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Fintech: The Power of the Possible and Potential Pitfalls

Good afternoon, it's a pleasure to be here. This is an exciting time for all things fintech, and as you're aware, it's getting increasing attention from regulatory agencies like the Federal Reserve, the OCC, state regulators, and others.[1] It's critically important to have an open and active dialogue among everyone involved, in order to better understand one another's goals and concerns. In an attempt to do just that, I'll keep my remarks brief and leave plenty of time for Q&A.

My talk today perfectly encompasses the sometimes dueling aspects of my profession. On the one hand, I'm president of the Fed District that is not just home to the technological hub of the United States, but is arguably the center of the tech universe. On the other hand, they don't call economics "the dismal science" for nothing, and I'm compelled to consider what potholes may be dotting the road ahead.

I'll begin by outlining what the financial system should provide for our economy and society, and by acknowledging where it has tended to come up short in the past. In a nutshell, the core purposes of the financial system are to facilitate payments between buyers and sellers, and to direct households' and businesses' savings to their most productive uses, such as building

[1] See, for example, the recent report issued by the Office of the Comptroller of the Currency (2016). http://www.occ.gov/publications/publications-by-type/other-publications-reports/pub-responsible-innovation-banking-system-occ-perspective.pdf

homes, expanding businesses, getting an education, or developing infrastructure. That's a tall order, and certain aspects have proven particularly difficult to achieve, including ensuring that the financial system is efficient and resilient, and that it benefits everyone in society.

Fintech holds great promise for tackling these long-standing challenges. This is why I'm excited by the innovation I'm seeing in financial technology—much of it from people here today. But it's also why I'm going to raise some potential risks. Let me be clear: People from regulatory agencies don't highlight potential downsides because we're dour, unfun pessimists—or at least not *only* because we're dour, unfun pessimists. We do it because we have to look not just at what's possible in the sense of wonder and limitless options, but at what's possible in the sense of the economist's greatest concern: the unintended consequence.

Before I go any further, I should make two disclaimers. First is the standard one, that the views expressed here today are mine alone and do not necessarily reflect those of others in the Federal Reserve System. Second is that, as president of the San Francisco Fed, I am not directly involved with writing rules or regulations. So I will not be talking about specific regulations and their application to fintech. Instead, my aim is to lay out issues and questions that should be part of the ongoing conversation about how fintech can make our financial system—and ultimately our economy—more successful at achieving its fundamental goals.

So, back to the duality. The laws of innovation often mirror the laws of physics: For every great stride, there is an equal and opposite risk. So it's not that regulators are here to call the cops on the party; we're here to make sure no one jumps off the roof. And while we see the potential in innovation, we're also looking at the other side of the coin.

As I said, technology offers creative opportunities to improve the performance of the financial sector, and to remedy some of its shortcomings. Fintech's opus spans products that address all parts of the so-called consumer wallet: planning, spending, saving, and borrowing. The products are generally less complex, making them more understandable and easier for customers to use. They're delivered via platforms that widen the overall customer base, allowing more people access to credit and the first rung of the financial ladder.

One of the most obvious and potentially most game-changing benefits is the ability to reach historically underserved and economically disadvantaged communities. This is the case in mature economies, like the United States, where inequality and access to financial services are perennial issues. It's also true for emerging economies, where large portions of the world's population are making the transition from subsistence-level living to a more sustainable economic existence. That is incredibly powerful.

Fintech can lower costs and improve services, particularly for lower-income families and small businesses. Meaning fintech can help more people get access to credit at reasonable terms, better manage their finances, and keep more money in their pockets. Or, in the case of the many workers in the U.S. who send funds to families in other countries, put more money in the pockets of their children, parents, or communities. Fintech can help revitalize impoverished neighborhoods by allowing small businesses that have been shut out of the formal financial sector to take root and grow.

Globally, we're seeing the emergence of payment systems via mobile phones in places where the vast majority of people are unbanked or underbanked, but have cell phones. Instead of paying huge fees for bank-like services, it's all done through text or the touch of a few buttons. This has made its mark in some areas, is starting to gain a foothold in others, and even has potential here.

So what could go wrong? The flip side concern is that those exact people could wind up becoming even more marginalized. I think back to exclusionary practices in lending like redlining, where portions of the population were denied services based on where they lived. Even when outright discrimination was banned, lending metrics translated into disenfranchisement of racial and ethnic groups. It would be a travesty if, despite the best intentions in the world, new technologies designed to improve the availability of credit instead ended up reintroducing that kind of exclusion, by, say, basing decisions on zip codes or other demographic metrics.

A similar juxtaposition of potential and risk arises with the proliferation of options for saving and borrowing that fintech promises. These novel approaches to intermediating savings and investments could lower costs and broaden access to people who are currently unbanked or underserved. At the same time—as we know all too well from historical precedent—the unscrupulous will prey on the vulnerable, be it through predatory lending, irresponsible payday loans, outright fraud, and more; sadly, the list goes on and on. I don't want to see fintech's positive potential hijacked to become a source of new, more powerful platforms to prey on consumers on a massive scale.

Another area for the great and the possible is leveraging big data and data analytics to improve operational efficiency, risk management, and decision making. For example, sophisticated algorithms can help overcome many of the hurdles to defeating money laundering and the funding of terrorist and criminal organizations. "Know your customer" laws across the world require banks and financial institutions to verify that their customers are the people they claim to be, which is a costly and heretofore imperfect undertaking. Advanced data analytics could provide powerful tools to increase both the efficiency and efficacy of these efforts.

The other side of that coin, of course, is that, left unbridled, the ease and anonymity of some types of fintech, such as digital currencies, have the potential to make criminal and terrorist activity even easier. And while fintech could have significant benefits for the ability to assess and manage risk, any time we're talking about big data, we need to be at least cognizant, and at most vigilant, about the protection and privacy of those consumers whose data are being used.

While fintech can also improve not just the accessibility but the quality of service—something that consumers are demanding—we also need to look out for the resilience of the financial system as a whole. As the fintech industry continues to grow, both as nonbank institutions and via partnerships with banks, potential risks to the financial system and economy expand in proportion. Moreover, for our financial system to be efficient, it's important that we have a level playing field, regardless of how institutions prefer to describe themselves or what kind of charter they hold. As a matter of principle, if it walks like a duck and quacks like a duck, it should be regulated like a duck.

In raising these concerns, I'm not suggesting that the spirit of innovation is in any way nefarious, nor do I claim that people haven't considered risk of their own volition. But as I said earlier, this is about *unintended* consequences. In summary, there's no question that fintech is going to change the face of financial services on a global scale. I am excited for the changes to come, and I see the potency of the possible. But for fintech's potential to be met, we need to make sure we don't reinvent or exacerbate shortcomings that have plagued our financial system thus far. In that regard, well-designed regulation that protects consumers, fosters inclusionary rather than exclusionary practices, and enhances the fairness and resilience of the financial system should help rather than hinder fintech's contribution to creating a better financial system and economy.

Thank you.