in place for competing and/or collaborating with them. Given the potentially serious regulatory burden entailed, early indications suggest that the SPNB charter may not attract many applicants.[115] Still, the OCC's recent announcement may result in increased competition—or at least complications—for credit unions. As a former banking regulator observed, "I think that a lot of credit unions have been slow to adapt to working with some of these fintech companies, but when you look at what they're up against—the Amazons of the world—if they don't start finding a way to partner and making these services available, then they won't be around for long."

CHAPTER 4

The Technology: A Twenty-First-Century Credit Union Business Model

When asked what "the twenty-first-century credit union" means to them, several of our interviewees noted that the phrase already sounds outdated. One credit union CIO said that it

> *kind of seems like we're still back in the '70s with technology. When I go to conferences and talk to other credit unions—and not just credit unions, banks in general as well—it's amazing how far behind the times we are technologically compared to other up-and-coming businesses and mom-and-pop shops, even.*

The futurist Alvin Toffler once quipped that "the future always arrives too fast," and this certainly appears to be how many in the credit union system feel with respect to how the rapidly emerging socioeconomic and technological trends and challenges that we have outlined in the previous two chapters are putting pressure on the traditional credit union business model. As one consultant told us, "The traditional credit union model—debt-interest margin, living off of what you make in loans, and what you have to pay out in operating expenses—just doesn't go very well right now." An industry regulator told us something similar:

> *I'm not sure the traditional depository as financial intermediary is going to ultimately be the best business model, or survive over the longer term. At some point between the changes in society and the changes in technology, financial innovation: why do you need the traditional deposit-taker/lender model?*

"The traditional credit union model—debt-interest margin, living off of what you make in loans, and what you have to pay out in operating expenses—just doesn't go very well right now."

Another analyst echoed these concerns, suggesting that "we're such a lending-focused business model, we have to be more creative about the financial services [we offer]."

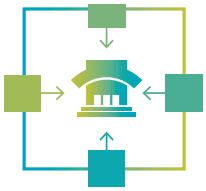
To do so, however, will require reimagining—from the ground up and inside out—the credit union model, in terms of both how credit unions use technology and what kind of legal foundation is required to make that transformation possible. In this chapter and the next, we outline what that reimagining might look like as we approach the centennial of the 1934 US FCUA.

Across our interviews, we found that credit union leaders are actively and creatively pondering ways forward other than simple funds intermediation. The platform-based, data-intensive models that they brainstormed with us put technology front and center. Two features stand out in these reflections.

Rebundling Financial Services through Platforms and Partnerships

New technologies and new providers have transformed how consumer financial services operate. In the near future, financial institutions, including credit unions, will be pressured to re-bundle the financial services currently offered piecemeal through different companies and applications. The two key strategies in offering holistic financial services will be to

remake financial institutions into open digital platforms and to embrace partnerships with third-party providers.



From unbundling to rebundling: During the recent fintech explosion, successful start-ups were those that specialized. In the process, they disaggregated and personalized financial services, inserting themselves as intermediaries between consumers and traditional financial services providers. Today, however, there is an opportunity to "rebundle" financial services, and those traditional providers—especially credit unions—are well positioned to take advantage and become consumers' first financial port of call. If fintechs built a variety of products and services that do one thing well, credit unions now have the opportunity to build on those lessons and work with vendors in order to serve their members holistically.

Platforms and partnerships: To accomplish this rebundling of services, credit unions must transform themselves into open digital platforms, building and maintaining close relationships with members while also establishing partnerships with third-party providers tailored to those relationships. The UK's open banking initiative is an intriguing example of this approach to "banking as a platform."[116] Treating the credit union as a platform centralizes member experience while also opening it up by allowing people to engage—and share their data—with a variety of institutions and applications. To enable these interconnections, flows of both value and data must be made interoperable, even as the credit union maintains at least some control over the member relationship.

Rebundling and platforming banking allows credit unions to make diverse financial services directly available to members in a simple, transparent, and readily personalizable one-stop digital shop, while putting themselves at the beginning and the end of members' experience.

Today, credit unions' online and mobile banking platforms offer basic functions like balance inquiry, transfers, remote deposit, and bill pay. But the universe of customizable financial services and products is much more diverse. Rebundling and platforming banking allows credit unions to make that diversity directly available to members in a simple, transparent, and readily personalizable one-stop digital shop, while putting themselves at

the beginning and the end of members' experience. To this end, we suggest that the credit union of the twenty-first century will have four fundamental characteristics.

1 Relationship Banking

What will differentiate credit unions from other financial institutions in the twenty-first century? The answer to this question is a familiar one. Credit unions were founded on a model of relationship banking specifically committed to helping members and their communities navigate financial challenges. One of our interviewees, a credit union vendor consultant, described what he called the "infectious" sense of community in credit unions:

> *This is something deeper than a deposit. This is something way, way more than a transaction. This is about being a part of your community and giving back, and helping the community not only survive but even thrive.*

This commitment originates with the member. The cooperative structure of the institution means that members' needs must be the foundation of financial services. As one analyst told us,

> *Time and again we hear people say, both credit union members and the credit unions themselves, that one of the really big differences is, because we're smaller and we tend to be local, we're more flexible in our underwriting and we are willing to listen to people's stories.*

Yet as members' needs change, so too must the relationship between members and credit union offerings. The imperative to, as this analyst told us, be "nimble and responsive" to members' needs and experiences—their "stories"—is the fundamental building block for the future of any individual credit union and for the credit union system as a whole. "Credit unions were set up 100+ years ago to help people," a credit union executive told us. "What does that mean today?"

