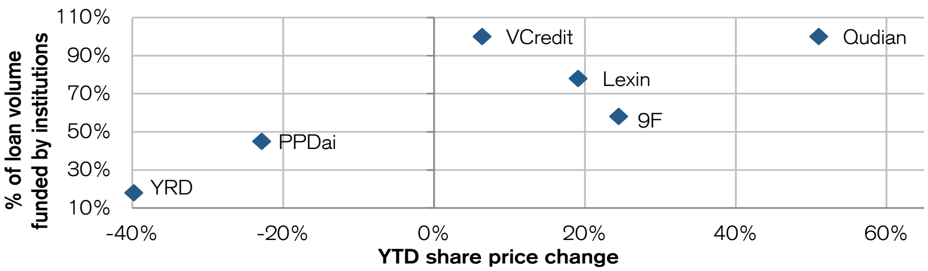
9 October 2019
Equity Research
Asia Pacific | China

China Online Lending Sector

Transformation from a retail-funded model

Diversified Financials | Initiation

Figure 1: Covered online lenders: % institutional funding vs YTD share price return



Note: 9F represents post-IPO share price return. Closing prices as of 8 Oct, 2019. Source: Company data

Research Analysts

Yiran Zhong
852 2101 6125
yiran.zhong@credit-suisse.com

Charles Zhou, CFA
852 2101 6177
charles.zhou@credit-suisse.com

Richie Jiang
852 2101 6198
richie.jiang@credit-suisse.com

Ashley Dai
852 2101 6102
ashley.dai@credit-suisse.com

- **Bracing for an intensifying P2P clean-up.** We see two fundamental conflicts at the core of the P2P model: (1) risk appetite mismatch between investors and borrowers, and (2) high regulatory cost vs small systemic impact. We expect accelerated P2P platform clean-up heading into 4Q, with continued roll-out of high regulatory hurdles while the 'triple-reductions' (i.e., reduction in the number of platforms, outstanding balance, and number of investors) remain in force for an extended period of time—likely through 1H 2020. A majority (~98%) of the currently 708 operating platforms is likely shut down during this process.
- **Picking the best-positioned players in transforming towards institutional funding.** With limited licensing options available for now, loan facilitation (or 'assisted lending') model is the most viable exit strategy for existing P2Ps. Despite a generally negative impact on take rate (higher funding cost and potentially lower APR) and operating margin (higher sales & marketing expense), a faster progress in transformation towards the loan facilitation model will be a key differentiation in loan origination volume growth. In this report, we identify three areas of the online lending business most valued by the licensed financial institutions: (1) customers, (2) asset quality, and (3) regulatory compliance. Lexin and Qudian rank among the best-positioned for transforming towards a 2B model. Yiren Digital ranks last. We adjust the WACC to reflect higher exposure to P2P-related regulatory uncertainty.
- **Stock Calls—prefer Lexin and Qudian.** We initiate coverage on Lexin with OUTPERFORM (TP of US$17.00) and 9F with NEUTRAL (TP at US$11.62). Maintain OUTPERFORM on Qudian (TP US$11.70) and VCredit (TP HK$13.00). We assume coverage on PPDai with OUTPERFORM (TP cut to US$5.80 from US$8.80). We also assume coverage on Yiren Digital with NEUTRAL (TP cut to US$6.92 from US$20). We prefer (1) Lexin for long-term sustainability, thanks to a focused and differentiated customer base and effective risk control, and (2) Qudian for relative defensiveness of its evolving business model amid the regulatory uncertainty.
- **One key risk** is the sustainability of institutional partnership. We believe the on-boarding cycle of 3-6 months reduces banks' willingness to abruptly terminate. Online lenders with stronger risk control should enjoy better funding sustainability than peers.

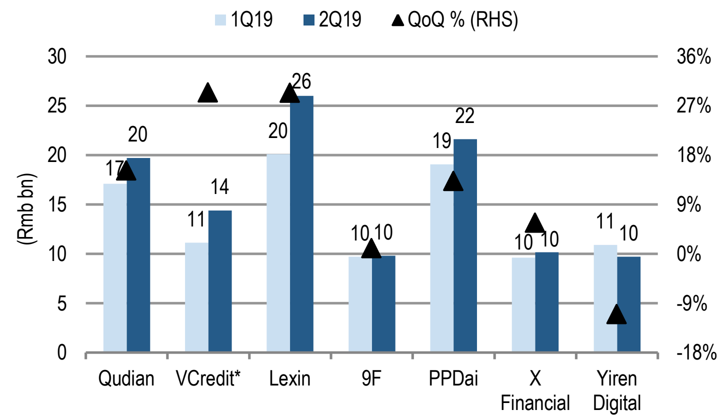
Focus charts

Figure 2: Fintech players under coverage—valuations, target price, and rating recommendations

Ticker	Name	TP New	Currency	Current P/E FY19E	Current P/B FY19E	Rating
LX.OQ	**Lexin**	17.00	USD	4.7	1.6	Outperform
QD.N	**Qudian**	11.70	USD	3.3	1.0	Outperform
2003.HK	**VCredit**	13.00	HKD	5.5	1.1	Outperform
PPDF.N	**PPDai**	5.80	USD	2.5	0.8	Outperform
JFU.OQ	**9F**	11.62	USD	8.2	1.7	Neutral
YRD.N	**Yiren Digital**	6.92	USD	3.8	1.3	Neutral

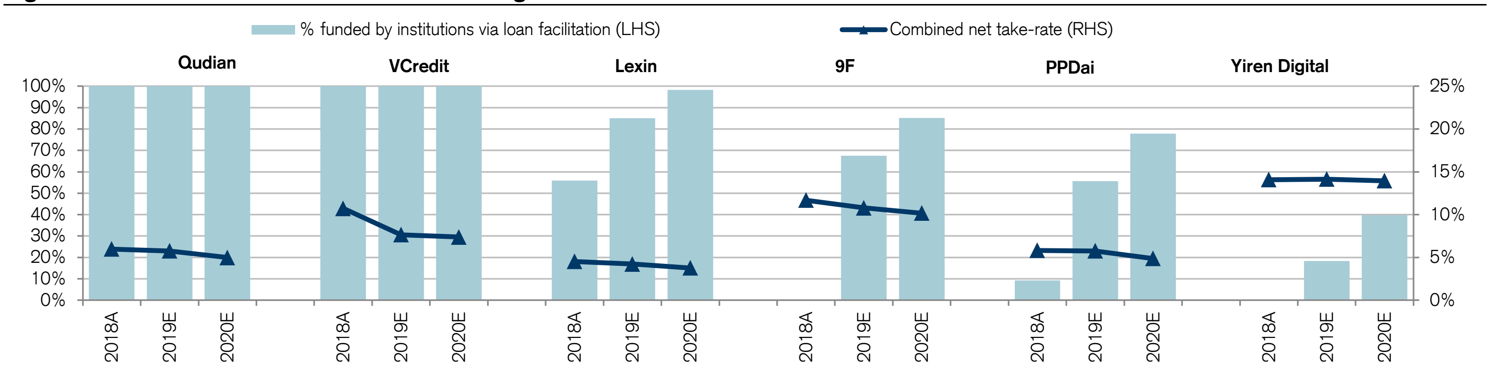
Source: Company data, Credit Suisse estimates

