

# FinTech

## Lecture 1. Reshaping the Banking and Payments Industry

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## Learning outcomes

- ▶ Explain how FinTech startups are **revolutionizing** payment methods and undermining traditional mechanisms for the individual and companies
- ▶ Determine how FinTech corporations can extract people from the traditional currency regime

# Overview

1. **Introduction**
2. The payment revolution in China
3. Ant Financial's role in revolutionizing payment processing
4. Square's disruption of the card payment system
5. Conclusion
6. Case: An interview with LexinFintech
7. Academic reading

# Introduction

- ▶ Technological innovations
  - ▶ Rise of the internet
  - ▶ Ubiquity of smartphones
  - ▶ Improvement in computing capacity to collect and process data
  
- ▶ Revolution in payment processes
  - ▶ Melding of technology and finance
  - ▶ Disrupted the financial services industry

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# Payment revolution in China

- ▶ China: Leader on FinTech revolution
  - ▶ Rapid growth in **economy**
  - ▶ Large and underserved **population**

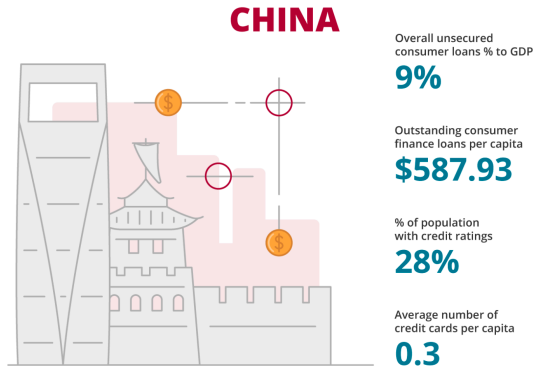


Fig. Financial market penetration - China (Zeng, 2018)

## Financial market penetration (USA vs. China)

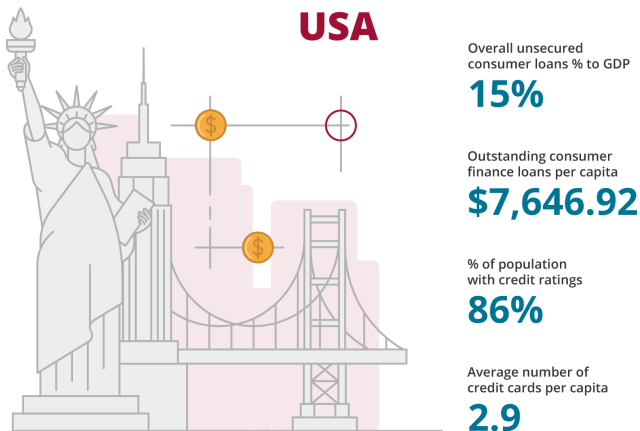


Fig. Financial market penetration - USA (Zeng, 2018)

## FinTech divisions in China

- ▶ China's FinTech companies
  - ▶ Use technological advantages to create **high-functioning** and **easy-to-access** financial services
  - ▶ Bypass some traditional financial institutions

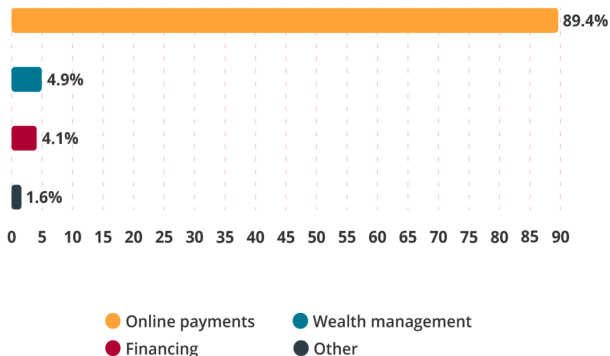


Fig. The divisions within China's FinTech sector (Ngai, Qu & Zhou, 2016)



