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Center for Financial Security
UNIVERSITY OF WISCONSIN-MADISON

FinTech: Innovations for Family Financial Security
Summary of Workshop Proceedings

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On October 5, 2017 the Center for Financial Security hosted FinTech: Innovations for Family Financial Security. The workshop brought together researchers, practitioners, and private-sector financial service providers to explore FinTech, an emerging financial sector, and its potential for addressing the needs of underserved consumers. FinTech, derived from “financial technology,” refers to innovations that use digital technology to provide or support financial products and services. The workshop focused on assessing FinTech’s capacity for improving financial security, presented examples of FinTech companies and innovations, and suggested considerations for policymakers, practitioners, and researchers interested in FinTech’s role in promoting financial well-being.

*The **Center for Financial Security (CFS)** researches personal finance topics in an effort to inform the creation of evidence-based strategies and aid innovation, particularly for those that serve economically vulnerable populations. Through its new **FinTech Initiative**, CFS:*

- *works with innovative tech services for prototype testing and evaluation of impacts on consumers,*
- *studies consumer responses to FinTech products and services, and*
- *analyzes how FinTech may facilitate or impede improved financial well-being.*

Financial insecurity is a pervasive, chronic issue

Tens of millions of Americans struggle financially, due to either personal or systemic challenges. Of American adults who make more than $40,000 per year, nearly one-third report experiencing financial stress, indicating that financial concerns exist across all income brackets[1]; financial security is a chronic problem in many people’s lives.

73 million Americans are struggling to get by financially.[1]	**44% of adults** could not cover a $400 emergency expense.[1]

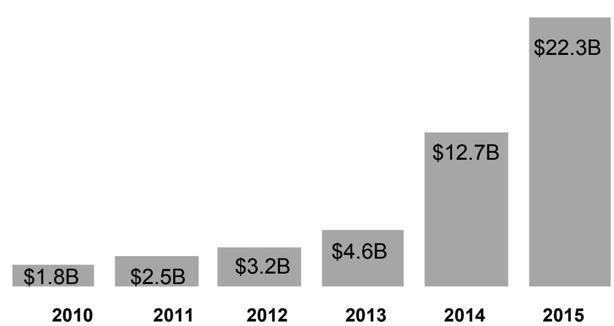
A number of long-term economic trends, including greater volatility in income and employment, longer bouts of unemployment, lower savings rates, and higher debt-to-income ratios, have contributed to the pervasiveness of financial difficulty. As a result, managing finances has become increasingly complex for both individuals and households, making it harder to observe the expansion of financial insecurity or to galvanize a sense of urgency to address it. These trends have also shaped the kinds of products and services people require to manage their finances effectively.

Technology plays a growing role in finances

Whether to check bank account balances, make payments, or verify identity, consumers use technology more than ever before to manage finances, monitor financial activity, and make financial decisions.

This evolution is driven by increasingly prevalent connectivity: The vast majority of consumers, across all age ranges and income levels, now have access to the Internet, most often via smartphones.[2] In 2015, more than half of all smartphone owners with a bank account reported using mobile banking, with even higher usage of mobile services reported by Hispanics and non-Hispanic blacks.[3]

Figure 1. Global Investment in FinTech



Source: J Skan, J Dickerson, L Gagliardi. (2016). Fintech and the evolving landscape: Landing points for the industry. Accenture.

Financial entrepreneurs have recognized the potential in these patterns. In the past five years, global investment in FinTech has increased more than ten-fold, from approximately $1.8 billion in 2010 to $22.3 billion in 2015 (Figure 1).[4] Combined with changing consumer needs and the increasing complexity in financial products and services, technological innovation in finance is modifying the way financial services are approached by, delivered to, and used by consumers.