Inspired by the original credit union community mission and cooperative principles, the twenty-first-century credit union will be built on the ties that bind membership to the institution and the institution to membership. Indeed, today, membership itself is a function of this relationship, rather than an outcome of the traditional categories of preexisting communities, one league CEO told us. "Whose field of membership is it," she asked, "if the members are doing their transactions on a mobile phone? That doesn't have anything to do with your place of employment or your geography; it has to do with a *relationship*."

Inspired by the original credit union community mission and cooperative principles, the twenty-first-century credit union will be built on the ties that bind membership to the institution and the institution to membership.

Many of our interviewees suggested that credit unions are entering a moment when a focus on relationships is in demand. As organizational mission is made an explicit part of consumer calculus and people increasingly seek out the values of community, cooperation, and commitment when looking for a financial services provider, credit unions are well positioned to take advantage of an environment in which consumers are looking for more personalized, granular relationships. As one CUSO executive told us, "There is a market need for credit unions, for a financial institution that's truly about doing what's right for the human. And there's also a population that's really hungry for mission-driven financial services. The opportunity is really ripe." An industry analyst similarly explained that consumers of all ages are looking for financial institutions with a local presence and "a human face," which is something that credit unions are able to deliver well. He continued, suggesting that in courting young people—"who, despite their ease and desire to work with some of the big companies like Apple or Google or Facebook or Amazon, really like the idea of small and local"—credit unions might look to "the craft beer industry, or buying local, or getting locally resourced foods" for inspiration.

As organizational mission is made an explicit part of consumer calculus and people increasingly seek out the values of community, cooperation, and commitment when looking for a financial services provider, credit unions are well positioned to take advantage. But when members lose trust in an institution's ability to meet their expectations, the values of the institution may matter less.

At the same time, difficulties remain, specifically in communicating the credit union mission and model to potential members and in building and maintaining the trust that motivates and animates that mission. We heard from almost every interviewee about the challenge of communication. The CUSO executive cited above wondered aloud why the credit union mission is not more widely known. "It's because we're transactional," she argued. "The way we're selling and delivering is transactional. What we say about credit unions is, 'We have great rates!'" But "we're moving from that transactional economy to a relationship economy," such that credit unions must invest in communicating their commitment in ways that build trust.

However, she continued, "trust can be sliced two ways." On the one hand, trust emerges from the alignment of principles and purpose. "I think credit unions have cornered the market on that," she said. On the other hand, trust is a function of credibility and capability, and here is where credit unions may fall short. "If you can't do everything right here, right now, immediately, and have all that service integrated, they don't trust that you're capable. When the experience is full of friction, they don't trust you." As another credit union leader put it, "In the old days, trust was largely what you and I are doing right now, but as people rely more on things that aren't human, trust is more and more dependent on something as simple as uptime."

When members lose trust in an institution's ability to meet their expectations, the values of the institution may matter less. "That mission falls away," the CUSO executive explained. "You're not really helping me in my life, you're making it hard!" As an industry analyst told us,

> *I think there are enough cause-oriented people, and perhaps enough people out there who have had a bad experience with the profit-driven banking model, that I think there will always be a market for the member ownership differentiator. The problem is, that differentiator is a good tiebreaker, but it's not good enough to be the source of someone accepting inferior service or less realistic means of delivering those services. The differentiator only comes into play, as I said, if it breaks the tie. It doesn't cover the 14-point spread.*

In other words, the relationship banking model on which credit unions have long relied is becoming increasingly relevant, but it must be supported by technology that responds to and enhances that relationship.

"There will always be a market for the member ownership differentiator. The problem is that differentiator is a good tiebreaker, but it's not good enough to be the source of someone accepting inferior service or less realistic means of delivering those services."

2 Ambient Banking

What is the future of the credit union member experience? Many credit unions have already made investments in user-friendly online and mobile interfaces. The credit union stakeholders with whom we spoke, however, emphasized that a strong member experience should be channel-agnostic. One executive told us that, in his mind, "the path to relevance" for credit unions was "engagement across channels" rather than an investment in any particular interface technology. This focus on an "omnichannel" experience was a common one in our interactions with credit union leaders as they seek to push back against the siloing of financial services. Instead, credit unions are strategizing how to offer a mix of channels alongside a mix of products and services that corresponds to member demands. One executive told us that at his credit union, "we've really been focused on any channel that helps with accessibility and convenience."

"The path to relevance" for credit unions is "engagement across channels," not an investment in any particular interface technology.

In the future, however, simply diversifying delivery channels may not be enough. Several interviewees suggested that credit unions need to start thinking now about how the mobile experience itself will evolve and need to be integrated with other channels, as well as face-to-face interaction. One executive described a series of spatial and technological shifts in how people have accessed financial services in the past and present: from banking at a branch, to banking at an ATM, to banking on a desktop or laptop computer, to banking on a phone. He suggested that this transition has pushed banking "more and more into the background," from branchless banking to pocket banking, and he wondered if financial institutions might soon leave behind the web presence and app experience entirely. Without the need to sign into any delimited digital space, what would banking look like, he wondered. "Wouldn't it be nice," he said,

> *if someday, before you go out for a night of hanging out with folks, all you would have to do is look at your phone, and if your screen is green, you know you had enough dough in your account to go have drinks.*

This may not be as science-fictional as it sounds. In a recap of the 2015 Money 20/20 conference, the media and communications scholar Rachel O'Dwyer writes about the promise of "ambient payments" in facilitating "behind-the-scenes" and "in-the-background" commerce. Retail experiments in automatic mobile checkout—which allows consumers to simply pick up the goods they want and walk out of the store—hint at what is possible in the coming decades. "Transactivity," O'Dwyer writes, "will soon migrate from

the bulky point-of-sale terminal into the everyday environment," becoming invisible.[117] This kind of seamlessness has long been a desire of those seeking to reduce friction in the credit union member experience, too: "Money is just a facilitator of other activities," one executive told us, "so don't get in my way." But this seamlessness cannot be achieved by taking separate pockets of the banking experience mobile. Integration and interoperability must be the goal. Instead, the credit union of the twenty-first century may be fully ambient, even atmospheric, combining Alexa-style voice interaction with a skillful mix of AI-driven chatbots and human handoffs. Access to financial services will not happen through a screen; instead, the interface will be all around us, and ideally this "backgrounding" of finance into our everyday lives will simplify interactions with financial services providers.

