US ONLINE LENDING TREND

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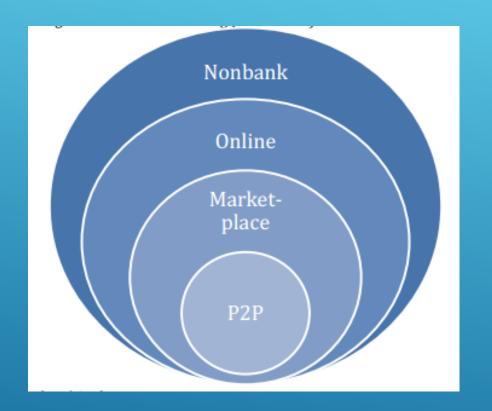


AGENDA

- Categories of "Online Lending"
- US online lending landscape
- Stage 1: P2P
- Stage 2: from P2P to marketplace lending and why
- Stage 3: from marketplace lending to online lending and bank partnershp
- Stage 4: Move to the center of matrix
- Appendix: marketplace lending in China and UK



CATEGORIES OF NON-BANK LENDING



Picture from: Marshall Lux and Martin, Chorzempa"When Markets Quake: Online Banks and The Present and Future", April 2017

LANDSCAPE1: TOP US ONLINE LENDING PLAYERS

* Estimates

Consumer

Small Business

Real Estate

US 2016 loan volume		US 2016 loan volume		US 2016 loan volume	
Lending Club	\$8.7 billion	OnDeck	\$2.4 billion	SoFi	\$1.6 billion*
Discover	\$4.0 billion	PayPal Working Capital	\$1.5 billion*	LendingHome	\$700 million*
SoFi	\$3.2 billion	*Kabbage	\$1.25 billion	RealtyShares	\$240 million
Lightstream	\$2.3 billion	CAN Capital	\$1.1 billion*	Sharestates	\$189 million
Prosper	\$2.2 billion	Square Capital	\$798 million	PeerStreet	\$175 million

Total top five players

* Estimated, excludes student loans

2016 \$20.4 billion

Total top five players

2016 \$7.05 billion

Total top five players

2016: \$2.9 billion

* Estimates

LANDSCAPE2: HIGHLIGHTS IN US ONLINE LENDING IN 2016

The Year in Review - USA

The Biggest Stories of the Past Year

- Lending Club challenges
- OCC Fintech Charter
- Goldman Sachs launches Marcus
- The first lending platform failures
- Securitization market grows
- Industry associations get some traction

STAGE 1: P2P LENDING -STORY PROMISED WHEN IT APPEARED

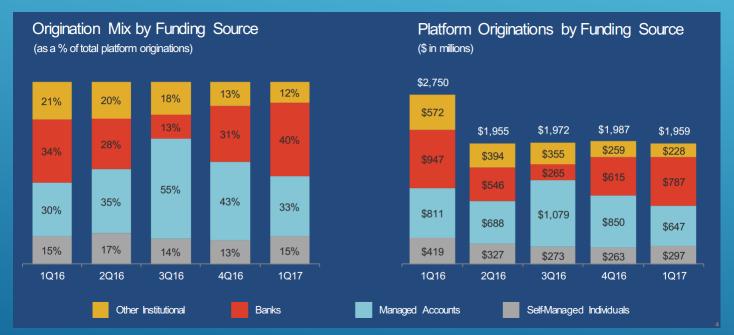
- "Transforming the banking system" by "cut off the middle man" (Lending Club's prospectus
- Lower cost of borrowing and better return
- Serve underbanked
- · Better customer experience

References: : Marshall Lux and Martin, Chorzempa "When Markets Quake: Online Banks and Their Past, Present and Future", April 2017



STAGE 2: FROM P2P LENDING TO MARKETPLACE LENDING

from P2P to peer to investors: 52% of Lending club originations in Q1 were funded by institutional investors



Picture from: Lending Club Q1 2017 presentation



STAGE 2: WHAT HAS CHANGED- FROM P2P TO MARKETPLACE LENDING

- · P2P disappeared, changed to Peer to institutional investor
- Lower investor return
- not proven business model (unprofitable, lending club, Proper, OnDeck)
- not proven credit model
- Securizitation

Types of current online lending platforms

- · Pure connectors
- Pure balance sheet lending
- Hybrid/mix



STAGE 2: WHY - ADVANTAGES OF P2P LENDING

- Lower cost of operations
- Regulatory arbitrage
- Credit scoring arbitrage (Fair Credit Reporting Act and Equal Credit Opportunity Act, not through the circle. Miniscule portfolio)
- Tap into underbanked
- Better customer experience (sometimes)
- No "maturity transformation" (maturity mismatch) (this leads to less regulations)
- Synergy in the e-commerce/social network ecosystem and platform (some)