Figure 3: Rising % of institutional funding has been the primary driver of total volume growth during 'triple-reductions'



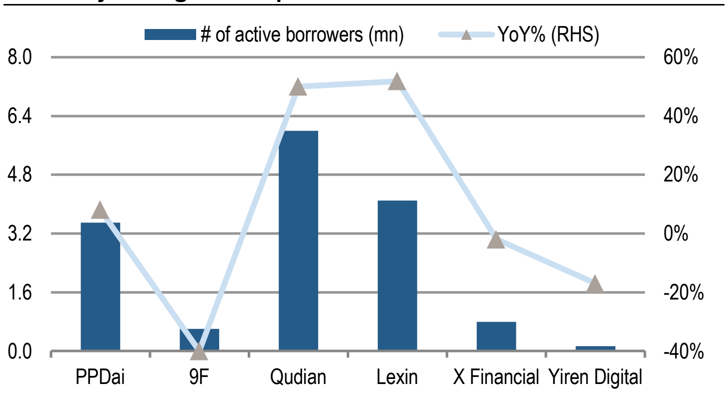
Source: Company data, Credit Suisse estimates

Figure 4: CS forecast—% institutional funding vs take rate



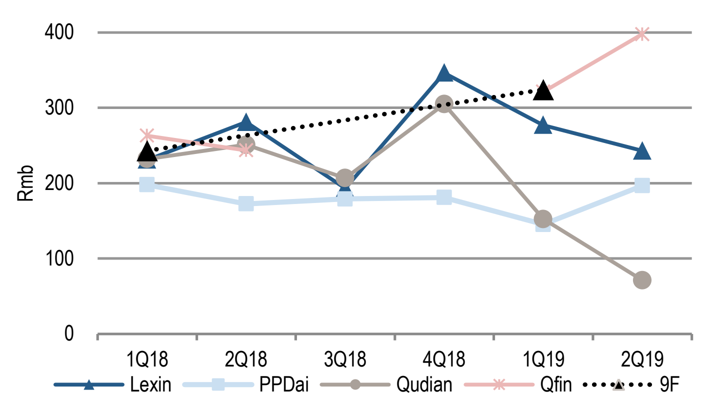
Note: Combined net take-rate reflects on- and off-B/S net revenue divided by total loan origination volume. Source: Company data, Credit Suisse estimates

Figure 5: Qudian and Lexin 2Q19 active borrower growth was markedly stronger than peers



Source: Company data, Credit Suisse estimates

Figure 6: Lexin and Qudian S&M expense per new customer declined YTD, bucking industry trend



Source: Company data, Credit Suisse estimates

Transformation from a retail-funded model

P2P clean-up is set to accelerate in 4Q

We expect accelerated clean-up of P2Ps, due to two fundamental conflicts of the P2P model.

We expect accelerated P2P clean-up heading into 4Q, with continued roll-out of high regulatory hurdles while the 'triple-reductions' remains in force for an extended period of time—likely through 1H 2020. In the meantime, a majority (~98%) of the currently 708 operating platforms will likely shut down during this process. We expect 'trial regulation' for compliant players starting 4Q19, by either registering with high regulatory hurdles or transforming into licensed online micro-lenders/consumer finance companies.

We believe that at the core of the P2P model lie two fundamental conflicts: (1) an inherent mismatch between the risk-profile of borrowers and the risk-appetite of investors; (2) high regulatory cost with retail investor base of 4.5 mn at its peak vs low financial systemic impact relative to the size of overall financial sector.

Impact on listed players: Shifting business models

The repetitive delay of registration deadlines and policy signals sent over the past few months suggest reduced regulatory appetite for P2P registration. Without a registration scenario, the likely exit options for existing players are: (1) acquiring licenses (2) sourcing funding from licensed financial institutions, i.e., loan facilitation, and (3) orderly exiting from the industry.

A faster progress in transformation towards the loan facilitation model will be a key differentiation in loan origination volume growth.

With limited licensing options available, loan facilitation is the most viable exit strategy for existing P2Ps. Despite a generally negative impact on take-rate (higher funding cost and potentially lower APR) and operating margin (higher sales & marketing expense), a faster progress in transformation towards the loan facilitation model will be a key differentiation in loan origination volume growth. Qudian (100% institutional funded as of 2Q19), VCredit (100%), and Lexin (78%) are progressing well ahead of peers. We expect better business sustainability, stronger growth outlook and higher earnings visibility for the platforms that are better positioned in obtaining institutional funding. In this report, we identify three areas of the online lending business most valued by the licensed financial institutions: (1) customers, (2) asset quality, (3) regulatory compliance, and conclude that Lexin and Qudian rank among the best-positioned for transforming towards a 2B model; Yiren Digital ranks last.

Investment recommendation: Prefer Lexin and Qudian

We maintain OUTPERFORM for Qudian and initiate Lexin with OUTPERFORM. We assume coverage of PPDai with OUTPERFORM, and maintain OUTPERFORM on Vcredit. We assume Yiren Digital with NEUTRAL and initiate 9F with NEUTRAL. We prefer (1) Lexin for long-term sustainability, thanks to differentiated customer base and effective risk control, and (2) Qudian for relative defensiveness of its evolving business model amid the regulatory uncertainty.

