How Can China Be Number One in the World for FinTech Innovation If It Is Still a Socialist Country?

ABA Cyberspace Law Institute/Winter Working Meeting
January 26-27, 2018

Jane K. Winn, Charles I. Stone Professor of Law, Center for Advanced Study & Research on Innovation Policy, University of Washington School of Law

In February 2017, The Economist Magazine proclaimed China the world’s leader in FinTech, leapfrogging over the UK and the US which had previously been considered the first and second most important FinTech markets. This confound the conventional wisdom that socialism cannot support the “creative destruction” characteristic of capitalism and the Chinese can only copy business models and technology developed elsewhere. This presentation will provide an overview of the legal environment of FinTech in the UK, US and China in order to shed light on what it is in China that is contributing to the revolutionary transformation of financial services occurring there, and noticeably not occurring in the UK or US.

Jane K. Winn is a professor at University of Washington School of Law in Seattle, Washington and a faculty director of the Center for Advanced Study & Research on Innovation Policy. Her teaching and research interests are in the area of commercial law with a focus on how globalization and technological innovation are transforming national legal systems. She is co-author of The Law of Electronic Commerce (4th ed. supp. 2017); many of her other publications are available from ssrn.com/author=334081. A graduate of Queen Mary College, University of London and Harvard University, she is a member of the American Law Institute and received Fulbright research grants in 2008 and 2016 to study the rise of e-commerce in Greater China. Winn has been a visiting faculty member at University of California-Berkeley; Peking University, Tsinghua University and Guanghua Law School at Zhejiang University in China; Sciences Po and Université Jean Moulin Lyon III, France; Melbourne University and Monash University in Australia; Chulalongkorn University, Thailand; and National Law University-Odisha, India.
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University of Washington School of Law
How Can China Be No. 1 in FinTech?

• Financial Technology vs. FinTech
• Why Does FinTech Matter?
• London as FinTech Capital of the World
• Where Does the US Rank?
• How Can China Be No. 1 in FinTech?
Financial Technology vs. FinTech
Finance Is a System for Managing Intertemporal Preferences for Tangible and Symbolic Wealth

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<th>Now</th>
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<td>Surrender Symbolic Wealth</td>
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<td>Debtor</td>
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<tr>
<td>Acquire Tangible Wealth</td>
<td>Debtor</td>
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We’ll Always Need Finance. Banks, Maybe Not.
Financial Technology
The Nexus of Forces Drives FinTech

- Mobile Channel
- Internet of Things
- Social Production
- Data Analytics
- Artificial Intelligence
- Machine Learning
- Cloud Computing
Why Does FinTech Matter?
The Old Consensus: Policy Trilemma

Safety & Soundness

Pick Any Two

Innovation & Competition

Return on Capital for Service Provider
Core Banking Systems on Mainframes vs. Cloud Computing
Operational Risk Management / Customer Due Diligence / Anti-Money Laundering / Counter Terrorist Financing / Data Protection / Tax Compliance / Suspicious Activity Reporting
Double Bind

"C’mon, c’mon — it’s either one or the other."
Why Was London the First Global FinTech Leader?
City of London
Silicon Roundabout
European Venture Capital, Entrepreneurship Hub
"The nine most terrifying words in the English language are: 'I'm from the government and I'm here to help.'"

-Ronald Reagan
Where Does the US Rank?
On the one hand...
On the Other Hand....

SO THEN I SAID

"I'M FROM THE GOVERNMENT AND I'M HERE TO HELP YOU"
How Can China Be No. 1 in FinTech?
Socialism with Chinese Characteristics
Indigenous Entrepreneurs
Rise of Chinese QR Payment Services

• QR codes invented 1994
• Alipay launched 2004
• 3rd Party Payment Law 2010
• PBOC Internet Banking Clearing & Settlement 2010
• Following China UnionPay

• Ubiquitous smart phones
• Alipay, Wechat were already successful platforms
• “Free” with ads
• Small business as consumers
Which Is to Be Master?
摸着石头过河
Crossing the River by Feeling the Stones
天下 = the world
Questions?
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I. What is “FinTech” and how does it differ from “financial technology”?

A. Financial technology existed before metal coins were invented in the 5th century BC in the Greek kingdom of Lydia. The technology of financial services has evolved continuously since the dawn of human history. Recent advances in financial technology that are not considered part of FinTech include automated teller machines, Internet banking and electronic check images.

B. The term “FinTech” is used to describe financial technology that is used to support a range of new financial services business models including mobile financial services. The term “FinTech” came into widespread use only in the years following the onset of the Global Financial Crisis in 2008.

