

# Data: Power or Pawn?

## Advancing Equity by Reimagining the Consumer-Data Relationship

**Amina Kirk,**  
Director of Policy, Change Machine  
and **Mae Watson Grote**  
Founder and CEO

### Introduction

The wealth gap in the United States—which today limits the wealth of the median Black family to about one-tenth of the wealth of a white family, while impacting Black women most acutely—is no secret. It’s also no accident. Our financial institutions have played a key role in propagating systemic racism in this country since financing the slave trade. As Angela Glover Blackwell wrote in her essay, [“Without Financial Inclusion, We’ll Never Achieve Racial Equity,”](#) featured in [The Future of Building Wealth](#), “No other industry has done more to oppress and exploit Black people from the beginning of the nation’s history... Discrimination in lending not only denied Black people and other consumers of color the best mechanisms for building wealth, but also stripped wealth from communities that could least afford to lose it, through excessive fees, fines and other means.”

Unfortunately, the racism so deeply rooted within our financial systems is now being recast through a similarly ubiquitous, yet relatively newer, institution: technology.

Tech's ability to accumulate and wield power is unquestionable. The dominance of the Big Four tech firms—Amazon, Apple, Facebook, and Google—has commoditized consumer data in unprecedented ways, subjecting all of our online activity to search, analysis, and constraint. While the semantics may sound reassuring—companies don't "own" our data, after all—the reality is that they have carte blanche to leverage and monetize it. These dynamics not only perpetuate existing forces, making products and payments accessible to white consumers who are ready adopters, but intentionally exploit and prey upon low-to-moderate income (LMI) consumers with product placement and ads for targeted services such as payday loans.

The unrestrained power of the Big Four has deterred ideal symmetry of the consumer-data relationship and made us all passive target markets. No population is more vulnerable to these tactics than Black and Brown consumers who are LMI, and nothing presents a greater threat than the expansion of those platforms into fintech. Suddenly, these companies hold the additional role of transactor: Amazon offers credit cards; Apple and Google provide payment services; and Facebook is in the business of banking. At a time when more than one-fifth of Americans are indebted to at least one personal loan—a third of those offered by fintech companies—the Big Four have taken to offering credit and payments to the very consumers they surveil. To participate in our online economy, Black and Brown consumers submit to a digital version of the targeted surveillance they experience in our analog world via policing and housing policies. Suddenly, serious financial trouble is just a few clicks away.

Without reform, we run the risk of exacerbating inequities—the racism and sexism so hardwired in our society—leading to even further financial insecurity. We must hold all of fintech accountable to wield its power in ways that challenge and change the policies, practices, and beliefs that keep Black and Brown women navigating financial insecurity from achieving their financial goals, much less acquiring or leveraging wealth for economic mobility. We must reform the financial system to intentionally and surgically reverse digital redlining one practice at a time.

**Technology can and should play a role in closing the racial and gender wealth gaps. The ultimate measure of #TechForEquity will be the prioritization of financial security for those who stand to benefit most.**

To get there, we must **reimagine the consumer-data relationship more equitably to remove systemic flaws**. We should heed Professor Meredith Broussard’s advice that “[code isn’t magic, it’s just math](#).” We’ve already learned that fintech can be a powerful means to achieve financial security, but is not an end to itself. In addition to efficiency improvements that the communities we collectively serve desperately need, technology embodies the leverage points required for systems change: the capacity to change mindsets, information, and resource flows. Moreover, because “[fintech is only one-percent finished](#),” we recognize that there are extraordinary opportunities to address our society’s structural flaws and as-yet undiscovered possibilities to achieve an equitable economy.

Now, to reach [#TechForEquity](#), we must follow the data.

## Rebalancing the Power in Data

For years, financial service providers—including regulated depositories, lenders, payment providers, insurance companies, investment firms, and more—have collected, stored, analyzed, and shared data generated by and about consumers and their financial behaviors. With the dramatic decrease in data storage costs, exponential growth of processing power, digitalization of the economy, and ever more integrated networks, the value and potential of consumer financial data has risen dramatically. Consider that your average email alone is worth \$89 over time—culminating in a [\\$200 billion data broker industry](#).

The ability of data aggregators to store and broker myriad inputs has created new dimensions of value. Now, data can be used for everything from tailoring experiences and products to individual consumer preferences, to more accurately pricing risk, and generating new revenue streams by selling to unrelated third-party brokers. In the past, companies paid heavily to buy access to data, such as purchasing lists of magazine subscriptions for individual consumers, or paying participants in focus groups to detail their shopping habits. Today, the price of accessing this data has decreased dramatically, while its value continues to skyrocket. However, we do not yet see comparable value provided by this increased access to data in terms of financial services that better serve the most vulnerable individuals. **In order to promote equity and balance power in the data industry, the financial benefits produced by access to consumer data must be transferred to the consumers from whom the data is derived.**

As the virtual fintech world expanded, the volume of consumer data-sharing saw rapid growth—even before Covid-19, which has only served to further fuel the adoption of consumer financial apps. With a greater emphasis on direct deposits, and an uptick in e-commerce and cashless purchases within Black and Brown communities, the pandemic has accelerated the speed and volume of data that consumers share. According to a survey conducted by Plaid, 59 percent of Americans say they now use more fintech to manage their money as a result of Covid-19. As detailed by Roll Call, [59 percent of Black and 63 percent of Latinx respondents reported using “some” digital financing tools.](#)

In both health outcomes and financial security measures, the Covid-19 health pandemic had a disproportionate impact on Black and Brown communities who are LMI. For evidence, we can simply look to the CARES Act checks designed to help these very communities, but which landed first in the accounts of those who have subjugated our cashless economic system. A recent report from the Brookings Institution stated that consumers spent [\\$66 million in check-cashing fees to access their CARES Act checks.](#)

The increasing use of fintech by Black and Brown individuals leaves them more vulnerable to the imbalance of power when it comes to the nature of the relationship between consumers and their data, including rights, ownership, and power.