"Transactivity will soon migrate from the bulky point-of-sale terminal into the everyday environment," such that the credit union of the twenty-first century may become fully ambient.

3 Automated Banking

How will credit unions use member data in the future? All of our interviewees pointed to the data generated by members' interactions with the credit union as a potential "treasure trove," as one executive put it. Many also worried, however, that credit unions had not recognized the value of the data, selling short what those data might allow them to do, or that they were locked out from that data by legacy systems and limited partnerships with their core technology providers. As a result, one CUSO executive told us, credit unions end up organizing their different products and services along a "production line" that leaves them fully siloed from one another. "It's as if in a typical credit union environment," she told us, "there's a loose collection of different companies housed under one roof."

In our interviews, credit union leaders aspired to mobilize data to lighten the load placed on members as they move from one part of the institution to another. One executive explained, "We're really going to look at technology and how do we create that one-stop for a member to come to, and once we have your data, we can prefill any kind of application you might want to get from us." Another put it this way:

> *If a member is coming to a credit union and saying, "Regardless of where I go in the credit union, regardless of what service I touch, I would expect they know me across the whole thing and would anticipate what I'm needing. If I transact in one side of the business, they would know it." That does not happen today.*

One of the key promises of data, then, is in automating processes to smooth the path of the member through the credit union. Member data are the fuel of automation, from robotic

processing of routine tasks to natural language processing to more advanced, AI/ML-driven risk assessment and decision making.

One key promise of data is in automating processes to smooth the path of the member through the credit union. But the more radical promise of automated banking is in wealth management and portfolio optimization, maximizing savings and returns within the risk parameters set by a member.

While automation can help streamline how members navigate the different platforms of their credit union, its more radical promise is in personal financial coaching, wealth management, and portfolio optimization, maximizing savings and returns within the risk parameters set by a member. For example, a credit union might use transaction data to identify products and services that could benefit a member, automating discovery instead of putting the burden on members to research and compare options on their own. Already today, for example, a handful of credit unions offer products that round up card-based purchases to the nearest dollar and automatically deposit the difference into a savings account. Others give members the option of automatically overpaying the minimum payment due on a loan, putting that amount aside and keeping it available for withdrawal should the member need it. In the future, other services might be automated and optimized: debt consolidation and repayment, savings for home or car maintenance, expenditure earmarking that automatically recognizes a purchase and pulls the spending from the correct bucket, or credit repair loans that allow members to lend microsavings to themselves over time to build their credit score and, ultimately, generate an emergency savings cushion.

By automating such financial chores and building in added value for members, credit unions can place some of the more onerous—repetitive or confusing—banking tasks out of sight and out of mind, freeing members up to concentrate on other activities. One credit union CIO emphasized how his members, especially younger ones, expected him to be able to offer this level of service:

> *When I talk about millennials, what we're finding is this whole "do it for me," or DIFM, strategy: "Don't let me think of what I need to do; just tell me what my options are, and suggest what I should do, and I'll do it myself or you do it for me." Some of the stuff that we're doing now, not only are we designing it to be self-service, but in certain aspects we're trying to develop to be self-service-slash-DIFM where we will let them know what they should do, where they can monitor their finances.*

Of course, as we discussed above, collecting and using members' data without a clear, effective strategy for managing data security and privacy can be devastating for a credit

union, exposing it to fraud, hacking, and reputational risks. "The irony in this space is," according to one credit union executive, "good security is very inconvenient. The more convenient security is probably it's going to be less effective." The twenty-first-century credit union, then, is one in which securing members' data and protecting their privacy do not come at the expense of seamless experience. Securing members' identities is not something added on to the use of data for automation and optimization; it is, instead, a constitutive part of how credit unions engage with members. Identity is at the center of automated banking: not individual data points, but keeping those data points connected in a digital identity that travels with the member. Several of our survey respondents and interviewees are excited about the potential that blockchain technology might have for harnessing the member relationship to become the trustworthy protector of member identity, while at the same time giving members control over their own identities. For now, however, the jury is out as to whether blockchain can offer an effective answer to this problem.

Identity is at the center of automated banking: not individual data points, but keeping those data points connected in a digital identity that travels with the member.

In the near term, realizing the potential of automated banking will require investment in, according to one executive, "a back-end infrastructure that makes that possible," which makes data flows fully interoperable across channels and platforms and potentially among credit unions themselves. This will necessitate not only data standardization and the development of new APIs but also, and most importantly, modernization of credit unions' legacy core systems. The CIO of a progressive credit union explained how if he had his way,

> *I would have all credit unions run the same core. Credit unions are all about sharing, and that's what I love. I have some local credit unions that we've built up a really good relationship [with], where if they were on the same core, I could say, "Here, I reinvented, or redefined, the new account opening on the Meridian Link platform," and they could implement it, because the core is identical no matter where it is.*

A CUSO consultant echoed this CIO in suggesting that most credit unions would like to reduce their dependency on their core providers. But instead of having the entire industry agree to run the same core, he argued that the key will be developing core-neutral middleware, which would "encourage developers to develop apps, and you can develop your own apps, you can share them. As long as you can do that, who cares what the core is?" Another credit union leader pointed to the ATM branching network as a possible model for such cross-movement collaboration: "When you modernize that word 'network' today, it's really thinking as a platform and behaving as an ecosystem."