   1. The innovations driving “FinTech” business models include big data; artificial intelligence/machine learning; mobile computing; Internet of Things; cloud computing and social production. Gartner has labeled this combination of technologies the “nexus of forces” driving the transformation of the “architecture of civilization.”

   2. Another feature of FinTech is the “technology stack” information technology architecture. “Technology stack” in this context refers to the use of modular design for complex computer systems in order to make them more flexible and resilient to change.

II. Why Is FinTech Such a Big Deal?

A. The “unbundling” of financial services has begun although it is not often referred to by that name: the most successful FinTech applications to date tend to be in the area of payment systems, but there are also remittance, lending, asset management, trade finance and insurance FinTech innovators. The “disruptive innovators” or new entrants into these financial services markets are attempting to cherry pick the most profitable segments of the financial services markets, leaving the most commodified, basic services for the incumbents to manage.

B. In the payments arena, banks must generally operate core banking systems that rely on mainframe computers in order to comply with operational risk standards imposed by bank examiners. Core banking systems are more powerful, stable and accurate than cloud computing systems so few banks would be permitted to migrate to cloud computing by their regulators. A tsunami of regulatory compliance obligations involving customer due diligence, anti-money laundering/counter-terrorist financing, tax compliance and data protection have increased the strain on aging legacy core banking systems to the breaking point. For most banks, however, there is simply no credible exit strategy yet to permit them to move to a new “technology stack” architecture which would permit them to compete on a level playing field with disruptive innovators.

III. Why Was the UK the First Global Leader in FinTech?
A. In the economic carnage that descended upon the City of London in the wake of the Global Financial Crisis, rents on office space near the City of London dropped so low that FinTech startups could afford to do business there. For young technology entrepreneurs, the value proposition of moving financial services out from under the shadow of core banking systems and migrating them to the mobile channel where they could leverage the “Nexus of Forces” seemed obvious. The UK has the most entrepreneurial culture and the most sophisticated capital markets of any European capital, so once the FinTech startups in “Silicon Roundabout” became successful, there was a market infrastructure to support their continued growth.

B. After London became the accidental global capital of FinTech innovation, the UK government rushed into help, creating new regulatory frameworks such as the “Regulatory Sandbox.” Because these initiatives did not address the underlying problem of how to migrate the banks’ aging core banking systems to newer technology architectures, they were more public relations gimmicks than sound public policy.

IV. Why Isn’t the US the Global Fintech Leader?

A. The US is a global FinTech leader, but its technology innovation and financial services industries are spread around Silicon Valley, New York, Boston and other urban areas. So the US market in aggregate is probably the largest and deepest for FinTech innovation but because it is not concentrated in one place and cannot always be clearly separated from America’s information economy generally, its success is not heralded the same way London’s accidental rise to global leader was.

B. Post-Global Financial Crisis, American public sentiment turned sharply against banks and Congress enacted the Dodd Frank Act in an effort to diffuse the “too big to fail” problem. The result has been a veritable tsunami of regulatory compliance obligations piled on banks that would stifle innovation under the best of circumstances. Politicians and regulators who demand more innovation from banks fail to notice their own schizophrenic attitude toward bank entrepreneurship in a post-Global Financial Crisis world.

V. How Can China Be Number One in Global FinTech If It Is Still a Communist Country?

A. There are two major contributing factors: the Chinese Communist Party has chosen to allow the private sector to innovate rapidly in the FinTech area, presumably to put a fire under the state owned banks and get them to innovate faster, and China is now the home to world class global entrepreneurs like Jack Ma of Alibaba and Pony Ma of Tencent.

B. The blockbuster FinTech success story in China is QR scan mobile payments. The elements of this financial service delivery model were built up gradually over a decade:

- QR technology invented in 1994
- Alibaba founded Taobao in 2003, Alipay in 2004
- People’s Bank of China did not regulate third party payments in China until 2010, allowing Alipay to grow unhindered for 6 years.
- People’s Bank of China launched a state of the art Internet Banking Clearing and Settlement system in 2010, reducing the cost of clearing and settlement of small mobile payments to near zero.
- Almost everyone in China owns a smart phone with a digital camera that can scan QR codes and an operating system that can run the mobile payment software.
- Alipay and Wechat each had half a billion customers when they launched their mobile apps.
- The cost of running QR scan mobile payments is so low that the advertising revenue the apps generate is adequate to pay for it, so they can be offered for free to users without running a loss.
- Small businesses often use Alipay and Wechat Pay as individuals so their transactions are not treated as business income and they also pay no fees to the payment services.