## **Data: A Danger to Some**

To remedy the imbalance, we first need to recognize *how* communities are disproportionately affected by the imbalance of power when it comes to consumer data. Here are a few ways our ecosystem of data-sharing fails to protect Black and Brown LMI households from wealth extraction and data misuse.

*Credit matters.* Credit reports demonstrate how much consumer information and data can be held by a single data holder. During financial coaching, we access information on each line of credit for Change Machine customers and advocate with the credit reporting bureaus for resolution about erroneous information. But when analyzed by machine data algorithms, information—including balance amounts, a history of late payments, and credit limits—lacks nuance, and all data is assumed to be correct without additional context or affirming the veracity of the information with the account holder. So rather than connecting the consumer with financial assistance, the data is instead used in a manner that negatively impacts their monthly cash flow. Further, Change Machine has observed frequent issues with identity theft and incorrect information on LMI customers’ credit reports.

*We don't know what we don't know.* Consumers may not have a comprehensive understanding of how their data is held, transferred, protected, and used. When assessing consumers' understanding of the movement, use, and storage of their authorized data, our financial coaches note widespread limitations in consumer knowledge. Although some may know that their information will be shared with third parties, most are not aware of specific information regarding those third parties or how their data is being used. The ways that data is used and the monetary value associated with certain data may change significantly after a customer's initial authorization.

*It's the system.* At the same time, customer knowledge and due diligence cannot overcome the challenges of obscure consumer data transfers. Individuals [can't be expected to solve for systemic problems](#). Consumers do not struggle with economic insecurity solely because they don't recognize how their data is used; they struggle because of the systemic barriers that exclude them from more income and wealth.

Black and Brown communities already face a financial system rife with implicit bias and racism that make access to credit difficult. Inaccurate data reporting exacerbates these issues. Financial shocks may result in an immediate need for accessible credit or debt management products; often the most predatory are short-term credit loans (e.g., payday lending, refund anticipation checks), where bad actors may collect personal information with few of the guardrails that larger financial institutions can afford. Black and Brown households are more likely to deal with financial shocks and are therefore more likely to be exposed to predatory actors due to a need for quick credit or cash.

Even when authorized sources utilize financial data, a lack of regulation can result in intrusive examinations of consumer financial information that disadvantages consumers. For example, the integration of credit and financial data into employment and licensing processes supports systemic inequities that work against Black and Brown communities—especially women. The American Association of University Women found that [women hold two-thirds of the nation's student loan debt, and that Black women hold the highest amount of student loan debt](#). Consequently, employment and licensing for various professions can be difficult to obtain when applicants are evaluated on their financial well-being and credit history rather than relevant job qualifications. The very fact that credit reviews have been normalized in the hiring processes for jobs that do not require skills in financial management is an overreach resulting from a lack of sufficient regulations to protect consumer privacy.

The bottom line: while there are obvious advantages of consumer data uses that benefit the consumer—such as speed, flexibility, product design, and the ability to expedite experimentation—the utilization of data unevenly benefits the data holder. **The customers served by Change Machine bear the burden of the expense of data insecurity, while data collectors and aggregators reap the value that their data creates. Tech is not an innocent bystander of today's inequality. Equity demands a correction of this imbalance of data value and expense.**

## Alex: A Change Machine Case Study

Alex (pronoun: they) is a Change Machine customer who lives in the Northeast and has a stable job. Observing the credit profile for Alex, we can note identifiable information such as name, date of birth, social security/individual taxpayer identification number, addresses, and work history. Alex has an active credit history dating back to September 1988. They have a total of six active accounts, which range from student loans to credit cards, and two additional accounts in collection. The oldest account, a student loan, dates back to 2010 and the most recent was initiated in 2019. Even if that data was confirmed by Alex, data algorithms decontextualize the data and do not reflect the complexities of Alex's experience.

But by speaking with Alex, we learn that they do not recognize one of the accounts in collection. The account happens to be a medical bill. What the data does not demonstrate is that Alex is disabled and has recurring medical expenses. Data regarding the account in collection decreases Alex's credit score. While Alex pays their medical bills, they do not know that they qualify for additional assistance to help with medical expenses. This financial assistance would ultimately ease their financial situation. Alex's poor credit score has led to higher interest rates on credit accounts and an inability to refinance their car payment. The result is that data about Alex is detrimental to their financial security, while serving as a simultaneous source of income and innovation for the data holder.

# Principles for Equity

As technology continues to transform the financial and digital economies, and mature as a sector, we must ensure that the most vulnerable communities are not taken advantage of—or harmed by— evolving data practices. But “do not harm” is not enough. **The value of data must be shared with consumers who generate the data and face the harm that results from data mismanagement.**

The question is: How can tech and the power of the Big Four be leveraged in a way that delivers better, more equitable outcomes? How might the concerns and experiences of Black and Brown consumers who navigate financial insecurity be fully reflected in data privacy and consent regulations in ways that earn their trust and confidence in the financial system, and lead to greater participation and stronger financial security outcomes? In order to promote equity and balance power in the data industry, the financial benefits produced by access to consumer data must be transferred to the consumers from whom it is derived. And we must create a sense of data stewardship among companies and data holders the likes of which HIPAA has achieved for health information.