4 Concierge Banking

What will consumers need from financial services in the twenty-first century? What do consumers want but cannot do by themselves? Today, the answer to that question is both simple and, considering the socioeconomic and technological context, challenging. Consumers want to save more, but they are stymied by instability and uncertainty in their day-to-day financial lives. They want to improve their credit and start investing responsibly, with carefully personalized loan and investment recommendations, but when they start looking they are confused and exhausted sorting through the numerous, complex options that pop up on Google. They want good financial advice to help them plan for tomorrow and the future, but they don't know who to trust.

Consumers want to save more, but they are stymied by instability and uncertainty. They want to improve their credit and start investing responsibly, but they are confused and exhausted sorting through the options. They want good financial advice, but they don't know who to trust.

The credit union of the twenty-first century will become a platform through which members navigate these challenges. At the heart of the value proposition of the twenty-first-century credit union is, as several of our interviewees put it, "concierge-type" personalization. This personalization would involve much more than dashboard visualizations of transactional data. Instead, the twenty-first-century credit union will offer financial services tailored to the member and their community, and that tailoring will evolve over time as the needs of the member and the community change. Combining data-driven recommendations and human financial advising, the twenty-first-century credit union will become, as one executive told us, "your life concierge." A CUSO executive explained that for her, the twenty-first century "would be data and digital first, like 100%":

> *It would know me, know my behavior, know all my financial background. It would be watertight safe. And there would be a warm, caring person on the other end advising me at all stages, and saying, "Hey, did you think about this?" Or, "Don't forget, you've got to be blah, blah, blah." And it wouldn't sound like a corporate voice; it would be personalized to me. A short-term and long-term advisor, helping me on my transactions to help me really make sure I'm behaving in the right way to meet my long-term and short-term goals.*

A twenty-first-century credit union "would know me, know my behavior, know all my financial background. It would be watertight safe. And there would be a warm, caring person on the other end . . . a short-term and long-term advisor."

The credit union would not simply offer a disparate collection of products and services but a palette of options and pathways that make sense for a particular member at a particular point in that member's life, based on what the credit union knows about the member and the relationship the credit union maintains with that member over the member's life cycle. This inverts, we suggest, a traditional financial services model, such that consumers come to their financial services provider to get their financial lives in order; core banking products are simply the means to that end.

Consumers come to their financial services provider to get their financial lives in order; core banking products are simply the means to that end.

Many of our interviewees framed the effective use of member data as a "natural" extension of credit unions' traditional strength in relationship banking. By combining transactional data and face-to-face knowledge, credit unions, as a former banking regulator phrased it, "really have an opportunity to sell that we're not the faceless giant in some other part of the country or the world that doesn't know your needs [and] can't tailor their services to what you're looking for." At the same time, the particular mix of products and services that make sense for a particular member and community will evolve over time. If you "design your products and solutions based on [members'] behaviors," one analyst told us, then sometimes "all of a sudden you grow a new arm because of the way your members are behaving, and you're flexible enough to grow that new arm, because somebody needs it."

In a platform-based model, some of these options would be designed and offered by the credit union, while others might be run through third-party providers. In the case of the latter, however, the credit union remains the gateway to these third-party services, matching members with the services that work for them:

> *The credit union's role in that would be, or through the CUSO, to identify best of breed, and to manage that relationship. Not just pick out somebody that's going to give you a good price, but actually manage the risk of that relationship on behalf of the members and have an ongoing dialogue with the members as to what they need next. So, I think, again, it's a concierge-type concept, and you're also an overseer of quality.*

The relationship remains between the member and the credit union, which filters third-party solutions and warehouses member data. In this sense, again, credit unions build on a traditional foundation of member knowledge and trust to vet third-party providers offered through the credit union platform.

In the process, financial services would merge with financial well-being. "The original mission of credit unions was to meet the needs of people of modest means," one regulator-turned-consultant told us, but it's an open question "whether all credit unions are in fact meeting that mission." As precariousness, uncertainty, and inequality increasingly shape all aspects of financial behavior and well-being, financial institutions must take a holistic approach to serving consumers; as one credit union SVP told us, financial well-being cannot be "something we try to address piecemeal." Instead, he suggested, we may be entering a future in which financial well-being "moves from being simply *some*thing [we do], to *a* thing, to *the* thing."

Financial well-being cannot be "something we try to address piecemeal."

Data-driven concierge banking offers one way to revitalize this mission. As one CUSO executive said, "That's an answer to the question, 'What would "people helping people" look like today?'" The CEO of a large credit union explained how, in the era of "big data," he saw an opportunity to focus more on personal financial coaching, counseling, or advising: "To thread the needle on your financial viability and sustainability as a household or as a person, there's so many moving variables in there now, I don't think you could do it. And that's going to be my job." That is, carefully tailored financial services can help the many people for whom securing a stable financial life is today out of reach. "I can thread the needle," he told us.

> *I can do predictive analysis of where this is all going for you. Let me give you real-time decision points, saying, "You're on track of where you need to be going," or, "Whoa, whoa, whoa, watch out." The decision's yours, always, but just know this doesn't fit for threading the needle.*

"To thread the needle on your financial viability and sustainability as a household or as a person, there's so many moving variables in there now, I don't think you could do it. And that's going to be my job."