The financial sector is ripe for disruption

Despite the meteoric growth in FinTech investment, technological innovation has not yet transformed the finance industry. Economic theory predicts that such growth in an industry would drive down costs and prices. Yet, there has been little or no change in costs of financial services; the finance industry remains economically inefficient, as it has been for decades. There is ample opportunity for disruption that creates greater transparency, broadens access, and lowers costs.[5]

The application of technology to financial products and services can generate disruption that is meaningful to consumers, lowering costs, improving access, and promoting financial security. FinTech's ability to scale quickly at a low cost can allow it to reach new markets and challenge financial systems, business models, and regulatory structures.

FinTech increasingly seeks to serve financially vulnerably consumers

Scalable digital technology can increase financial companies' ability to develop products and services that have lower barriers to access, enabling solutions to bolster financial well-being among financially vulnerable populations. In workshop discussions, a number of themes emerged as key considerations for FinTech innovations aimed at increasing the financial well-being of financially vulnerable consumers.

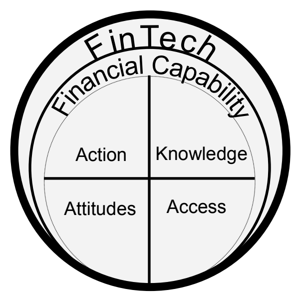
SpringFour™ *maintains a database of more than 10,000 curated and vetted resources in 30 categories related to financial well-being, including childcare, student loans, healthcare, housing and rental services, and disaster relief. Businesses and organizations can use SpringFour's desktop app as an organizational tool to identify providers of services and provide referrals to clients; they can also embed SpringFour's browser-based interface on their websites to allow clients direct access. SpringFour currently serves more than 300 markets nationwide, providing direct access to local resources that promote financial stability.*

From access to action: FinTech impacts financial capability

By lowering costs and reducing other barriers to access (e.g., transportation), FinTech can bring new consumers into the financial mainstream. Discussions of FinTech often focus on this potential to increase *financial inclusion*—consumers' access to safe and affordable financial products and services. However, FinTech innovations often aim to do more than simply increase access—they may also seek to increase financial knowledge, guide financial decision making, or improve financial relationships. Thus, FinTech can support the spectrum of factors that contribute to a person's *financial capability*, from cultivating internal capacities like financial attitudes, skills, and behaviors to improving the external environment by providing the opportunity to act via increased access.[6]

M1 Finance *provides an app-supported service for managing investments. Users create personalized investment portfolios or choose from professionally designed portfolio templates. The service automatically buys investments in the proportions dictated by the portfolio template. To reduce cost barriers, M1 charges consumers fees based on their account balance. It offers a low minimum account balance of $100 and no fees for balances less than $1,000. Through the platform, M1 aims to reduce barriers to investing, make investing simple and accessible, and empower people to become active participants in their financial futures.*

Figure 2. FinTech impacts financial capability



Shift Savings *is a digital platform that automatically rounds up a user's purchases to the next whole dollar and deposits the excess into an interest-bearing savings account. For example, if a user makes a purchase of $6.50, Shift will charge the payment account $7.00 and deposit $0.50 into the user's savings account. Shift also allows users to set goals or targets and track their spending habits and progress toward goals. Shift is offered through employers, as an employee-benefit; employers can match users' Shift dollars. The platform aims to help people take a first step toward saving and eventually begin building wealth and financial wellness.*

The need for empathy

People run into economic hardship for many reasons, and financial matters are often considered a taboo topic in American culture, making it difficult to understand people's circumstances and needs. As a result, financial

Moonrise, *created by American Family Insurance, is a digital platform that matches workers with short-term employment opportunities. The app targets workers who already have full-time jobs and are looking for more work to help make ends meet. After entering their availability, preferences, and skills in the app, "Moonlighters" receive text messages alerting them to employment opportunities that match their attributes; those who accept work are paid immediately through the interface's Ka-ching feature. Employers benefit from decreased recruiting time and the availability of an on-demand workforce to cover production surges or unexpected absences. In this way, Moonrise bridges employer needs with a motivated workforce and reduces barriers to entering the job market.*

products are often designed without an understanding of the various methods and informal financial management techniques used by diverse populations.[7] For instance, misconceptions about consumers often incorrectly associate low income levels with low levels of financial knowledge and financial capabilities. On the contrary, when money is tighter, people often spend more time and use more tools in managing it.[7]

Meeting consumers where they are and understanding their needs is key in serving the most vulnerable populations with FinTech. Integrating empathy and customer knowledge into all steps of product development will ensure that FinTech innovations are meaningful and useful to those for whom they are intended.