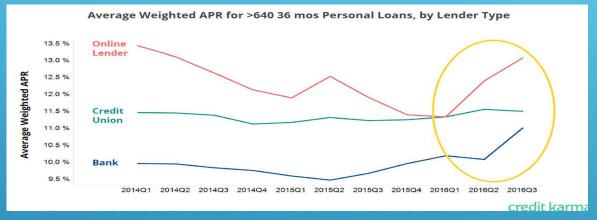


STAGE 2: WHY - DISADVANTAGES OF P2P LENDING

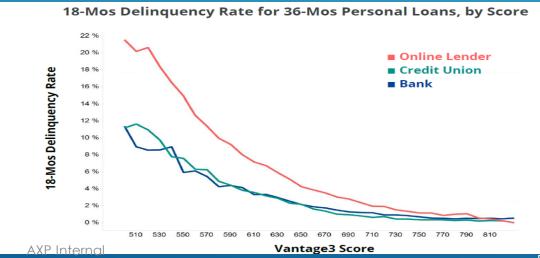
- Higher cost of funding compared to banks
- Higher risk
- Unproved credit model
- Higher acquisition cost
- Lack of diversification of business
- Rising interest rate
- Competition from traditional banks (In the future, obtaining funds from traditional lenders may end up looking a lot lke borrowing from lending club and prosper)

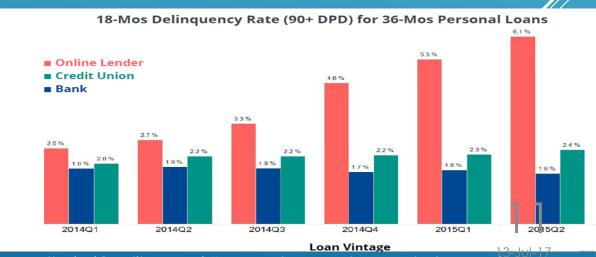
STAGE 2: LOWER RETURN AND HIGHER DEFAULT RATE