The Act: A Twenty-First-Century Credit Union Legal Model

Most of the people with whom we spoke were satisfied with the FCUA's core provisions and felt that if any changes were to be made, they should not endanger credit unions' cooperative ownership structure or their model of democratic governance. However, there are aspects of the FCUA—some pragmatic, others more conceptual—that emerged from our conversations that might be amended in ways that would help credit unions grow sustainbly in today's financial services ecosystem while also allowing them to stay true to—and even deepen—their social mission and cooperative principles.

Two of the more pragmatic areas of concern are the member business lending (MBL) cap and the rules governing credit unions' abilities to issue supplemental capital. The National Association of Federal Credit Unions (NAFCU) has made MBL reform one of the centerpieces of its regulatory relief agenda, aiming to raise the current limit of 12.25% of total assets to 27.5%, and/or redefine the upper limit on a member business loan from $50,000 to $250,000 to bring it more in line with past inflation.[118] A former credit union regulator argued that the MBL cap works to restrict credit union growth in a way that benefits banks more than anyone else:

> *[Banks] have intentionally sought to keep credit unions down with the hope that eventually you'll force that credit union to convert to a bank in order to get out from under those restrictions. I think this is their long-term game plan. Through restrictions on business lending, you force them to have to stay at a smaller size, not able to grow as much as they feel like they should, and eventually a credit union says, "I'm just going to convert to a bank." And now the bank comes along and says, "I'll tell you what, I'm going to make an offer to buy you." And the banks will eventually absorb the credit union[s], or at least the bigger, more progressive ones, through that model over time.*

The NCUA representatives we interviewed indicated that they, too, would like to change the MBL cap, beyond what they had already done in the final rule the agency issued in 2016.[119] These representatives acknowledged that the current level represents a limit on credit

unions' abilities to serve small businesses and start-ups, and that this presented a problem in light of socioeconomic trends:

> *Increasingly, if it ends up being that with the baby boomer retirements and other changes in the nature of the economy and the workforce you have more self-employed folks, there's going to be a big role for more business lending. And so we have done a lot in the last few years, partly because of that realization, to try to modernize our regulatory and our supervisory approach to business lending.*

"If it ends up being that with the baby boomer retirements and other changes in the nature of the economy and the workforce you have more self-employed folks, there's going to be a big role for more business lending."

Another suggested area of reform regards supplemental capital. As we learned from our interviewees and survey respondents, credit unions' ability to compete with other financial institutions, let alone remain viable businesses, depends in large part on being able to meet their members' expectations regarding consumer-facing financial technologies. However, to be on, or at least near, the cutting edge of technology trends, credit unions need to make capital investments either for in-house development or in partnering with CUSOs and third-party vendors like fintech start-ups. On this point, credit unions are at a significant disadvantage compared with commercial banks. A CUSO consultant explained,

> *It's very difficult for credit unions to fund these technology CUSOs, because technology is a capital-eater, and credit unions have limitations on how much they can invest in CUSOs, and they also have a limitation on the risk tolerance as well. Right now, for federal credit unions, I think, it's essentially 1% of their assets less reserves, which hasn't posed a lot of problems yet. Most credit unions don't invest that much. But as we go further, I think that increasing that amount would help a lot.*

A former federal regulator concurred, arguing that giving credit unions access to supplemental capital would be crucial to their long-term viability:

> *I think that probably capital is the thing that's going to be the biggest regulator, or the biggest governor, on the growth of credit unions between now and 2034 when we reach the 100 years of the Federal Credit Union Act. Because technology's going to change a lot between '18 and '34! And in that period of time, if the credit union is limited to only their retained earnings, it's not going to be able to make those investments.*

Currently, federal credit unions can issue supplemental capital if they are an LICU.[120] The NCUA may make the process of applying for low-income designation easier for credit unions. Additionally, the NCUA's new risk-based capital rule will go into effect at the beginning of 2019, lowering the effective risk weight for investments in CUSOs for the majority of credit unions, among other things.[121]

MBL and supplemental capital rules are well-recognized and much-sought-after reforms by many in the credit union system. A twenty-first-century FCUA, however, may require more far-reaching changes. Issues that would entail more abstract, comprehensive reform of the FCUA are field of membership and the common bond.

In addition to cooperative ownership and democratic governance, the most prominent factor that distinguishes credit unions from other financial services providers is a restriction on membership. Credit unions' fields of membership are defined according to "common bonds," a requirement that members have a relationship to one another that is based on shared occupation, shared association, shared location, or (more recently) some combination of these. As a group of national credit union representatives told us, the original rationale for the common bond requirement "was thinking that you would feel more responsibility to pay back your loans because [the credit union was] people you knew." This is a common ingredient of many forms of cooperative or solidarity finance found around the world.

Yet while it may have made sense in 1934 for credit unions to be founded on narrowly defined common bonds, "community" in the twenty-first century does not look the same as it did when the FCUA was written. Digital platforms allow for synchronous communication and persistent interaction in ways that produce communities just as real as those formed on the factory floor or in places of worship; indeed, today, offline occupational and social bonds often accompany and build on online relationships. Studies of such online or "networked" communities show that people have many ways of participating in and contributing to building virtual social ties.[122] Meanwhile, predictive analytics affords different ways of knowing credit union members by, for example, producing data about their behavior and assessing the likelihood that they will default on a loan. Similarly, credit and lending are not the same today as they were in 1934; as national credit union representatives elaborated to us, the original common bond rationale "is just not going to hold anymore [because] credit is just so much more available."

While it may have made sense in 1934 for credit unions to be founded on narrowly defined common bonds, "community" in the twenty-first century does not look the same as it did when the FCUA was written.