The field that has dedicated itself to the financial security of oppressed communities has a rich and successful history that provides us with several lessons to facilitate those discoveries: the work must center our customers; their financial goals drive our mission; and we hold ourselves accountable to our customers’ success. Our equity lens has allowed the field to have impact; applying the same lens to technology gives us a chance to wield it for an equitable economy. Our research provides us with a set of guiding principles to reimagine this consumer-data relationship to forge new dimensions of performance that close the racial and gender wealth gaps.

## **Data Equity Principle 1: Use data to build financial security through pro-poor financial products**

Consumer data is monetized in a variety of ways; it may be exchanged for monetary value and utilized to generate revenue for data brokers. Equity demands that fintech, starting with the Big Four, give consumers a financial benefit in return for their data in the form of either wealth-generating products or direct payments. Consumer data must be used and disclosed to explicitly support consumer financial security. Innovation can, and should, lead us toward the technology-driven financial products of the future—those that not only leave behind the racist tactics of the past, but actively pursue better outcomes for Black and Brown women who navigate financial insecurity. Policymakers may also have a role to play in supporting such innovation, by making it easier to transfer financial data between institutions. In the [Executive Order on Promoting](#)

[Competition in the American Economy](#), the Biden administration encouraged the Consumer Financial Protection Bureau (CFPB) to promulgate “a rulemaking under section 1033 of the Dodd-Frank Act to facilitate the portability of consumer financial transaction data so consumers can more easily switch financial institutions and use new, innovative financial products.”

People who are LMI face particular financial transaction needs (e.g., income volatility, liquidity pressures, hidden fees) that are best served by financial products carefully designed to address those needs. Our data shows that low-income consumers have credit card interest rates that are approximately 3.6 percent higher than the national average. This draws into question whether consumer data is being used to make innovative financial products that are fine-tuned to meet the needs of low-income customers. It also suggests that sharing consumer financial data is rewarding for some and damaging for others. If collected data is not used to design or improve financial products for a customer, then it is important that those profiting from customer data offer monetary recompense.

Data analysis that prioritizes customer needs can serve to build out products that address issues such as the root causes of financial insecurity and consumer information gaps, and help LMI customers succeed. For instance, data can provide insights about individuals’ understanding of financial systems and how they could better process and retain this information. Moreover, it can help facilitate interventions for consumers who are falling behind, or at risk of falling behind, on payments.

In our focus groups, participants shared that they were particularly interested in products that help them to build wealth and plan for the future. Apps that facilitate mortgage research and applications, asset-building products, and credit-education apps, all resonated with participants because they support a person’s financial life in the long term through wealth and asset building.

### ***Data Equity Principle 2: Foster trust through transparency and relevance***

Black and Brown households may be less trustful of institutions, both financial and government, in the use and disclosure of data. Mistrust of financial service providers by Black and Brown consumers is the result of the financial service industry’s long history of using wealth extraction and discriminatory practices against Black and Brown communities. Even if companies are legally prohibited from these practices, the legacy of prior abuse and wealth extraction by the financial industry remains intact, and its presence is evidenced by the persistent racial wealth gap in the United States. This knowledge is enough to keep many Black and Brown consumers from using mainstream financial products that could otherwise save time and money.

Our research indicates that Black and Brown women who navigate financial insecurity are eager to build wealth over time by using tools tailored to help them with day-to-day money management. Customers are more likely to trust a product if:

- The information regarding terms and conditions is clear, straightforward, easy to access, culturally relevant, and in their language.
- It is convenient, easy to use, and feels relevant to their lives, such as those that would immediately support them to achieve their financial goals and activities. Many participants alluded to the challenges they experience with managing money; features like alerts, automation, and customization help them to have confidence in their management of their financial lives.
- It is from a company founded or led by Black individuals.
- Cost of use is clear and supported by perceived benefit. Participants mentioned that the cost of using a financial product or tool is a major factor in their decision making and weighed perceived value in comparison to cost.

### **Data Equity Principle 3: Make consent legitimate and meaningful**

It is important to ensure that consumers have a thorough understanding of the value of their data and how it will be used before consenting to share it with a financial service provider. Without a comprehensive understanding, neither choice nor consent can be authentic. We must consider if there is legitimate consent from consumers who decline a company's data use policies when this decision may make them ineligible for the product or services they are seeking.

To achieve true consent, consumers must receive full information in a simple format that is easy to read and in plain language. It is also important for this information to be shared in a variety of languages and formats, including visualizations and audio recordings. A lack of clarity related to financial services and data sows seeds of distrust between customers, financial service providers, and financial technologies. This distrust is difficult to overcome and may motivate customers to opt out of sharing data or engaging with financial technologies that are well-suited to meet their financial needs and goals. The assumption of perfect information will always undermine the true power of choice.

Data holders must also recognize that consumers' lives are dynamic and therefore consent is impermanent. Irrevocable consent agreements can have detrimental impacts for those experiencing hardships. For instance, the Institute for Women's Policy Research found that [domestic violence survivors often struggle with negative credit reports due to credit abuse by their partners](#). Black and Brown households may be disproportionately represented in vulnerable groups, such as those experiencing homelessness, returning citizens, or domestic violence

survivors whose life circumstances may require more entrances and explicit exits from data consent agreements to protect their personal information.

Few, if any, data consent agreements currently offer the level of flexibility needed to address these circumstances.

### **Data Equity Principle 4: Keep data holders accountable**

Regulation should enforce true accountability for data management by providing clear guidance on the limitations of sharing, transferring, and managing consumer data. Regulation of consumer data should encourage financial transactions that are easy to access, convenient, and efficient. It should also provide a method for consumers to explicitly limit the content and frequency of data use for all data holders. Black and Brown consumers may fear that their data is used to discriminate against them, target them for predatory financial products, enforce previous debts, or even open up exposure to immigration-related issues.