- For Lexin, we initiate with TP of US$17.00. We believe Lexin has a sustainable business model with comparative advantage in the areas that institutional partners value the most from online lenders: (1) risk control capability, and (2) sustainable customer acquisition. We forecast robust origination volume growth of 71/44/15% YoY for FY19-21E. Our TP of US$17.00 implies FY19-20E P/E of 9.2x and 8.0x, and FY19E P/B of 3.2x.
- For Qudian, we maintain OUTPERFORM and TP of US$11.70. While we raise adjusted net income by 21/52/43% to Rmb4.5/5.9/6.4 bn for FY19-21E to factor in revenue contribution from QD's open platform initiative and expect such shift in revenue structure to significantly lift QE's ROE to 34/32/26% for FY19E-21E vs 24% in FY18, we lower long-term growth to 3% from 5% to reflect lower visibility of the new business. Our TP implies 6.0x FY19E P/E and 1.7x FY19E P/B.

Key risks

Key risks to our thesis include: Sustainability of existing institutional partnership, regulatory uncertainty over loan facilitation, macro headwind causing asset quality deterioration.

Figure 7: Valuation comp table

Ticker	Company	Price	Market Cap	ADT	Credit Suisse Research													
		Last closing	Last closing	1 year	Ratings	Target price		PE (x)			PB (x)		Profit growth			ROE (%)		
		Price curr.	USD mn	USD mn		Price curr.	2018a	2019e	2020e	2018a	2019e	2020e	2019e	2020e	2-yr CAGR	2018a	2019e	2020e
Domestic peers																		
QD.N	Qudian	6.48	1,927	6.9	OPFM	11.7	5.8	3.3	2.5	1.4	1.0	0.7	77%	32%	53%	25%	34%	32%
LX.OQ	Lexin	8.64	1,431	3.0	OPFM	17.0	5.6	4.7	4.1	2.5	1.6	1.1	21%	15%	18%	68%	45%	35%
PPDF.N	PPDai	2.78	853	1.3	OPFM	5.8	2.6	2.5	2.7	1.0	0.8	0.6	-5%	-6%	-6%	52%	34%	24%
2003.HK	Vcredit	7.29	464	0.5	OPFM	13.0	7.8	5.5	3.4	1.2	1.1	0.9	131%	121%	NA	46%	20%	28%
JFU.OQ	9F	12.10	2,346	1.1	NTRL	11.62	8.2	8.2	7.6	2.6	1.7	1.4	7%	8%	8%	NA	NA	NA
YRD.N	Yirendai	6.48	600	1.0	NTRL	6.92	2.7	3.8	3.4	NA	1.3	1.0	-29%	12%	-11%	-435%	79%	34%
QFIN.OQ	QFin	8.60	1,237	1.3	NC	NA	NA	3.2	2.2	0.8	0.6	0.4	302%	48%	NA	-78%	42%	40%
2051.HK	51Credit	3.15	468	0.7	NC	NA	5.3	5.2	3.5	1.0	0.7	0.6	3%	49%	24%	39%	NA	27%
JT.N	Jianpu Tech	2.25	379	0.4	NC	NA	NA	NA	20.4	1.7	1.7	1.6	71%	379%	NA	-25%	-9%	7%
HX.OQ	Hexindai	1.47	70	0.3	NC	NA	3.4	1.9	0.9	0.6	0.5	0.3	84%	114%	98%	46%	80%	39%
US peers																		
TREE.OQ	Lending Tree	313.50	4,072	21.9	NC	NA	55.0	58.1	36.9	11.6	12.0	12.8	0%	63%	28%	30%	21%	21%
GSKY.OQ	Greensky	6.94	1,229	4.1	NC	NA	13.9	12.0	10.1	49.7	NA	10.5	0%	19%	9%	NA	819%	193%
LC.N	Lending Club	11.45	998	2.4	NTRL	22.0	20.8	NA	31.0	1.1	1.1	1.1	67%	417%	NA	-14%	3%	7%
FCH.N	Funding Circle	7.30	1,010	0.0	NC	NA	NA	37.3	NA	19.6	NA	NA	237%	NA	NA	-18%	-10%	-8%
ENVA.N	Enova Internationa	20.43	695	2.2	NC	NA	8.8	5.7	5.3	2.0	NA	NA	54%	7%	28%	22%	26%	24%
AXP.N	American Express	113.65	94,292	110.1	UPFM	108.0	15.0	14.1	13.0	4.3	4.2	3.8	6%	9%	8%	34%	30%	31%
COF.N	Capital One	86.88	40,649	56.2	OPFM	118.0	7.1	7.5	7.4	0.9	0.7	0.7	-4%	1%	-2%	12%	10%	10%
DFS.N	Discover	77.70	24,727	41.5	OPFM	98.0	9.0	8.5	8.5	2.4	2.1	1.9	6%	0%	3%	26%	25%	25%
SYF.N	Synchrony	32.42	21,509	51	OPFM	47.0	7.7	6.5	8.0	1.6	1.5	1.4	18%	-18%	-2%	19%	22%	20%

Note: last close date as of 8 Oct 2019. Source: Company data, Credit Suisse estimates

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P2P clean-up is set to accelerate in 4Q

Our base case is for P2P funding to remain under pressure for FY19E through 1H20E as policy signals sent over the past 1-2 months suggest reduced appetite for a registration-based approach to P2P regulation.

We expect accelerated platform clean-up heading into 4Q, with continued roll-out of high regulatory hurdles while the 'triple-reductions' remain in force for an extended period of time—likely through 1H 2020. In the meantime, a majority (~98%) of the currently 708 operating platforms will likely shut down. We expect 'trial regulation' for compliant players starting 4Q19, by either registering with high regulatory hurdles or transforming into licensed online micro-lenders/consumer finance companies. For our covered platforms with P2P exposure, including YRD (P2P accounting for 80% of 2Q19 loan volume), PPDai (55%), 9F (42%) and Lexin (22%), we assume continued reduction in P2P-funding mix.

- P2P funding will remain under pressure while P2P-funded balance continues to decline for FY19E through 1H20E, and subdued recovery in P2P-funded loan origination volume in 2H20E following trial regulation.
- Online lenders to continue to transform towards an institutional funding model, which will remain a key driver of loan volume growth in FY19-21E.