Increasingly less competitive APRs

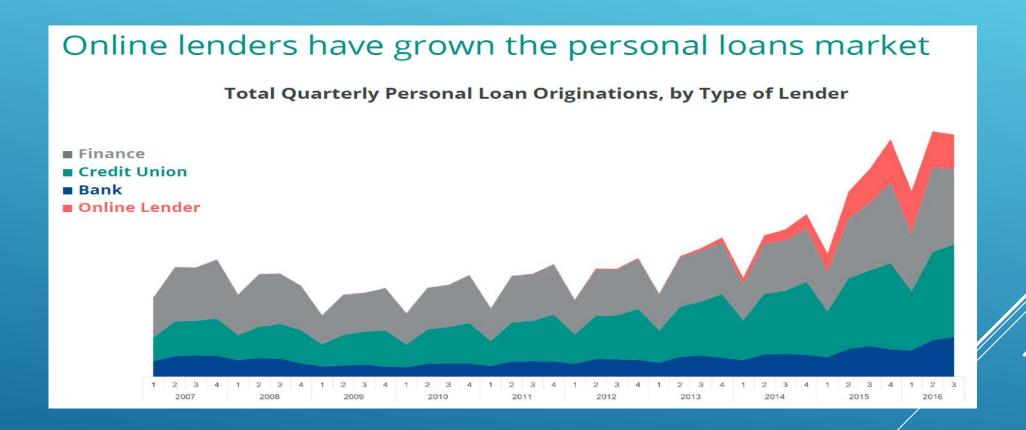


Higher default rate





STAGE 2: SLOWER GROWTH

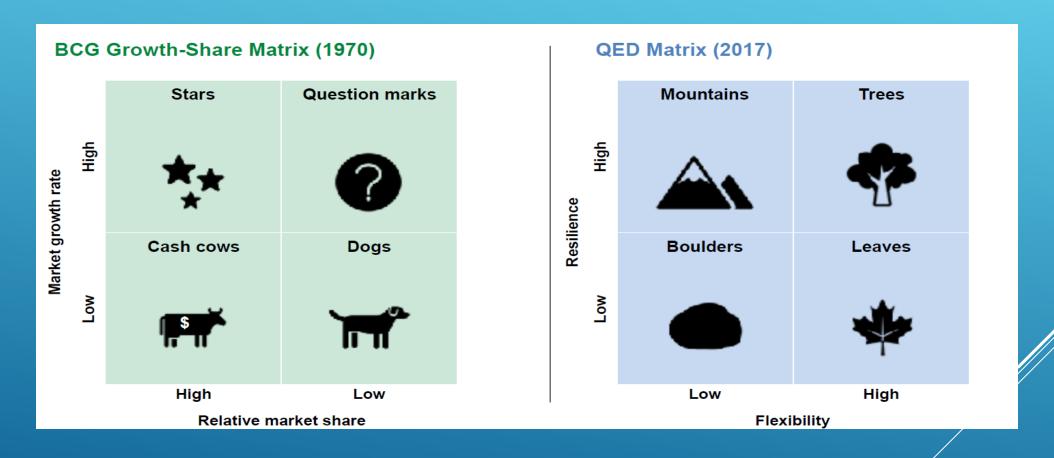


STAGE 3: ONLINE LENDING AND PARTNERSHIP WITH BANKS

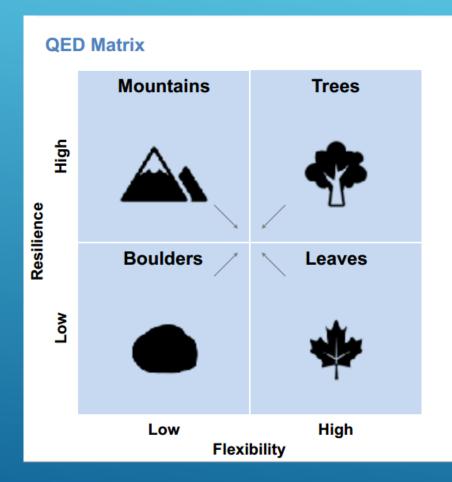
- Traditional banks offer online loans:
 - Goldman Sachs: Marcus, American Express: NextsStep, working capital loans, capital one, discover, etc.
- Fintech companies work with banks (Borrowe-Underwriter-Lender):
 - Bank-Fintech-Bank (BFB): JP Morgan & OnDeck, Santander & Kabbage and Regions Bank & Avant.
 - Fintech-Fintech-Bank (FFB): Lending Club partnerships with Union Bank and the BancAlliance
 - Bank-Fintech-Fintech (BFF): Regions Bank & Fundation, Radius Bank & Prosper.

Reference: Jason Jones, "2017 Will Be A Huge Year For Bank Partnerships", Leng academy, No. 2016, accessed November 20, 2016

STAGE 4: MOVE TO THE CENTER (FUTURE)



STAGE 4: MOVE TO THE CENTER (FUTURE)



- Distinguishing between banks and FinTechs on a single dimension is insufficient
- The QED Matrix reflects trade-offs in the design of financial services institutions
 - Resilience is a function of factors like brand, capitalization, and product suite diversification
 - Flexibility concerns both infrastructure and decision-making – and spans organizational design, technology, culture, talent, and more
- Each quadrant has strengths and drawbacks, so our thesis is that entities should move towards the center of the matrix

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STAGE 4: MOVE TO THE CENTER (FUTURE)

QED Matrix: How to move to the center



Mountains



- Partner and invest in Leaves to experiment with new models
- Shed (or scale back) low ROE businesses
- Shift towards platform model, strong distribution model
- Hire, retain, and empower talent

Boulders



- Focus efforts on local businesses (deposits, CRE, agriculture loans)
- Partner with Mountains / Leaves on national businesses

Leaves



- Diversify offerings to reduce risk and expand customer base
- Partner with Mountains and Boulders to improve distribution

Trees



- Develop bank-like capabilities in deposittaking and risk
- Avoid organizational bloat, technical debt, silo-ing by SBU, etc. common in banks

APPENDIX: MARKETPLACE LENDING IN UK VS CHINA IN 2016

The Year in Review - UK

The Biggest Stories of the Past Year

- Brexit creates uncertainty
- The FCA starts a regulatory review
- The Innovative Finance ISA gets some momentum
- Zopa announced its pursuit of a banking license
- Lord Turner changes his tune on P2P lending

The Year in Review - China

The Biggest Stories of the Past Year

- The CBRC announces official regulation of online lending
- Fintech investment in China now leads the world
- Total loan volume topped 2 trillion RMB (approx. \$300 billion)*
- The number of P2P lending platforms dropped for the first time to 2,448*
- Continued problems with fraud and scandals

^{*}Source: Wangdaizhijai (wdzj.com)



THANK YOU