Data holders who collect and generate consumer information should also be mandated to provide consumers with information on the monetary value of their data. These values should be presented both as a projection and as an updated valuation on a regular basis. An example would include a section of the annual privacy and terms of use policy that details what forms of data are being collected from the consumer, how the company will use each piece of data, and the value of that data if the company had to purchase it on the open market rather than the consumer authorizing direct access. This valuation could also inform the monetary value that should be paid to consumers when their data is used to generate value for a company, such as the development of new products.

Regulation must also be enacted to protect consumers from data uses that support systemic racial and gender inequities. Data influences access and opportunity for all. In today's world, algorithms analyze data and approve mortgages, evaluate job applications, and determine the viability of would-be entrepreneurs for small business loans. Therefore, it must not be used to create processes equivalent to modern-day redlining. Regulation can be a powerful tool to prevent these risks and promote economic equity.

Consumer data must be safeguarded. This includes ensuring that the burden of correcting mismanaged and incorrect data does not fall on the consumer. Data holders must be held responsible for correcting errors and ensuring the consumer is not subjected to fees for said corrections. Data holders must be held financially accountable through substantial fines for the

economic ramifications that can result from inaccurate consumer data leading to negative financial profiles (e.g., credit reports, ChexSystems, insurance clearinghouses), and must offer monetary restitution to consumers who suffer from such data inaccuracies.

### **Data Equity Principle 5: Redistribute the data wealth**

Customer data is extremely valuable, and the increasing commodification of consumer data, by the Big Four and smaller fintech firms, should not be wealth-extracting. In order to promote equity and balance power in the data industry, the financial benefits produced by access to consumer data must be transferred to the consumers from whom it is derived. Only then will symmetry be restored.

One method of reshaping consumers into indirect financial beneficiaries of their data is through taxation. Opponents of a data tax argue that it's difficult, if not impossible, to accurately assign a monetary value to consumer data and to the innovative products that businesses develop with said data. While this is true, it fails to account for two major uses of consumer data: the use of data in online advertising and the direct sale of consumer data to other parties. In fact, in 2018, the European Commission proposed a corporate tax reform that would institute an interim tax of 3 percent on revenues generated from these activities specifically.

In the United States, even a tax rate of 1 percent on the \$200 billion data broker industry would generate around \$2 billion in annual revenue. This could then be spent on [“improving privacy of our information on the internet, countering identity theft, and improving connectivity and internet literacy”](#) as we collectively strive for a more equitable internet.

# The Role of Regulation

The debate around policymakers' role in restoring symmetry to data ownership and digital finance has centered on the flawed notion that access to credit and democratized financial opportunity are equitably distributed based on market forces alone. In fact, the opposite is true. Financial exclusion is perpetuated when technology is built on the foundation of uneven access to credit. Therefore, policies that recalibrate the governance of credit access, that enhance competition by increasing data portability, and hold the Big Four and others accountable for equity via enhanced transparency, can provide the kind of systemic change needed to eliminate financial exclusion.

## Under Review: The Dodd Frank Act Section 1033

One such policy, The Dodd Frank Act, under Section 1033, directed the Consumer Financial Protection Bureau (CFPB) to ensure financial service providers make available to consumers information that they possess or control about financial products or services that consumers obtain.

In October 2020, the CFPB issued an Advance Notice of Proposed Rulemaking related to Section 1033. Change Machine responded to the Notice by encouraging the Bureau to adopt the principles included in this paper: to establish explicit goals for the use and disclosure of consumer information that (a) protect those most vulnerable to data usage abuses and to whom the greatest harm could occur; and (b) prioritize the use and disclosure of consumer data to explicitly support their financial security rather than to increase the financial security of companies or other actors.

Our principles can inform the rulemaking in four key ways:

**Access & Transparency.** Data holders must be required to track how consumer data is being used and disclosed to third parties. And they must provide clear information about the monetary value and movement of data information in the preferred language of the consumer and in various formats (including visualizations).

**Security.** Data's primary use should be building financial security through pro-poor financial products. Data holders must be held financially accountable through substantial fines for the economic ramifications that can result from inaccurate consumer data leading to negative financial profiles (e.g., credit reports, ChexSystems, insurance clearinghouses).

**Accountability.** Data holders must be held financially responsible for correcting errors and ensuring the consumer is not subjected to fees for said corrections.

**Consent.** Data holders must obtain affirmative consent from consumers via consent agreements that are presented in clear and conspicuous language, time-bound, and offer clear paths for cancellation or amendment of consent. Notice must be provided to consumers regarding material changes to consent agreements. Data holders must limit the use of data to direct transactional relationships between the consumer and the primary company, and only permit data uses that are essential to maintain that relationship. Data usage must also be restricted by time-bound consent agreements.

Black and Brown consumers may rightly fear that their data is used to discriminate against them, target them for predatory financial products, enforce previous debts, or even open up exposure to immigration-related issues. For a financial system to be inclusive, it is imperative that we prioritize addressing these concerns.

The CFPB can address this lack of trust by promoting full transparency in consumer data. Full transparency requires consumers to receive detailed information about the present and future uses of their data. Consumers must be informed of who uses their data, for what purpose, and what financial gain is projected or received for the exchange or use of each piece of data. Only this level of transparency will begin to repair the broken trust that exists between consumers and the financial system.

## A Seat at the Table

The research has spoken. Data mismanagement can cause financial insecurity. Black and Brown LMI communities distrust financial systems, and current methods of collection, aggregation, and selling of consumer data can potentially cause harm. These are settled points in data and financial security literature.