The repetitive delay in the P2P registration deadlines and policy signals sent over the past 1-2 months suggest reduced appetite for a registration-based approach to P2P regulation:

- In early July, the two 'leading group offices' held a meeting on the regulatory progress of the P2P sector and setting the policy goals for 2H19. Specifically, 3Q's regulatory priorities are (1) maintaining 'triple-reductions' (reduction in the number of platforms, outstanding balance, and number of investors), (2) allowing few quality players to transform into licensed lenders, and (3) ensuring an orderly exit of the rest of the sector. Selective compliant players should be included for 'trial regulation' in 4Q. No time-line for registration has been specified, nor was the word 'registration' mentioned.
- A few leading P2P platforms have exited. In July, Lufax (outstanding loan balance of ~Rmb98 bn, largest in China) reportedly applied for a consumer finance license while winding down its P2P business. In August, Zendai's two P2P platforms (combined balance of ~Rmb10 bn) reportedly suspended new lending due to strict regulatory hurdles imposed by the Shanghai finance authority. Zendai also claimed that its business relationship with its custodian bank was abruptly terminated.
- Indeed, custodian banks and third-party payment companies have reportedly been pressured by local finance authorities to avoid providing settlement services to P2P-related payments over the past month—another way to accelerate clean-up of the industry. Agriculture Bank of China has cut the fast payment channel for Yirendai and Weidai. According to Caixin, 80-90% of P2P-related capital flows go through third-party payment companies.
- We view the 5 September announcement to include P2Ps into the Baihang credit reference system as a way to recoup borrower data before more platforms exit, and promote healthy development of the sector in the long run.

Despite the original cause of practicing inclusive finance, the P2P model bears two conflicts at its core:

- Aside from prevailing practices of asset pooling and duration mismatch, the P2P model inherently carries a mismatch between the higher risk-profile of borrowers and the lower risk-appetite of the retail investors: (1) on one hand, the borrowers typically served by P2P platforms are underserved by banks and other financial institutions, with limited credit history and charged with APRs of 24-36% or above; (2) on the other hand, the lenders are retail investors with limited capacity in understanding and pricing risk. Many of the investors had been first led onto the platforms by some form of loss protection offered by the platforms, a practice now prohibited by regulators.
- High social and regulatory cost vs low systemic financial risk: (1) the number of P2P investors reached 4.5 mn, at its peak in late-2017 (Aug-2019: 1.9 mn), and a series of

disorderly shut-downs of problematic P2Ps in 2H18 caused disruptions to social stability. The hefty social cost implies high regulatory cost; Meanwhile, (2) the outstanding balance of P2P lending was Rmb1.3 tn at its peak (Aug-2019: Rmb643 bn), implying low financial systemic impact relative to the size of total bank loans/total financial sector asset of Rmb147 tn/Rmb278 tn. Indeed, the local governments' finance offices are the leading regulatory body responsible for registration and disposition of local platforms (Figure 8).

Figure 8: P2P outstanding balance at only 6.8% and 0.6% of total consumer credit and total bank lending, respectively, as of end-2018

(Rmb bn)	2014	2015	2016	2017	2018
Short-term bank lending to consumer	3,249	4,101	4,931	6,804	8,799
Consumer finance companies (top 4)	N/A	N/A	N/A	195	237
Micro-loan companies	942	941	927	980	955
Auto finance companies	320	391	521	669	769
P2P platforms	**129**	**388**	**680**	**1,042**	**789**
Total consumer credit	**4,640**	**5,821**	**7,059**	**9,690**	**11,549**
Total bank lending to consumer	15,366	18,952	25,047	31,519	37,790
Total RMB bank lending	81,677	93,954	106,604	120,132	136,297

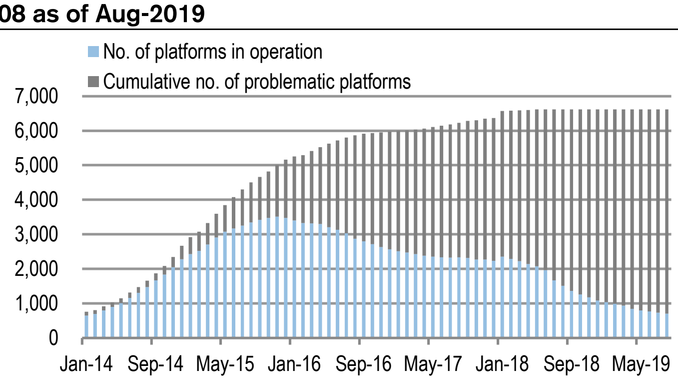
Source: CEIC, NIFA, Credit Suisse estimates

Figure 9: China's P2P regulatory landscape—local governments and industry associations are leading the efforts to register and clean up local platforms

Level	Regulatory body	Relevant Office	Function
Central	PBoC	Office of the Leading Group for the Special Campaign against Internet Financial Risks	Setting the policy objectives for internet finance
Central	CBIRC	Inclusive Finance Department; Office of the Leading Group for the Special Campaign against P2P Lending Risks	Forming regulatory framework for P2P industry
Local	Local government finance offices	Joint Office for the Special Campaign against P2P Lending Risks	Leading the efforts in local platform registration and disposition
Local	Local CBIRC offices		Jointly oversee P2P platforms with local government finance offices
Industry	National Internet Finance Associate		Setting industry standards for disclosure, contract, custodian accounts, etc.

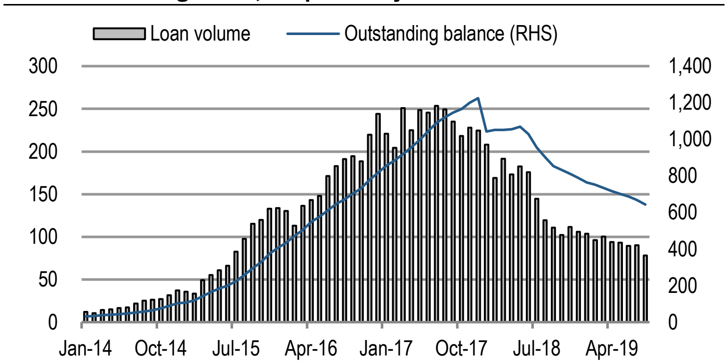
Source: Credit Suisse estimates

Figure 10: Number of P2P platforms in operation declined to 708 as of Aug-2019



Source: Company data, Credit Suisse estimates

Figure 11: P2P loan volume and balance are down 35% and 29% YoY in Aug-2019, respectively



Source: Company data, Credit Suisse estimates

Impact on listed players: Shifting business models

Exit options for existing players

In light of a low probability for an eventual registration, the most likely paths for the existing P2P-funded online lenders are (1) acquiring licenses, (2) sourcing funding from licensed financial institutions, (3) for the rest, orderly exiting from the industry. Pragmatically, we think the trial registration of the P2Ps is hard to implement without appearing to endorse the ones that have been chosen to pass, effectively a licensed-base model anyhow.