## FinTech adoption rates among SMEs

- ▶ FinTech adoption rates are moving beyond consumers to include SMEs
  - ▶ SMEs: Small to medium sized enterprises
  - ▶ China: Highest rates of FinTech adoption among SMEs



Fig. SMEs FinTech adoption rates (Global FinTech adoption Index, 2019)

## Opportunities for SMEs

- ▶ Historically, SMEs **lacked access** to financial services
  - ▶ Many banks offering services to more established businesses
  - ▶ Products and services provided by traditional financial institutions:
    - ▶ Poor product fit
    - ▶ Complex customer journeys
    - ▶ Minimal access to funding
    - ▶ Complex and lengthy processes
  
- ▶ FinTech: **Alternative** banking solutions and financial management

## FinTech solutions and services used by SMEs

- ▶ The potential for disruption in emerging markets is much higher
  - ▶ No **incumbent** (in many cases) to compete for financial services

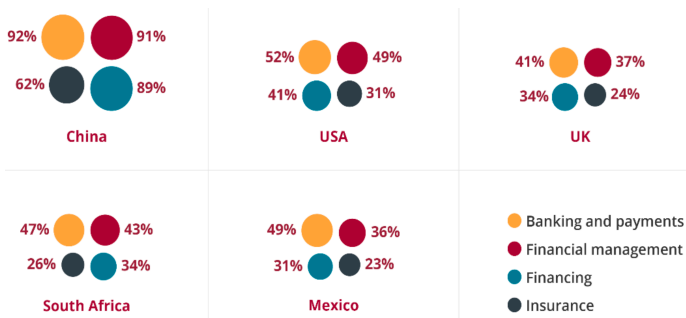


Fig. FinTech solutions and services used by SMEs (Global FinTech adoption Index, 2019)

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## Online payment providers in China

- ▶ Two giants: **Alipay** and **WeChat Pay**
  - ▶ Provide a **variety of services** to their customers
    - ▶ Financial services: money transfers, wealth management, micro loans
    - ▶ Add-on services: fitness tracking, healthcare tracking

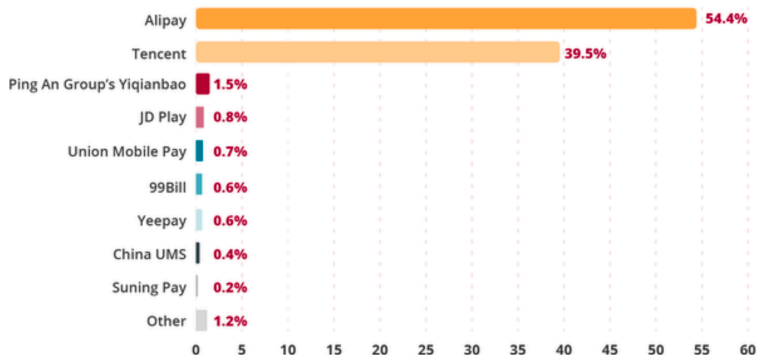


Fig. Market share of payment providers in China (China Banking News, 2019)

## Future of FinTech in China

- ▶ **Regulate** FinTech: Adoption and implementation of national standards
  - ▶ PBOC three-year plan (2019)
    - ▶ Aims to strengthen FinTech regulation and compliance
    - ▶ Aims to expand these regulations to six new cities as part of a FinTech "regulatory sandbox"
  - ▶ Regulatory sandbox: 上海、重庆、深圳、雄安、杭州、苏州
    - ▶ Hubs of innovation and financial regulation
    - ▶ Safely test new and innovative technologies, products and services
    - ▶ **Minimize the risk** and strengthen consumer protection

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## Credit card payment process

- ▶ Credit card payment
  - ▶ Reducing the profit margins of merchant
  - ▶ Particularly expensive for small business owners
- ▶ FinTech: **revolutionize** how good and services are purchased
  - ▶ Square [[link](#)] was founded as a **payment aggregator**
    - ▶ A device that plugged into the top of a smartphone
    - ▶ **Reduce costs** and allow small merchants access to card payment facilities