Now, we need LMI communities—and those typically excluded from conversations about tech and data equity—to be included in the visioning and implementation of the consumer data frameworks of the future. In particular, Black and Brown women who navigate financial insecurity must be at the table to provide input as more than just passive consumers in the larger marketplace. As Angela Glover Blackwell stated in [The Curb-Cut Effect](#): “[W]hen the nation targets support where it is needed most—when we create the circumstances that allow those who have been left behind to participate and contribute fully—everyone wins.”

The CFPB must include a 360-degree view of LMI consumer perspectives and recommendations regarding the collection, storage, and use of their own financial data. That informed view will help us to identify the harms caused by data collection and storage processes and identify the solutions that best address these harms. To date, these views have not been substantively explored from the perspective of Black and Brown women who navigate these very challenges.

A robust participatory research agenda that centers consumers will give us a deep understanding of how the consumer-data relationship can be reimagined to advance more equitable systems. In order to platform the input of Brown and Black women who navigate financial insecurity, our questions for participatory research must include:

- ***Consumer Conceptualization of Data Value.*** How do Black and Brown communities value their data? Should data be handled as an asset, work product, or natural resource for data valuation purposes? How could participating in this financial data ecosystem give us lower cost and more efficient products and services? What if there was a clear and bright line between how a financial institution values that data and the return for consumers?
- ***Consumer Desire for Data Management.*** What patterns of data use and consent are most important or concerning for their financial security, and should therefore inform rule making about these issues? What harmful outcomes should be anticipated and minimized through rulemaking and regulation? What data security processes would provide the most peace of mind to consumers: Requiring data to be destroyed after a certain amount of time? Regular and frequent updates? Expiring consent?
- ***Consumer Preference for Regulation.*** How might the concerns and experiences of consumers who navigate financial insecurity be fully reflected in data privacy and consent regulations in ways that earn their trust and confidence in the financial system, and lead to greater participation and stronger financial security outcomes? How should parties that collect, aggregate, share, and profit from consumer data be regulated? What administrative and financial liability should these parties hold in the event of consumer data mismanagement and negative repercussions? What accountability should these parties have to individual consumers whose data they hold? What entities should have oversight on these parties? Should individual consumers have standing to act on consumer data rights?

When you connect the issues outlined by this paper with the larger societal focus on social media and corporate abuses of consumer data, the “techlash” is unsurprising and the scrutiny needed. And yet, left alone—unchallenged or underutilized—the tech sector is more likely to leave out and leave behind the communities we care about. These are the very same communities that need to be intentionally included and centered in the broader work of undoing injustice and insecurity.

At Change Machine, we believe that tech can and should accelerate financial security for these very stakeholders, and we're leveraging our practitioner community to promote accountability and harness the power of tech for equity. **Our thesis is, simply put, that we must have robust protections that include: ensuring that the most vulnerable communities are not taken advantage of, or harmed by, evolving data practices; and providing for their needs and advancing their financial security outcomes.**

When this happens, tech can yield significant improvements in terms of scale, impact, and agency for our customers. We know this first hand. At the most basic level, technology has allowed us, at Change Machine, to exponentially increase the scale and scope of our mission to build financial security.