Lexin and Qudian rank among the best-positioned for transforming towards a 2B model.

Despite a generally negative impact on take-rate (higher funding cost and potentially lower APR) and operating margin (higher sales & marketing expense), a faster progress in transformation towards the loan facilitation model will be a key differentiation in loan origination volume growth. Qudian (100% institutional funded as of 2Q19), VCredit (100%) and Lexin (78%) are progressing well ahead of peers. We expect better business sustainability, stronger growth outlook, and higher earnings visibility for the platforms that are better positioned in obtaining institutional funding. Below, we identify three areas of the online lending business most valued by the licensed financial institutions: (1) customers, (2) asset quality, (3) regulatory compliance, and conclude that Lexin and Qudian rank among the best-positioned for transforming towards a 2B model; Yiren Digital ranks last. We adjust the WACC in the DCF valuation models for our covered companies according to their relative position in the current regulatory environment.

License options: Online micro lending license more likely

If P2P regulation adopts a license-based model, the two potential license options are consumer finance license and online micro-credit license:

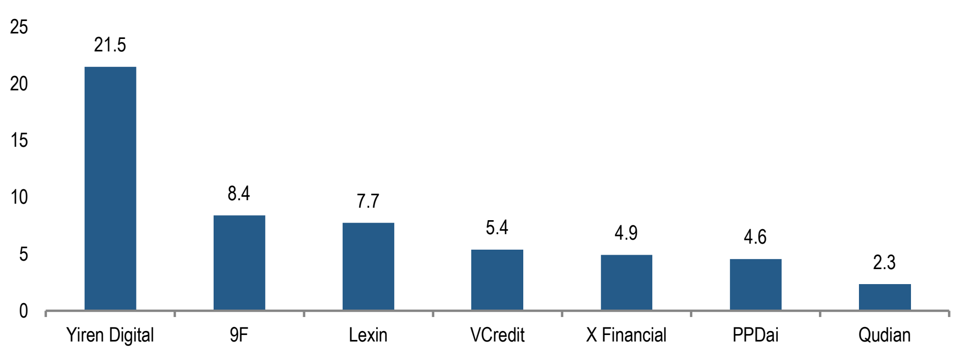
- Consumer finance licenses are much more desirable given better access to funding and higher leverage ratio, but they are notoriously difficult to acquire due to demanding regulatory standards on capital and shareholders (Figure 12). Only 27 consumer finance licenses have been granted thus far, typically to entities with joint shareholding by commercial banks and companies with strong consumption scenarios.
- The existing online micro-credit companies are regulated along the same lines of traditional micro-credit ones (Figure 12), without a nation-wide regulatory standard. The approval of online micro-credit licenses have been suspended altogether since Nov-2017.
  - In April, a uniform nation-wide standard was reportedly being formulated by the CBIRC, with 3-5x leverage ratio, Rmb500 mn paid-in capital requirement, and Rmb200-300k/Rmb1 mn maximum loan size for individual/corporate borrowers.
  - On 11 September 2019, CBIRC's Inclusive Finance Department echoed the plan to regulate the online micro-lending license at the national level, while adopting a differentiated approach to regulating the industry. Those platforms with (1) consumption scenarios, and (2) small ticket-size loan products are more likely to enjoy regulatory support.
  - Even at 5x leverage, this implies much lower capital efficiency than most listed online lenders (Figure 13).

Figure 12: Comparison between consumer finance license and traditional (non-online) micro-credit license

	Consumer finance	Traditional micro-credit
Business scope	- Individual consumer loan - Deposit from domestic subsidiaries/shareholders - Borrowing from domestic financial institutions - Issuance of financial bonds - Access to interbank funding - Advisory/agency business related to consumer finance - Insurance agency business for consumer finance related products - Fixed income securities investment - Other businesses approved by the CBIRC	- Micro-loan business - Other businesses approved
Regulatory requirement		
Regulatory body	CBIRC	Local municipal bureau of finance
Minimum registered capital	Rmb300 mn	Rmb5 mn for limited liability company Rmb10 mn for joint-stock limited company
Leverage	10x	1 - 3x
Shareholder	Major shareholder at least 30% shareholding Financial institutions: - At least 5 years of consumer finance experience - Assets of at least Rmb60 bn at latest financial year-end - Profit making for latest two consecutive financial years - Cannot transfer shares in five years Non-financial institutions: - Operating revenue of at least Rmb30 bn in latest financial year - Net assets at least 30% of total assets - Profit making for latest two consecutive financial years - Cannot transfer shares in five years	Single shareholder at most 10% shareholding
Maximum loan size	Rmb200k	5% of net capital
Other requirements	- Interbank borrowing up to 100% of net capital - Asset loss reserve adequacy ratio at least 100% - Investment balance at most 20% of net capital	- Interbank borrowing up to 50% of net capital - Asset loss reserve adequacy ratio at least 100% - Interest floor is 0.9 times the base interest rate published by the PBOC
Existing players		
No. of players	27	7,967 (at Mar-2019)
Outstanding loan balance (Rmb bn)	237 (at Dec-2018, for Top 4 players)	927.2 (at Mar-2019)

Source: Company data, Credit Suisse estimates

Figure 13: Leverage comparison between major listed online lending platforms



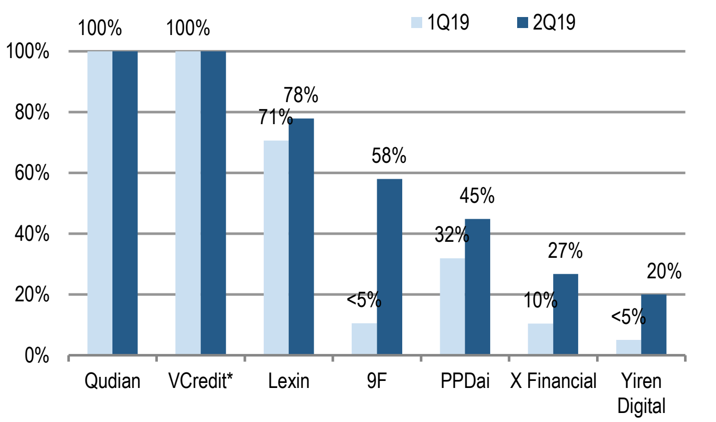
Source: Company data, Credit Suisse estimates

Loan facilitation: The most viable exit strategy

We expect better business sustainability, stronger growth outlook, and higher earnings visibility for the platforms that are better positioned in obtaining institutional funding.