The socioeconomic changes detailed above—increased mobility, frequency of job changes, and the growth of the temporary workforce—and the fact that sophisticated telecommunications platforms allow individuals to form virtual communities beyond areas of physical proximity challenge what constitutes a common bond. Instead of being a potential asset vis-à-vis knowing members and applying social pressure to act in the best interests of the cooperative, restrictive fields of membership today can become a liability for credit unions, particularly regarding safety and soundness, even as for others it can provide a protective market niche in which to grow. With respect to the occupational common bond specifically, a former regulator described it as "the fundamental flaw in the original credit union model," because

> *if the company sold out, if [it] went under for whatever reason, all of a sudden the credit union's financial footing is lost. The members all had a tie through that organization, now that organization no longer exists, or it's been downsized so much that now the credit union is in trouble.*

Restrictive fields of membership today can become a liability for credit unions, even as it provides a protective niche for others.

Of course, field of membership rules have changed dramatically since the FCUA was first passed in 1934, and debate around field of membership rules has been dynamic. The Credit Union Membership Access Act that the US Congress passed in 1998 allowed credit unions to have multiple common bonds, and in 2016, the NCUA instituted a final rule that relaxed certain field of membership rules, including:

- *Community common bond*: The areas and population sizes that community charter credit unions can serve have been expanded, and the population limit for a designated "rural district" was raised from 250,000 to 1 million.
- *Multiple common bond*: A credit union can now serve members who have a "strong dependency relationship" with any of its multiple select employee groups (SEGs), even if they work only as contractors.
- *Occupational common bond*: Credit unions can serve members with "strong dependency relationships" not just to a given SEG but also to any entity within the same trade, industry, or profession.[123]

In June 2018, the NCUA approved another final rule on chartering and field of membership that relaxed restrictions on credit unions applying for a community charter, expansion, or conversion. Specifically, the new final rule allows federal credit unions to submit a narrative description of the community that they wish to serve rather than being beholden to official statistical areas or political subdivisions. However, the narrative must still

describe a "well-defined local community" that is ultimately delimited by geographic boundaries.[124] Nonetheless, conversations around how to define membership and community remain fluid.

While a number of our interviewees approved of past changes by the NCUA, others felt that field of membership was still too restrictive; still others believed that credit unions were becoming more like commercial banks and drifting away from their original purpose of serving local communities and people of small means.[125]

One part of the FCUA's field of membership rules that might be productively changed concerns the expansion of multiple-bond credit unions, specifically "the inclusion of [an additional] group in the field of membership of a credit union that is within *reasonable proximity* to the location of the group."[126] The notion of "reasonable proximity" could be an obstacle to membership in an environment where, for example, contractor groups may not reside anywhere near the SEG or SEGs with whom they work. The NCUA representatives we met agreed that reasonable proximity may be too vague a concept in an increasingly digitally mediated world:

> *If Congress wrote the Act now instead of in '34, it would be an interesting debate to see what is meant by the term "reasonable proximity." In this day and age, is it unreasonable to assume that someone doesn't have to be located a certain distance from the group in order to effectively serve them? So, it's looking at what was a common bond when it was written, and really what is a common bond now, and how is that kept, and nourished, and nurtured? And I think someone could make an argument that if you're on this LinkedIn page, if you're in this social group, if you're in this chat room, there is some commonality that's getting nurtured there. It's just getting over the, "How could you possibly say that would work to meet our field of membership rules?" So, that's the challenge I think Congress would have now: What do we really mean by this, and what are—in this day and age, in 2018, or 2034—tangible examples of how you can nurture a common bond without having to be face-to-face?*

Reasonable proximity may be too vague a concept in an increasingly digitally mediated world.

Indeed, as this report went to press, NCUA Chairman J. Mark McWatters asked Congress to relax field-of-membership rules even further to allow, for example, multiple common-bond institutions to add underserved areas to their field of membership, eliminate the "reasonable proximity" provision, and "provide for explicit authority for web-based communities as a basis for a credit union charter."[127]

Confusion about what "reasonable proximity" means raises a larger question about the relationship between common bonds and location, and whether the community common bond, currently defined by membership "within a well-defined local community, neighborhood, or rural district," ought to be reworked.[128] A credit union SVP told us, "If we were to start over, to me, charters that are framed by geography in a world that's becoming less and less constrained by geography don't make much sense." Communities in the twenty-first century are increasingly tied to shared interests and values, and interactions are increasingly facilitated through mobile and online platforms. These sorts of communities are more apt to fit the definition of an associational common bond, which also opens up questions about what counts as "association." Using the example of a popular mobile game, a lawyer at a national credit union group explained that the meanings of association and community, and how they are related to geographic location, are all intertwined:

> *Communications and society today have allowed associations to expand more, and so I think we're already kind of starting to grapple with, when we think of an association, it's not just a bridge club down the road. It can be whatever group it is, and now very actively involve people from all over the country. You do have a lot of folks in the [credit union] system beginning to kind of grapple with, "What is the definition of community in the twenty-first century?" And I think grappling with the idea that our traditional sense of community—"[so-and-so] lives down the street from me"—is kind of running into the twenty-first century where somebody who lives in Seattle and loves Pokémon Go might really feel more connected to a Pokémon Go player in El Paso than they do to the people who live down the street.*

Communities in the twenty-first century are increasingly tied to shared interests and values, and interactions are increasingly facilitated through mobile and online platforms, and these sorts of communities are more apt to fit the definition of an associational common bond.

A credit union executive made a similar point: "Amazon Prime members are arguably a thinly connected community. You could imagine a Facebook credit union, or maybe a Twitter, or maybe a Snapchat, or Pinterest, right?" Others wondered aloud whether owning an iPhone could be a common bond, or—more importantly and realistically—if being an Uber driver or a student debtor constituted an associational bond.