# Notes

- 1 The term “platform” is used to refer to a range of things, including as a foundation for nearly any type of transaction. Here, “platform” is used specifically in the context of labor relations. For a discussion of the role of platforms more broadly defined as a feature of modern capitalism, see Srnicek, Nick, and Laurent De Sutter. 2017. *Platform Capitalism*. Polity.
- 2 Weil, David. 2014. *The Fissured Workplace: Why Work Became So Bad for So Many and What Can Be Done to Improve It*. Cambridge, MA: Harvard University Press.
- 3 Dubal, Veena. 2017. “The Drive to Precarity: A Political History of Work, Regulation, & Labor Advocacy in San Francisco’s Taxi & Uber Economies.” 38 *Berkeley J. Emp. & Lab. L.* 73. [https://repository.uchastings.edu/faculty\\_scholarship/1589](https://repository.uchastings.edu/faculty_scholarship/1589).
- 4 Kuek, Siou Chew, Cecilia Maria Paradi-Guilford, Toks Fayomi, Saori Imaizumi, and Panos Ipeirotis. 2015. *The Global Opportunity in Online Outsourcing*. World Bank Group. <http://documents.worldbank.org/curated/en/138371468000900555/The-global-opportunity-in-online-outsourcing>.
- 5 Gray, Mary, and Siddharth Suri. 2019. *Ghost Work: How to Stop Silicon Valley from Building a New Global Underclass*. Houghton Mifflin Harcourt.
- 6 Newton, Casey. 2019. “The Secret Lives of Facebook Moderators in America.” *The Verge*, 25 Feb. <https://www.theverge.com/2019/2/25/18229714/cognizant-facebook-content-moderator-interviews-trauma-working-conditions-arizona>.
- 7 Wong, Julie Carrie. 2017. “Facebook’s Underclass: As Staffers Enjoy Lavish Perks, Contractors Barely Get By.” *The Guardian*, 26 Sept. <http://www.theguardian.com/technology/2017/sep/26/facebook-workers-housing-janitors-unique-parsha>.
- 8 Stone, Maddie. 2020. “Facebook Abandoned Drilling Equipment Beneath the Ocean Floor.” *Vice*. August 14. <https://www.vice.com/en/article/4ay5mj/facebook-abandoned-drilling-equipment-beneath-the-ocean-floor>.
- 9 Mike Rogoway, Mike. 2017. “Nearly Half of Facebook’s Prineville Jobs in Flux as Data Centers Change Security Contractor.” *Oregonlive*, 10 Jan. [https://www.oregonlive.com/silicon-forest/2017/01/nearly\\_half\\_of\\_facebooks\\_prine.html](https://www.oregonlive.com/silicon-forest/2017/01/nearly_half_of_facebooks_prine.html).
- 10 Google Walkout for Real Change. 2019. “Not OK, Google.” 2 April. <https://googlewalkout.medium.com/not-ok-google-79cc63342c05>.
- 11 Wakabayashi, Daisuke. 2019. “Google’s Shadow Work Force: Temps Who Outnumber Full-Time Employees.” *The New York Times*, 28 May. <https://www.nytimes.com/2019/05/28/technology/google-temp-workers.html>.
- 12 Hyman, Louis. 2018. *Temp: How American Work, American Business, and the American Dream Became Temporary*. New York: Viking.
- 13 Bureau of Labor Statistics. 2016. “Figure 1: Labor’s Share of Output in the Nonfarm Business Sector, First Quarter 1947 Through Third Quarter 2016.” U.S. Department of Labor. <https://www.bls.gov/opub/mlr/2017/images/data/giandrea-sprague-fig1.stm>
- 14 Bureau of Labor Statistics. 2021. “Union Membership (Annual) News Release.” 20 Jan. <https://www.bls.gov/news.release/union2.htm>.
- 15 McNicholas, Celine, Lynn Rhinehart, Margaret Poyssock, Heidi Shierholz, and Daniel Perez. 2020. “Why Unions Are Good for Workers—Especially in a Crisis like COVID-19.” Economic Policy Institute, August 25. <https://www.epi.org/publication/why-unions-are-good-for-workers-especially-in-a-crisis-like-covid-19-12-policies-that-would-boost-worker-rights-safety-and-wages/>.
- 16 These states also have worse economic, health, and social outcomes than states that are less hostile to unionization. Manzo, Frank and Robert Bruno. 2021. “Promoting Good Jobs and a Stronger Economy.” Illinois Public Policy Institute. <https://illinoisepi.files.wordpress.com/2020/05/ilepi-pmcr-promoting-good-jobs-and-a-stronger-economy-final.pdf>
- 17 Schneider, Daniel and Kristin Harknett. 2019. “It’s About Time: How Work Schedule Instability Matters for Workers, Families, and Racial Inequality.” *The Shift Project*, 16 Oct. <https://shift.hks.harvard.edu/its-about-time-how-work-schedule-instability-matters-for-workers-families-and-racial-inequality/>.
- 18 Hacker, Jacob. 2006. *The Great Risk Shift: The New Economic Insecurity and the Decline of the American Dream*. New York: Oxford University Press
- 19 Restaurant Opportunities Center United and UC Berkeley Food Labor Research Center. 2019. “The Gig Is Up: The New Gig Economy and the Threat of Subminimum Wages.” <https://rocunited.org/wp-content/uploads/sites/7/2020/02/TheGigsUp.pdf>.