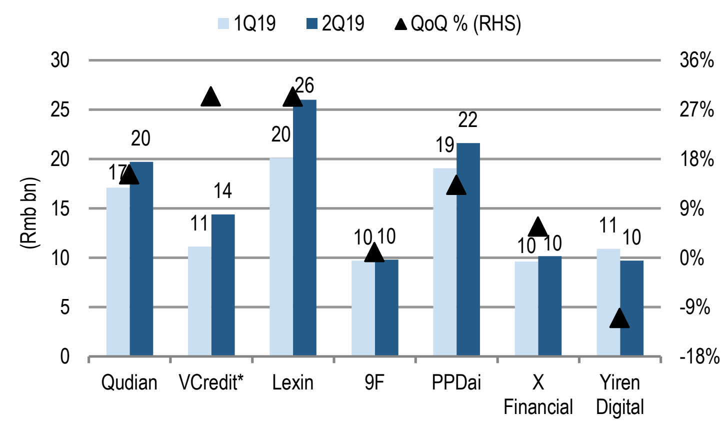
The transformation towards the assisted-lending model has become a key differentiator in listed online lenders' loan origination volume growth, as it has been largely tolerated by regulators while P2P funding entered into zero/negative growth during 'triple-reductions' over the past year. As shown in the figures below, Qudian (100% institutional funded), VCredit (100%), and Lexin (78%) are progressing well ahead of peers in sourcing institutional funding partners. They also enjoy relatively stronger loan volume growth vs peers YTD. We expect better business sustainability, stronger growth outlook, and higher earnings visibility for the platforms that are better positioned in obtaining institutional funding.

Figure 14: Rising % of loan origination volume funded by institutional partners…



*Data for VCredit uses 1H19 and 2H18. Source: Company data, Credit Suisse estimates

Figure 15: …is the primary driver of total volume growth for P2P platforms during 'triple-reductions'



*Data for VCredit uses 1H19 and 2H18. Source: Company data, Credit Suisse estimates

The loan facilitation (or assisted lending) model involves online lenders facilitating loans for licensed financial institutions, including banks, consumer finance companies and trusts. This directly addresses the two mismatches we identified in a P2P model above, i.e., replacing retail investors with institutions for which (1) managing risk is a core-business, and (2) business that is strictly regulated.

The online lender provides some form of guarantee to the funding FIs (typically 5-10%). The guarantee service is typically provided by third-party financing guarantee companies or the online lenders' own licensed guarantee company. In many cases, the online lenders provide back-to-back guarantees for external guarantee companies.

SWOT analysis for loan facilitation by online lenders

Thus far, the partnering institutions include banks (mostly city commercial banks and internet banks), consumer finance companies and trusts. Chinese banks have been expanding swiftly into retail over the past few years, driven by NIM pressure amid interest rate liberalisation and NPL pressure from corporate loans. Some regional banks have also used partnerships with internet banks/fintech companies to circumvent their geographic restriction. Below we provide a SWOT analysis for the loan facilitation model as compared to their institutional partners:

Strength: Where is the value creation? Given the operations-heavy nature involved in acquiring the customers and processing small ticket-size consumer loans, from aggregating data, assessing risk to collecting overdue loans, we believe there is still a learning curve for many banks/traditional FIs in building a competitive in-house capability to serve the >24APR borrower cohort. At the core of loan facilitation lie three key competitive advantages: (1) the risk assessment capability for effective customer acquisition and segmentation, (2) the large amount of transactional data accumulated over the years for borrowers with little credit reference data accessible by traditional financial institutions, (3) a system that enables fast credit line approval and better user interface that enhances user experience.

Weakness: Where they are likely to be squeezed by institutional partners? (1) Depending on the institutions' risk appetite, many require a lower-APR product other than the 36%-APR products currently funded by the P2P model, (2) most banks require some form of guarantee or insurance protection. Lenders typically commit to a 5% deposit, (3) funding availability is susceptible to the delinquency performance.

Opportunities: (1) a new driver of volume growth; (2) potential for further cooperation to provide a wide range of fintech services including payment, risk control, big data, etc. Fintech's role to enhance the quality and efficiency in financial services is generally supported by the PBoC.

Threat: (1) tightening regulatory requirements on the loan facilitation business model, including reining in the banks' out-sourcing of risk control function and local banks circumventing their geographic restriction (more details below), (2) compared with retail funding, institutional funding is much more concentrated, leaving the facilitators at greater risk of suffering from funding pull-out, (3) technology in-housing and take-over of customer base by the banks.

Potential regulatory headwind down the road? We expect a low policy priority this year

Looking forward, we think the primary regulatory risks around the loan facilitation model lie with (1) the practice of implicit guarantee, to the extent that the online lenders are positioned as an 'information intermediary' under the current regulatory framework, (2) cooperation with city/rural commercial banks, restricting their attempt to expand beyond local operations, (3) a tighter control over the usage of loan proceeds, and a stronger emphasis on consumption scenario.

However, we expect a relatively high tolerance level this year and limited impact on the profitability of loan facilitation given:

- The regulatory priority remains the ongoing clean-up of P2Ps;
- Consumer spending is supported by macro policy amidst the US-China trade negotiations. On 27 August, the State Council released a series of measures to boost domestic consumption, among which was to encourage consumer finance's support to consumption demand.
- The loan facilitation model embodies P2P platforms' transformation to a '2B model'. The policy stance is generally positive towards fintech's role in helping to accelerate the transformation of traditional financial institutions. On 22 August, the PBoC released the 'Fintech Development Plan for 2019-21', in which it acknowledges and encourages fintech's use to enhance the quality and efficiency in financial services.

Thus far, there has been a vacuum of regulatory guidance that either assigns the regulatory authority or specifies the business boundaries of the loan facilitation model. There is no licensing requirement for loan facilitators. Relevant regulations have been imposed only on the licensed financial institution side thus far, based on the general principles that financial institutions should not outsource key risk-control processes to loan facilitators. Specifically, financial institutions are not allowed to rely on credit enhancement services provided by online lenders without a financing guarantee license or cooperation with third-party guarantee companies.