## Square's product offering

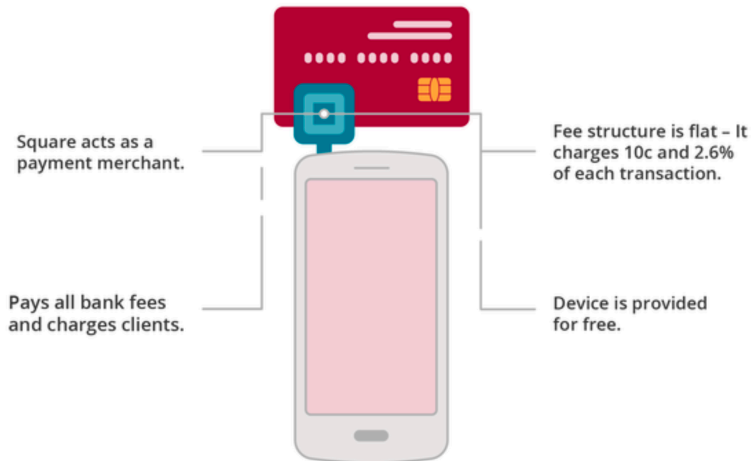


Fig. Square's product offering (Adapted from: Square, n.d.)

## Mobile apps vs Traditional payment methods

- ▶ Despite having developed a unique product, Square still faced **low rates of adoption** of their product in the US.

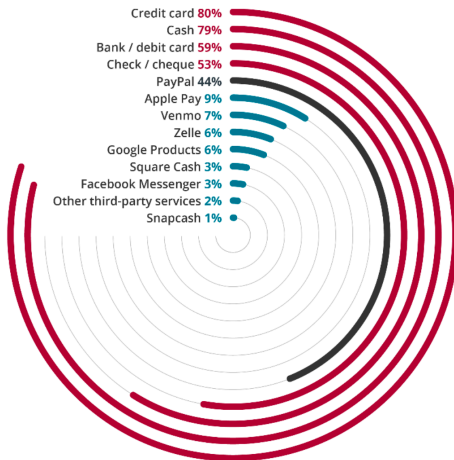


Fig. Rates of adoption of mobile apps vs traditional payment methods (CNBC, 2019)

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## Conclusion

- ▶ FinTech **reshape** financial services industry
  - ▶ Companies like Ant Financial and Square identified gaps in the market
  - ▶ Using technological advances to ease the **payment process** and make it cheaper for consumers and companies
  - ▶ Through this process, they have had some success in challenging incumbent financial institutions
- ▶ These FinTech companies have faced barriers to **growth**
  - ▶ Why the adoption of these products has been so rapid in China?
  - ▶ Whether this experience is replicable in other countries?
  - ▶ What is your expectation on the future of payment systems?

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## An interview with LexinFintech

### ▶ Video

- ▶ Evolution of the payment industry
- ▶ Leading role of Chinese companies:
  - ▶ develop FinTech payment applications
  - ▶ develop the online loans industry
- ▶ Challenges faced by FinTech companies
- ▶ Opportunities that these companies have for growth

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## Academic reading

- ▶ **Fintech, regulatory arbitrage, and the rise of shadow banks (2018 JFE)**
  - ▶ How regulatory differences and technological advantages contributed to the growth among online "fintech" lenders
- ▶ **Can FinTech reduce disparities in access to finance? Evidence from the Paycheck Protection Program (2022 JFE)**
  - ▶ Does fintech successfully serve small businesses poorly served by banks?
- ▶ **The rise of finance companies and FinTech lenders in small business lending (2022 RFS)**
  - ▶ The substitution effect between fintech and banks
- ▶ **Finance and Firm Volatility: Evidence from Small Business Lending in China (2022 MS)**
  - ▶ Credit access significantly reduces firm sales volatility
- ▶ **FinTech Credit and Entrepreneurial Growth (2024 JF)**
  - ▶ Access to FinTech credit boosts SMEs' sales growth