- 20 Bernhardt, Annette, Rosemary Batt, Susan Houseman, and Eileen Appelbaum. 2016. "Domestic Outsourcing in the U.S.: A Research Agenda to Assess Trends and Effects on Job Quality." Berkeley, CA: Institute for Research and Employment; Berlinski, Samuel. 2007. "Wages and Contracting Out: Does the Law of One Price Hold?" *British Journal of Industrial Relations* 46 (1): 59-75. <https://onlinelibrary.wiley.com/doi/pdf/10.1111/j.1467-8543.2007.00665.x>.
- 21 Reder, Libby, Shelly Steward, and Natalie Foster. 2019. *Designing Portable Benefits: A Resource Guide for Policymakers*. Washington, DC: Aspen Institute Future of Work Initiative.
- 22 Yang, Jenny, Molly Weston Williamson, Shelly Steward, K. Steven Brown, Hilary Greenberg, and Jessica Shakesprere. 2020. "Reimagining Workplace Protections A Policy Agenda to Meet Independent Contractors' and Temporary Workers' Needs." The Urban Institute. [https://www.urban.org/sites/default/files/publication/103331/reimagining-workplace-protections\\_1\\_0.pdf](https://www.urban.org/sites/default/files/publication/103331/reimagining-workplace-protections_1_0.pdf).
- 23 Kramer, Anna. 2021. "Forced Unemployment and Second-Class Status: The Life of Google's Data Center Contractors." *Protocol: The People, Power and Politics of Tech*. 19 Apr. <https://www.protocol.com/google-contractors-forced-unemployment>.
- 24 National Academies (National Academies of Sciences, Engineering, and Medicine). 2020. *Measuring Alternative Work Arrangements for Research and Policy*. Washington, DC: National Academies. Abraham, Katharine, and Ashley Amaya. 2018. "Probing for Informal Work Activity." Working Paper 24880, National Bureau of Economic Research. August. <https://www.nber.org/papers/w24880>.
- 25 These estimates are drawn from synthetic analyses of a range of data sources compiled by the Gig Economy Data Hub, a project of the Aspen Institute Future of Work Initiative and Cornell University's ILR School, which seeks to clarify data on gig and non-standard work arrangements in the U.S. See Aspen Institute Future of Work Initiative. 2021. "How Many Gig Workers Are There?" Gig Economy Data Hub. <https://www.gigeconomydata.org/basics/how-many-gig-workers-are-there>.
- 26 Wakabayashi, Daisuke. 2019. "Google's Shadow Work Force: Temps Who Outnumber Full-Time Employees." *The New York Times*, 28 May. <https://www.nytimes.com/2019/05/28/technology/google-temp-workers.html>.
- 27 Bureau of Labor Statistics. 2018. "Contingent and Alternative Employment Arrangements – May 2017." U.S. Department of Labor. 7 June. <https://www.bls.gov/news.release/pdf/conemp.pdf>.
- 28 Solomon, Danyelle, Connor Maxwell, and Abril Castro. 2019 "Systematic Inequality and Economic Opportunity." Center for American Progress, <https://www.americanprogress.org/issues/race/reports/2019/08/07/472910/systematic-inequality-economic-opportunity/>.
- 29 Katznelson, Ira. 2013. *Fear Itself: The New Deal and the Origins of Our Time*. New York: Liveright.; DeWitt, Larry. 2010. "The Decision to Exclude Agricultural and Domestic Workers from the 1935 Social Security Act." *Social Security Bulletin* 70, no. 4. <https://www.ssa.gov/policy/docs/ssb/v70n4/v70n4p49.html>.
- 30 Dubal, Veena. 2021. "The New Racial Wage Code." *Harvard Law and Policy Review*, UC Hastings Research Paper. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3855094](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3855094)
- 31 Bureau of Labor Statistics. 2018. "Contingent and Alternative Employment Arrangements – May 2017." U.S. Department of Labor. 7 June. <https://www.bls.gov/news.release/pdf/conemp.pdf>.
- 32 Silicon Valley Rising. 2016. "Tech's Invisible Workforce." Working Partnerships USA. <https://www.siliconvalleyrising.org/files/TechsInvisibleWorkforce.pdf>
- 33 Marketplace Edison Research. 2018. *The Gig Economy*. December. <http://www.edisonresearch.com/wp-content/uploads/2019/01/Gig-Economy-2018-Marketplace-Edison-Research-Poll-FINAL.pdf>.
- 34 Benner, Chris, Erin Johansson, Kung Feng, and Hays Witt. 2020. "On-Demand and on-the-edge: Ride-hailing and Delivery Workers in San Francisco." UC Santa Cruz Institute for Social Transformation. 5 May. <https://transform.ucsc.edu/on-demand-and-on-the-edge/>.
- 35 Lyft. 2021. "Lyft Economic Impact Report 2021." <https://www.lyft.com/impact/economic-impact-report>.
- 36 Benenson Strategy Group. 2015. "The Driver Roadmap: Where Uber Driver-Partners Have Been, And Where They're Going." Uber. [https://ubernewsroomapi.10upcdn.com/wp-content/uploads/2015/01/BSG\\_Uber\\_Report.pdf](https://ubernewsroomapi.10upcdn.com/wp-content/uploads/2015/01/BSG_Uber_Report.pdf).
- 37 Rosenblat, Alex, Karen E. C. Levy, Solon Barocas, and Tim Hwang. 2017. "Discriminating Tastes: Uber's Customer Ratings as Vehicles for Workplace Discrimination." *Policy @ Internet* 9 (3): 256–79.
- 38 Scott, Brittany. 2021. "Opening the Door: Ending Racial Discrimination in Industrial Temp Hiring Through Innovative Enforcement." Partners for Dignity & Rights. [https://fa0fbce7-d85e-4925-af7c-4b7d25478b8c.filesusr.com/ugd/3b486b\\_1a0b55b0b90b4ca99d63a057406c4b96.pdf](https://fa0fbce7-d85e-4925-af7c-4b7d25478b8c.filesusr.com/ugd/3b486b_1a0b55b0b90b4ca99d63a057406c4b96.pdf).