Figure 16: Regulations relevant to loan facilitation model

Release date	Authority	Relevant regulation	Guidance specific to the assisted-lending model
Dec-17	Office of the Leading Group for the Special Campaign against Internet Financial Risks; Office of the Leading Group for the Special Campaign against P2P Lending Risks	Circular 141: Notice on Rectification of Cash Loan Business	Assisted-lending model is permitted, but financial institutions are not allowed to rely on credit enhancement services provided by online lender without a financing guarantee license or cooperation with third-party guarantee companies.
Jan-19	Office of the Leading Group for the Special Campaign against Internet Financial Risks; Office of the Leading Group for the Special Campaign against P2P Lending Risks	Circular 175: Circular on the Classification and Disposal of Risks of Online Lending Institutions and Risk Prevention	Encouraged leading online lenders to transform into online micro-credit company, assisted-lending provider, or directing traffic to licensed asset management institutions.
Jan-19	CBIRC	Opinions on Advancing Rural Commercial Banks' Adherence to Their Position, Governance Enhancement and Improvement of Financial Service Capabilities	Rural commercial banks should focus on local, county and community services and prudently engage in integrated and cross-regional operations
Jan-19	Zhejiang CBIRC	Notice on Enhancing Risk Control of Internet Assisted Lending and Joint Lending	Local banks without online risk management capacity should avoid conducting online lending via cooperation with loan facilitators
Apr-19	Beijing Internet Finance Association	Notice of Strengthening Compliance and Risk Control by Loan Facilitators	Loan facilitation is defined as lending by financial institutions -- based on their risk review -- to qualified borrowers referred by facilitators, who screen out the borrowers via their proprietary risk control systems and channels.
Aug-19	State Council	Guidance on Promoting the Healthy Development of the Platform Economy	Providers of financial information intermediation services and transaction facilitation services should be legally subject to entry management.

Source: Company data, Credit Suisse estimates

Picking the best-positioned to transform

We expect better business sustainability, stronger growth outlook and higher earnings visibility for the platforms that are better positioned in obtaining institutional funding. We identify three areas of the online lending business most valued by the licensed financial institutions: (1) customers, (2) asset quality, (3) regulatory compliance. We provide a framework with measures that differentiates online lenders in these three areas, in addition to the current level of reliance on P2P funding. We assign scores of one to five to our covered companies, with higher score representing a lower reliance on retail funding, more attractive customer base, better asset quality, less regulatory compliance risks, and vice versa.

We provide a framework to assess online lenders' relative position in transformation towards institutional funding. Lexin ranks first, followed by Qudian. Yiren Digital ranks last.

- **Efficient customer acquisition and a high-quality customer base**. P2P platforms with better quality customer base will have a smoother transformation than peers. Those with a lower-quality customer base can start by directing the best tranches of asset to institutional partners, but customer acquisition cost will eventually exert pressure on operating margin. The metrics we evaluate are:
  - (1) The characteristics of borrower cohort and the size of borrow base: Lexin scores highest given its targeted borrower base of educated young adults, followed by Qudian for its large and quality borrower base acquired through previous cooperation with Ant Financial. We do not see a clear differentiation for the rest.
  - (2) Effectiveness in customer acquisition, as reflected by the diversity of acquisition channels: We prefer those with strong consumption scenarios and membership programmes such as Lexin and 9F, followed by YRD, thanks to their offline channels. Qudian's active borrower enjoyed strong growth in 2Q, but with higher credit cost. The rest rely more on online advertising and search engine marketing, which is increasingly expensive.

- **Proven risk control capability and benign asset quality trends.** Given licensed FIs' low tolerance of NPL, online lenders' asset quality metrics will be followed closely, and deterioration in asset quality can quickly lead to the pull-out of institutional funding. Furthermore, better risk assessment translates to better ability to identify customers by risk segments for targeting different institutional partners with differentiated risk appetite. The metrics we evaluate in this category are:
  - (1) delinquency trends in 2Q19: Improved delinquency trends for PPDai; followed by M3+ delinquency improvement for 9F and VCredit; slight pick-up for in Lexin's M3+ delinquency; Qudian experienced a notable pick-up in delinquency, partly due to its credit trial programme; For Yiren Digital, while the delinquency ratios for its 3Q18 vintage suggest early signs of stabilisation in asset quality, those for the 2017 vintages should continue to worsen as they complete the cycle.
  - (2) average loan amount. We expect platforms with larger average loan amount to be more vulnerable to an economic down-cycle. Yiren Digital's average loan amount is largest due to its differentiated product strategy, followed by 9F (~Rmb15,600). The rest are clustered at around Rmb6-7,000 range except for Qudian (~Rmb3,300).
- **Business models and products with lower compliance risk** are obviously preferred by financial institutions to avoid business disruptions and negative publicity. Metrics we look at include:
  - Lower APR: All the covered companies have nominal APR of below 36%. By IRR-method most except Lexin cluster around the upper bound of the APR 24-36 category, with Yiren Digital and 9F above 36.
  - Whether a consumption scenario is present: We differentiate between those with proprietary e-commerce platforms. Lexin ranks highest with its own e-commerce channel, Fengqile (quarterly GMV of Rmb1.9 bn). Its 'Lehua Card' also allows consumers use Lexin's installment purchase services for payments using WeChat Pay. 9F's online shopping platform One Card Mall provides products from e-commerce partners such as JD.com and NetEase, offline users can draw credit limits for payments to merchants connected by China UnionPay. Qudian also offers installment credit to users' merchandise purchase offered on its marketplace.
  - Status regarding guarantees. All of the companies under our coverage have either attained a financing guarantee license via subsidiaries or cooperate with insurance companies and/or third-party guarantee companies to provide guarantee services. We rate 9F highest given its partnership with China PICC P&C provides insurance protection to loans with terms of no more than 12 months. Qudian scores second as its revenue structure shifts towards the open platform initiative, which does not strictly require a guarantee commitment. Lexin has a small portion (less than 15%) of loan facilitation volume under a non-guarantee model.

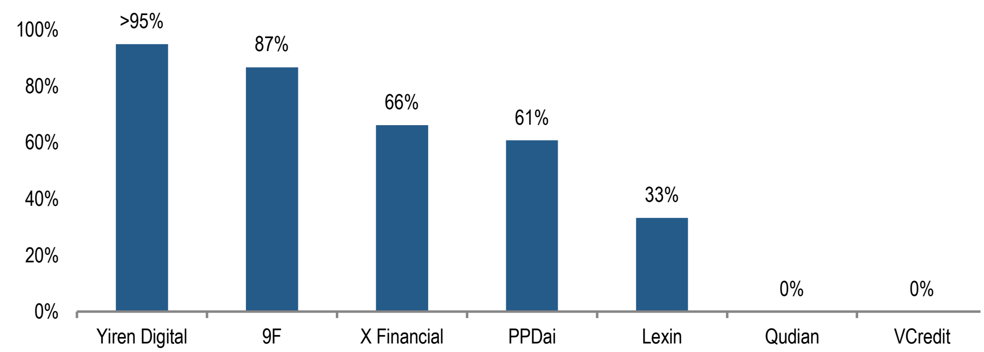
Ranking the total scores from high to low, the following table shows the best- to worst-positioned platforms in the current regulatory environment. Lexin ranks first, followed by Qudian. Yiren Digital ranks last.