SafetyNet™ *is an insurance program that covers interruptions in cash flow due to layoff or disability. On the website, consumers are prompted to answer three simple questions to determine their eligibility for insurance. Once qualified, consumers can then choose a level of coverage. Monthly premiums range from $5 to $30; the insurance provides lump-sum payouts of $1,500 to $9,000 in the event of a loss. SafetyNet™ aims to provide a "transparent" product—no hidden fees, fine print, or surprises—that offers a simple mechanism to help people through financial emergencies and increase financial well-being. SafetyNet™ hopes to expand the program nationwide within five years and is currently testing additional products, including income interruption insurance for landlords and for the self-employed.*

Many firms that attended the workshop described talking with consumers during product development to find out about consumers' financial values and attitudes. They used this feedback to inform product designs and ensure they were creating products people actually need and want. Understanding the *desirability* of a service or product in this way is often the first consideration of these firms, before the product's potential profitability or feasibility.

Making contact with customers in this way has additional benefits. Testing a product, or even a product concept, with consumers can illuminate potential barriers to take-up, such as intimidating interfaces or varying literacy levels. By approaching each step in the product development process with empathy for the product's eventual users, FinTech companies build greater trust with and create more meaningful products for financially vulnerable consumers.

Challenges for FinTech Innovations

Several major challenges hinder FinTech's potential to increase access to financial products and services, lower costs, and increase financial capability, particularly for financially vulnerable populations. Taken together, these challenges point to a weak support system for FinTech innovation and may constrain its ability to create positive impacts.

Current regulatory structures impede innovation

The majority of US financial regulations were created in response to major financial crises.[8] The resulting regulatory structure is highly layered, complex, and difficult and costly to change, making innovation challenging.

FinTech developers seeking to test new ideas must manage a range of complex regulatory issues, including:

- Know Your Customer (KYC) laws, which limit transactions with people on the fringe of mainstream finance, as well as transactions with international counterparties;
- Prudential regulations for safety and soundness, which may discourage key actors from taking risks on small, untested products or markets; and
- Unclear or overlapping regulatory jurisdictions, resulting in confusion, delays, or even disapproval of a new product.

Though these regulations aim to ensure consumer safety, they often create cumbersome barriers and can shut down innovations before they even have a chance to develop.

Traditional investment incentives don't reward investment in social returns

US funding and business models often emphasize quick returns on investment. These incentives shape which consumer markets are served, shifting focus away from financially vulnerable populations—services that target large-dollar savings or lending are likely to produce a higher, quicker return on investment than those aiming to get people started with savings or investments by committing small amounts.

FinTech offers a low-cost way for firms to pursue these small-dollar markets, but there is a lack of incentives and financing mechanisms that promote innovation in this arena; social returns on investments are not sufficiently or consistently valued.

Some consumers will still face exclusion
While FinTech holds promise to provide new products and services to underserved populations, some consumers may still be excluded; recent evidence highlights some consumer characteristics that may prove challenging even for nimble FinTech companies.

- *Consumer adoption challenges.*
  Although financial inclusion is often viewed from a supply-side perspective—that is, focused on the services firms deliver—consumers' demand for products must also be taken into account. A recent study of FinTech products around the globe found evidence that emerging products may be more suited to the financial needs and circumstances of higher-income households and are poorly designed to meet the needs of the mass market.[7] Additionally, the study suggests an association between lower financial literacy and lower demand and take-up of financial services, meaning these consumers may continue to be difficult to reach with FinTech innovations. FinTech developers may need to place special emphasis on developing products that fit the financial situations of financially vulnerable households, who face greater income volatility, have fewer assets, and differ from higher income households in many other ways.