- 39 Yang, Jenny, Molly Weston Williamson, Shelly Steward, K. Steven Brown, Hilary Greenberg, and Jessica Shakesprere. 2020. "Reimagining Workplace Protections A Policy Agenda to Meet Independent Contractors' and Temporary Workers' Needs." The Urban Institute. [https://www.urban.org/sites/default/files/publication/103331/reimagining-workplace-protections\\_1\\_0.pdf](https://www.urban.org/sites/default/files/publication/103331/reimagining-workplace-protections_1_0.pdf).
- 40 Baradaran, Mehrsa. 2017. *The Color of Money: Black Banks and the Racial Wealth Gap*. Harvard University Press.
- 41 Shambaugh, Jay, Kriston McIntosh, Emily Moss, and Ryan Nunn. 2020. "Examining the Black-white Wealth Gap." Brookings, 27 Feb. <https://www.brookings.edu/blog/up-front/2020/02/27/examining-the-black-white-wealth-gap/>.
- 42 Bhutta, Neil, Andrew Chang, Lisa Dettline, and Joanne Hsu. 2020. "Disparities in Wealth by Race and Ethnicity in the 2019 Survey of Consumer Finances." Board of Governors of the Federal Reserve System. 28 Sep. <https://www.federalreserve.gov/econres/notes/feds-notes/disparities-in-wealth-by-race-and-ethnicity-in-the-2019-survey-of-consumer-finances-20200928.htm>.
- 43 Chatterjee, Rhitu. 2020. "How The Pandemic Is Widening The Racial Wealth Gap." NPR, 18 Sept. <https://www.npr.org/sections/health-shots/2020/09/18/912731744/how-the-pandemic-is-widening-the-racial-wealth-gap>.
- 44 Callahan, David. 2013. "How the GI Bill Left Out African Americans." *Demos*, Nov. 11. <https://www.demos.org/blog/how-gi-bill-left-out-african-americans>. Accessed 30 Sept. 2021.
- 45 Hardy, Bradley, Trevon Logan, and John Parman. 2018. "The Historical Role of Race and Policy for Regional Inequality." The Hamilton Project. 28 Sep. [https://www.hamiltonproject.org/papers/the\\_historical\\_role\\_of\\_race\\_and\\_policy\\_for\\_regional\\_inequality](https://www.hamiltonproject.org/papers/the_historical_role_of_race_and_policy_for_regional_inequality).
- 46 Noel, Nick, Duwain Pinder, Shelley Stewart, and Jason Wright. 2019. "The Economic Impact of Closing the Racial Wealth Gap." McKinsey & Company. 13 Aug. <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/the-economic-impact-of-closing-the-racial-wealth-gap>.
- 47 Aspen Institute Future of Work Initiative. 2021. "What Are the Experiences of Gig Workers?" Gig Economy Data Hub. <https://www.gigeconomydata.org/basics/what-are-experiences-gig-workers>.
- 48 Bhutta, Neil, Andrew Chang, Lisa Dettline, and Joanne Hsu. 2020. "Disparities in Wealth by Race and Ethnicity in the 2019 Survey of Consumer Finances." Board of Governors of the Federal Reserve System. 28 Sep. <https://www.federalreserve.gov/econres/notes/feds-notes/disparities-in-wealth-by-race-and-ethnicity-in-the-2019-survey-of-consumer-finances-20200928.htm>.
- 49 Bruckner, Caroline and Thomas Hungerford. 2018. "Failure to Contribute: An Estimate of the Consequences of Non-and Underpayment of Self-Employment Taxes by Independent Contractors, and On-Demand Workers on Social Security." SSRN Electronic Journal. <https://doi.org/10.2139/ssrn.3273492>.
- 50 Helling, Brett. 2022. "How Much Do Uber Drivers Make in 2022?" Ridester. 22 Feb. <https://www.ridester.com/how-much-do-uber-drivers-make/>.
- 51 Newton, Casey. 2019. "The Secret Lives of Facebook Moderators in America." *The Verge*, 25 Feb. <https://www.theverge.com/2019/2/25/18229714/cognizant-facebook-content-moderator-interviews-trauma-working-conditions-arizona>.
- 52 Gale, Janelle and Arun Chandra. 2019. "An Update on Compensating and Supporting Facebook's Contractors." Facebook. 13 May. <https://about.fb.com/news/2019/05/compensating-and-supporting-contractors/>.
- 53 Bureau of Labor Statistics. 2018. "Contingent and Alternative Employment Arrangements—May 2017." U.S. Department of Labor. 7 June. <https://www.bls.gov/news.release/pdf/conemp.pdf>.
- 54 T. Rowe Price. 2017. "Reference Point: T. Rowe Price Defined Contribution Plan Data." 31 Dec. [https://www.troweprice.com/content/dam/troweplan/pdfs/ReferencePoint\\_Report.pdf](https://www.troweprice.com/content/dam/troweplan/pdfs/ReferencePoint_Report.pdf)
- 55 Invisibly. 2021. "How Much is Your Data Worth? The Complete Breakdown for 2021." July 13. <https://www.invisibly.com/learn-blog/how-much-is-data-worth>.
- 56 Bureau of Labor Statistics. 2021. "Employment Cost Index-June 2021." U.S. Department of Labor. July 30. <https://www.bls.gov/news.release/pdf/eci.pdf>.
- 57 Typical wealth ratios are 10 to 15 percent, with higher ratios likely for higher earning households.
- 58 The median net worth of Black families is \$17,150—a tenth that of white families, at \$171,000. See McIntosh, Kriston, Emily Moss, Ryan Nunn, and Jay Shambaugh. 2020. "Examining the Black-White Wealth Gap." Brookings, Feb. 27. <https://www.brookings.edu/blog/up-front/2020/02/27/examining-the-black-white-wealth-gap/>.
- 59 Bureau of Labor Statistics. 2018. "Contingent and Alternative Employment Arrangements—May 2017." U.S. Department of Labor. June. <https://www.bls.gov/news.release/pdf/conemp.pdf>.
- 60 Board of Governors of the Federal Reserve System. 2021. "Distribution of Household Wealth in the U.S. since 1989." June 21. <https://www.federalreserve.gov/releases/z1/dataviz/dfa/distribute/table/>.

61 Goldman, Tanya, and David Weil. 2020. "Who's Responsible Here? Establishing Legal Responsibility in the Fissured Workplace." Institute for New Economic Thinking Working Paper No. 114. 1-53. 10.36687/inetwp114.; Reder, Libby, Shelly Steward, and Natalie Foster. 2019. *Designing Portable Benefits: A Resource Guide for Policymakers*. Washington, DC: Aspen Institute Future of Work Initiative.

62 Scholz, Trebor. 2016. *Platform Cooperativism: Challenging the Corporate Sharing Economy*. New York: Rosa Luxemburg Stiftung.

63 Batchelder, Lily. 2020. "Leveling the Playing Field between Inherited Income and Income from Work through an Inheritance Tax." The Hamilton Project. 28 Jan. [https://www.hamiltonproject.org/papers/leveling\\_the\\_playing\\_field\\_between\\_inherited\\_income\\_and\\_income\\_from\\_work\\_through\\_an\\_inheritance\\_tax](https://www.hamiltonproject.org/papers/leveling_the_playing_field_between_inherited_income_and_income_from_work_through_an_inheritance_tax).

64 Leiserson, Greg. 2020. "Taxing Wealth." The Hamilton Project. 28 Jan. [https://www.hamiltonproject.org/papers/taxing\\_wealth](https://www.hamiltonproject.org/papers/taxing_wealth).

65 Baradaran, Mehra. 2020. "Closing the Racial Wealth Gap." *New York University Law Review Online* 95:57-80.