Contemporary communities form not only around products, services, and platforms like the ones that our interviewees cited, but also around participation in causes like the credit

union system itself. In this sense, then, credit unions might be understood as creating *their own* communities, whose members share a common bond that is defined by commitment to the credit union or to cooperative finance. A national representative for credit union professionals articulated this point for us:

> *I can think of credit unions whose members love them so much that they say, "Well, what I have in common with that other person is we love our credit union." So, the mere fact that I decide that I would rather receive my financial services from a cooperative entity in and of itself defines the community. And really, isn't it about business models? Nothing wrong with for-profit banks—I use both credit unions and banks, personally—but shouldn't I have the right as a consumer to choose which business model I want to do my business with? Doesn't that make sense?*

One of the NCUA representatives with whom we spoke agreed, stating that "people want to be part of something," and that "the credit union structure is set up for that ageless need people have to be part of a community, whereas a bank is just a bank; it's never meant anything emotional to me." Another noted that there is an implied continued level of interaction in the idea of a common bond that isn't necessarily facilitated by physical proximity. He argued, "Is there an onus for the credit union to force a level of interaction, almost like an associational common bond, to make sure that that bond isn't broken and that it can be demonstrated? If that's not the case, [then] the concept of a common bond is outdated."

"People want to be part of something" and "the credit union structure is set up for that ageless need people have to be part of a community."

Others offered a more radical solution, suggesting to jettison the concept of membership entirely. One CUSO consultant put it bluntly: "Get rid of membership. It's a twentieth-, maybe a nineteenth-century concept. Let the membership grow organically." Doing so would, in effect, turn the credit union incorporation process on its head. Instead of choosing from among a number of common bond options to determine field of membership in one's charter, bonds among members would be constituted by belonging to the credit union itself; the field of membership would be anyone that uses the credit union's products and services. Membership would, in this case, "grow organically" based on a demonstrated, persistent connection to the credit union as an institution and a connection to the credit union model of cooperative finance.

The prospect of doing away with field of membership raises the issue, for some, of credit unions' tax exemption. Since commercial banks are not restricted as to who can become a customer, credit unions cannot compete with them for members on an even playing field. In theory at least, this disadvantage is offset by exemption from taxation. Being able to serve members who would not otherwise have access to low-cost credit thereby serves a public purpose, which government and other financial institutions are not fulfilling. Tax exemption has significant benefits not just for credit unions but more importantly for consumers, as a trade association economist explained:

> *We provide through the tax status a benefit that's nearly $3 billion per year. Do credit unions return that $3 billion to their members, or do they engage in expense preference behavior? Do they just take the money and build fancy offices and cut themselves big paychecks? It's clear that we not only return the value of that tax status, but because of the fact we don't have stockholders demanding a market rate of return on their investment, all those profits go right back not to the stockholders but to the depositors and borrowers. We like to say it's the best investment government makes in its citizens.*

"It's clear that we not only return the value of that tax status, but because of the fact we don't have stockholders demanding a market rate of return on their investment, all those profits go right back not to the stockholders but to the depositors and borrowers."

Yet a former state banking regulator emphasized how any changes to field of membership rules would most likely be met with strong opposition by commercial banking industry lobbyists, especially if the possibility of doing away with credit unions' tax status was not on the table:

> *If [credit unions] are open to changes in taxation, it actually makes [rethinking field of membership] much closer to a reality. I think that what that also would open for them is what bankers would say: "Okay, well, if you want to serve a broader field of membership that's not this tightly knit association or common bond, then you should have the same kind of Community Reinvestment Act responsibilities that we have."*

Given the realities of trying to compete in today's financial services landscape, some of our interviewees wondered whether it was worth trading tax-exempt status if it meant getting rid of field of membership, a position that has historically been anathema to the

movement, but which some credit unions may be beginning to take more seriously.[129] As a CUSO consultant put it plainly,

> *The wisdom is that if [field of membership's] going to have to change, you're going to have to pay taxes, right? So, it's not only a question of whether you pay taxes; it's how you pay taxes. The credit unions that are left, whoever they might be, might be willing, depending on the tax scheme. Australia has taxes [for credit unions]. Canada has taxes. They seem to be large, thriving credit unions. And if that's the price to pay to make it a secure industry going forward, that may be the price you'd have to pay.*

To be clear, these voices represent a minority of the people with whom we spoke. Most of our interviewees were adamant about preserving tax exemption, not only because it helps distinguish credit unions from other financial services providers but also because it has clear benefits for ordinary consumers. However, the fact that it may become more of an open question for some credit unions indicates that the FCUA's current field of membership rules are not well aligned with an increasingly digital world and precarious, insecure economy. In fact, the time may come when credit unions are forced to demonstrate their contributions to community and to the public good, and in that sense, perhaps the time has come to allow credit unions to define their own communities.

The NCUA's representatives articulated the twenty-first-century approach to regulating credit unions by emphasizing what they believe is the FCUA's greatest strength: the fact that it is "principles based." One explained, "Historically, it was [that] regulations were prescriptive, 'one size fits all.'" However,

> *as innovation and the pace of change continues to be rapid, and potentially accelerating, having principles is what allows you to have more of a timeless and risk focus, and [be] in a more flexible environment that still gets you to the bottom-line objective of keeping credit unions safe and sound and in compliance.*

Addressing the MBL cap, rules on supplemental capital, field of membership, and the common bond would shift regulatory focus from a "prescriptive, one-size-fits-all" approach to one that is more flexible and granular.