- *Limitations of consumer access to technology.*
  Financial inclusion also appears to be correlated with Internet adoption, leading to concerns that consumers without Internet access, or those who are simply uncomfortable using technology-based services, may be left out of the move towards FinTech.[9] Research has shown generational differences in financial outcomes of FinTech users, perhaps because of different patterns in using and responding to technology-based tools.[10]

These consumer characteristics, in the context of a regulatory system that impedes innovation and a lack of incentives to invest in solutions for vulnerable populations, may inhibit the ability of FinTech innovations to improve financial security for a broad array of consumers.

Challenges to FinTech	Key Considerations
Overlapping regulations	Collaborations
Inflexible regulatory system	State-sponsored "sandboxes"
Profit-focused business models	Innovative regulators
	Incentivizing social returns
Impatient funding mechanisms	Design with empathy
Unequal access to technology	Desirability before profitability
	Meeting consumers where they are
Restricted consumer adoption	Financial market subsidies
Consumer protection	Research

Considerations for Research, Policy, and Practice

The following questions emerged from workshop discussions to motivate researchers, practitioners, and policymakers to better understand and create a supportive environment for FinTech innovations that can help solve financial challenges.

How do consumers respond to, adapt to, and use FinTech?
In creating new, cost-effective financial products and services, FinTech has the potential to reshape the financial market, yet little is known about consumer attitudes toward and responses to FinTech. To what degree are consumers aware of the full range of financial products and services available on the market? What are consumer tastes and preferences regarding FinTech products? How do consumers weigh the implicit and explicit costs and benefits of products and services?
Especially in the case of FinTech's impact on

The **Aspen Institute** *is a nonpartisan educational and policy studies organization. The Aspen Financial Security Program (FSP) sponsors the* **New Innovations in Financial Technology and Inclusion** *initiative to study financial innovation as a means to advance financial inclusion and consumer well-being. As part of this initiative, Aspen FSP analyzes legal and regulatory structures around the world to identify trends that may support innovation in the United States. In 2016, Aspen FSP helped launch the Nonprofit Leaders in Financial Technology (nLIFT) group, through which six nonprofit leaders collaborate in advancing technological solutions to increase financial inclusion.*

The **University of Wisconsin-Madison** *has created a* **Financial Services Innovation course** *aiming to develop well-rounded, flexible consumer finance experts who help markets better meet consumers' needs. The course introduces students to the current financial environment and its operations, guides them to identify opportunities and unmet needs, and supports them in developing solutions that better align financial services to consumer needs. Ultimately, the course aims to promote an empathic approach to creating meaningful financial products and services, one that draws on direct input from consumers.*

economically vulnerable populations, a stronger evidence base regarding consumers' responses to FinTech products will help inform effective strategies for designing, implementing, and adapting solutions that are meaningful and impactful in increasing financial well-being.

How can the regulatory structure support FinTech innovation?

Consumer protection remains a primary function of the regulatory system, but the current system restricts entry of new firms, hampering competition and the creation of a dynamic market. How can the regulatory structure maintain consumer protection yet spur innovation and make it easier for innovations to move to scale?

Many countries are exploring regulatory "sandbox" policies, which establish a collaborative regulatory environment in which FinTech innovations can be tested on a small scale.[11] Sandboxes create a transparent process in which regulators and innovators learn together, identify regulatory challenges, design tailored regulatory approaches, and develop an evidence base for FinTech products.

In the United States, individual states may be able to take a leading role in adopting the sandbox model. In fact, several states have recently announced plans for creating individual- or multi-state sandboxes.[12]

How can investment in serving the financially vulnerable be promoted?

While nonprofit organizations continue to expand their reach and the private sector is increasing investment in products and services for underserved populations, social returns on investment remain undervalued and limit incentives for innovation in this realm. How can FinTech disrupt current financing mechanisms and business models to place value on social returns and make the changes stick?

Key to answering this question is promoting a conversation about the role of finance in people's lives and the market's ability to fill the public's needs. Are there places for subsidy within the financial market to allow it to work better? Are there core services or fundamental products the financial market can't provide that nonprofits or innovative capital structures may be able to support?

Call for collaboration and systems thinking

A central, recurring theme of the event was recognition of the importance of collaboration between FinTech innovators, regulators, and the finance industry. From redesigning the regulatory framework to creating an evidence base for effective strategies, new collaborations can support innovation, bring attention to challenges, and ultimately develop more meaningful solutions.

Collaboration across industry sectors can further contribute to these aims. From health care to housing to employment, financial security spans all sectors. Improving financial security cannot be tackled by one sector alone; its roots and potential solutions lie in all sectors, markets, and systems. A collaborative approach can spur innovation while ensuring consumer protection.

Conclusion

FinTech is changing the landscape of financial products and services available to consumers, while potentially disrupting existing systems and business models. Although, the industry is still relatively small and has struggled with scale and consumer adoption,[13] the cost savings and innovation technology can facilitate has the potential to draw new consumers into the financial mainstream and serve them in more meaningful ways. For financially vulnerable consumers, special emphasis must be placed on tying expanded access to the other elements of financial capability, including consumer protection. Population-specific products, developed from a position of empathy, are needed to meet the unique needs and interests of different consumer groups. Future research is needed to inform effective strategies and innovative collaborations within and across sectors and further develop FinTech's ability to cultivate greater financial security for families.

References

[1] Larrimore J, Durante A, Park C, and Tranfaglia A. 2017. Report on the Economic Well-Being of U.S. Households in 2016. Board of Governors of the Federal Reserve System.

[2] Pew Research Center. 2016. Internet/Broadband Fact Sheet. pewinternet.org/fact-sheet/internet-broadband

[3] Dodini S, Lopez-Fernandini A, Merry E, Thomas L. 2016. Consumers and Mobile Financial Services 2016. Board of Governors of the Federal Reserve System.

[4] Skan J, Dickerson J, Gagliardi L. 2016. Fintech and the evolving landscape: Landing points for the industry. Accenture.

[5] Philippon T. 2016. The fintech opportunity. (Working Paper No. 22476). National Bureau of Economic Research.

[6] Birkenmaier J, Sherraden M, Curley J. 2013. Financial *Capability and Asset Development: Research, Education, Policy, and Practice*. Oxford: Oxford University Press.

[7] McCaffrey M, Schiff A. 2017. Finclusion to Fintech: Fintech Product Development for Low-Income Markets. Helix Institute of Digital Finance.

[8] Philippon T. 2016. The fintech opportunity. (Working Paper No. 22476). National Bureau of Economic Research.

[9] McHenry G, Goldberg RM, Lewis M, Carlson E. 2017. Digital and Economic Inclusion: How Internet Adoption Impacts Banking Status. (Working paper). National Telecommunications and Information Administration.

[10] Carlin BI, Olasfsson A, Pagel M. 2017. FinTech Adoption Across Generations: Financial Fitness in the Information Age. (Working paper No. 23798). The National Bureau of Economic Research.

[11] Duff S. 2017. Modernizing Digital Financial Regulation: The Evolving Role of Reglabs in the Regulatory Stack. The Aspen Institute Financial Security Program.

[12] Merken S. 2017. States Embrace Fintech Sandbox Concept as Federal Action Stalls. Bloomberg Law: Banking.

[13] World Economic Forum. 2017. Beyond Fintech: A Pragmatic Assessment of Disruptive Potential in Financial Services.

Other Resources:

Aspen Institute Financial Security Program. https://www.aspeninstitute.org/programs/financial-security-program/

M1 Finance. https://www.m1finance.com/

Moonrise, Inc. https://moonrise.works/

Safety Net™. https://safetynet.com/

Shift Savings, Inc. https://www.shiftsavings.com/

SpringFour™. http://springfour.cc/

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