This perspectival shift in regulation parallels changes in the credit union business model, outlined above. That is, as credit unions become more narrowly tailored in how they serve their self-defined fields of membership, regulation must also become more narrowly tailored to the institutions it regulates. Ultimately, one credit union system leader mused, "the credit union will be able to define [its fields of membership] itself," and regulators

"will only judge whether the credit union is financially and 'safety and soundness-wise' able to serve the community that it has defined" for itself. "Ability to serve," in short, will be the focal point for supervision and regulation.

Ultimately, the credit union will be able to define for itself its field of membership, and regulators will only judge whether that credit union is capable of serving the community it has defined for itself. As credit unions become more narrowly tailored in how they serve their fields of membership, regulation must also become more narrowly tailored to the institutions it regulates.

CHAPTER 6

Conclusion

Confronting change requires first and foremost that we are aware of it and know something about it. The goal of this report has been to outline some of the most urgent and significant transformations facing credit unions at the beginning of the twenty-first century and, in so doing, jump-start the process of organizing a collective response. Each credit union has its own particular strengths and weaknesses and will therefore have to chart its own path through this landscape. Individual credit unions will no doubt go through a process of strategic brand differentiation, identifying niche markets and developing financial products and services that can best serve current and potential members in those markets.[130] But no matter their niche, in this report we have outlined a model for reimagining the role of credit unions in the twenty-first century: as a relationship-rooted, platform-based concierge and one-stop shop for financial services. This model suggests that credit unions take a holistic approach to financial well-being, rebundling deposit taking, payments, and lending with savings assistance, investment advice, personal finance, and wealth management optimization.

The goal of this study has been to outline some of the most urgent and significant transformations facing credit unions at the beginning of the twenty-first century and, in so doing, jump-start the process of organizing a collective response.

While the credit union system remains well positioned in today's consumer financial services landscape, uncertainty is growing. Looking ahead to the FCUA centennial in 2034, a number of factors, including new large-scale socioeconomic trends and new technological capabilities in the financial services industry, will change not only how credit unions serve their members but also how they are regulated. From fintech diversification to credit union consolidation, demographic divergence to automation, labor precarity and financial fragility to income volatility and inequality, transformations outside the control of any one institution are putting pressure on all credit unions to change quickly. For example, workforce transformations brought on by continued globalization (of labor and the supply chain), increased automation, and greater flexibility in employment have already altered the financial needs of millions of Americans. How will people save or invest with highly variable incomes? How will frequent job relocation affect the mortgage market? How will driverless cars impact the demand for auto loans, especially if a revolution in automation makes personalized public transportation more affordable and accessible?

Other transformations have emerged from within the credit union operating model and regulatory and supervisory framework. Experimentation with new delivery channels, data-driven personalization, and the growing role of payments (and with it, of nonbank payments providers) have all generated stress on the traditional credit union business model, which largely remains focused on deposit-taking and lending. Meanwhile, persistent concerns about financial safety and soundness are now accompanied by renewed worries about data security and consumer protections. Credit unions that are effective operating outside the traditional debt-interest margin model, including by putting payments and portfolio advising at the center, will be better positioned to serve members' shifting needs.

Still other shifts wait just over the horizon, including—perhaps most importantly—changes in how we make, maintain, and understand our relationships with one another. The changes in the relationship between community and location, outlined above, will have a twofold impact on credit union operations in the near future. On the one hand, conventional ways of identifying a community and participating in it, such as belonging to the same geographic area or the same workplace, are giving way to communities oriented around shared values and interests that are mediated across vast distances by digital and Internet-enabled technologies. On the other hand, underserved communities, particularly in rural areas, often find themselves on the wrong side of the "digital divide," without broadband access or wireless coverage.[131] As branches close because of overhead costs and the shift to online and mobile banking platforms, such communities will be at even greater risk of joining the ranks of the un- and underbanked.[132] But thanks to their traditional strengths in relationship banking, credit unions can continue to serve members in all kinds of communities: dispersed, digitally mediated ones, as well as concentrated and rural ones.

Changes in the meaning of community will necessitate changes in how the credit union system is supervised and regulated as well. Credit unions require a much more flexible concept of membership than one based exclusively on narrow definitions of occupation, organization, or geography, and the concept of "reasonable proximity" must evolve beyond spatial delimitations. We expect that the NCUA will continue to refine field of membership regulations over the next several years. Ultimately, however, field of membership will have to catch up with twenty-first-century characteristics of community based on shared interests, values, and interactions. Accomplishing this will almost certainly require congressional action, which poses its own challenges, especially for credit unions' continued tax-exempt status.

As a movement, however, credit unions' greatest asset is the cooperative model itself; it remains not only their brand but also their mission. Dedication to nonprofit principles, member ownership, and democratic governance persists as the key to distinguishing credit unions from other financial services providers. The credit union of the twenty-first century must also be a community partner, however that community is defined. Communities are not simply aggregates of individuals; communities have their own collective needs and collective commitments. Might field of membership eventually evolve to indicate a community of individuals united by cooperative finance itself? With respect to democratic governance in particular, future research should address the state of member participation in governance of credit unions today and what cooperative finance in the twenty-first century looks like. A better understanding of how the cooperative model works in practice may help facilitate regulatory reforms by providing an evidence-based argument for what sets credit unions apart in the financial services landscape.

There remains great uncertainty about how credit union communities will best be served, especially given the struggles of small credit unions in the face of institutional consolidation. Will larger credit unions, with the resources to invest in mobile and digital solutions, acquire smaller ones and retain the personal relationships and local branch operations the latter bring to the table? Or will the movement bifurcate, with some credit unions operating according to a model that more closely resembles the one outlined in the 1934 FCUA and others becoming something else entirely? We must understand how, in a world where credit unions must be and build their own communities, credit unions can serve both members and memberships—that is, both individuals and their communities.

Endnotes

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