Figure 17: Online lenders' relative position in obtaining institutional funding

	Current institutional funding		Customers		Asset quality		Regulatory compliance			Total Score
	% institutional funding by loan volume	% institutional funding by loan balance	Quality of customer base	Effective customer acquisition	Delinquency trend	Average loan amount	APR	Consumption scenario	Method of providing guarantee	
Lexin	4	4	5	5	3	3	5	3	3	**35**
Qudian	5	5	4	2	2	4	4	3	4	**33**
VCredit	5	5	2	2	4	3	4	2	2	**29**
9F	2	1	2	4	4	2	3	3	5	**26**
PPDai	3	3	2	2	5	3	4	2	2	**26**
Yiren Digital	1	1	2	3	2	1	3	2	2	**17**

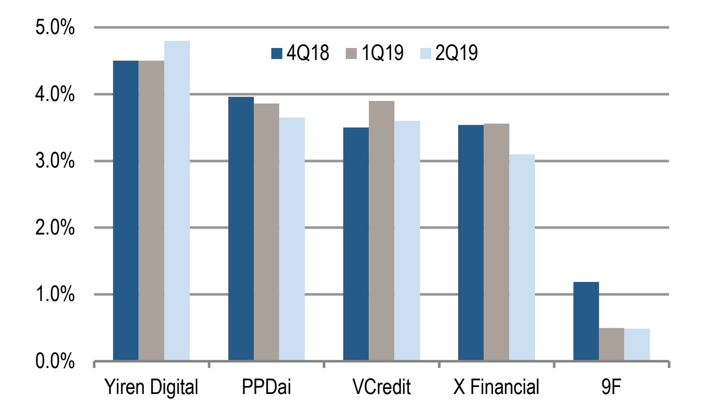
Source: Company data, Credit Suisse estimates

Figure 18: P2P outstanding balance still accounts for >50% of outstanding loan balance for YRD, 9F, XYF and PPDF



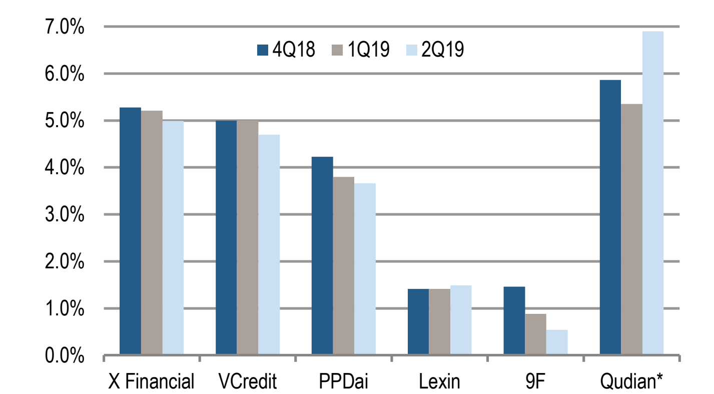
Note: Data as of 2Q19 for Vcredit, Lexin, YRD, X Financial, PPDai and Qudian; 1Q19 for 9F. Source: Company data, Credit Suisse estimates

Figure 19: <90 days delinquency rate



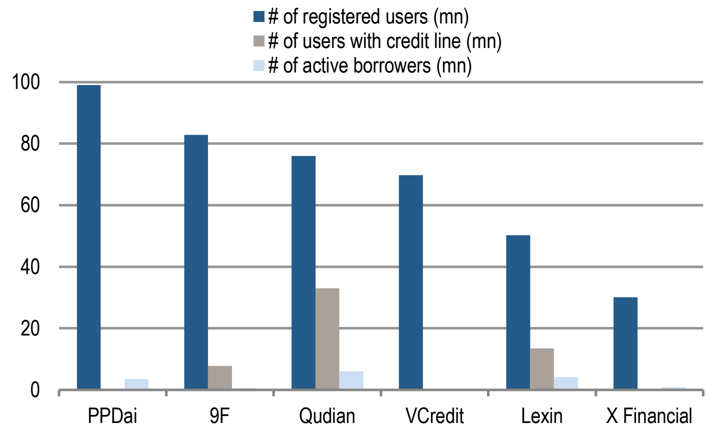
Source: Company data, Credit Suisse estimates

Figure 20: 90-180 days delinquency rate



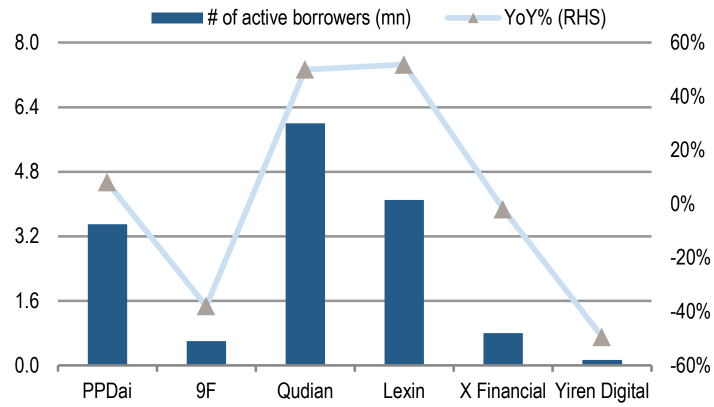
*Represents M3+ delinquency. Source: Company data, Credit Suisse estimates

Figure 21: PPDai, 9F and Qudian have the largest registered user base



Note: Data not available for Yiren Digital. Source: Company data, Credit Suisse estimates

Figure 22: Qudian and Lexin's 2Q19 active borrower growth was markedly stronger than peers



Source: Company data, Credit Suisse estimates

Figure 23: Peer comp table

	Lexin	Qudian	VCredit	PPDai	9F	Yiren Digital
Borrower/ investor						
Borrower profile	Educated young adults aged between 18 and 36 in China	Young consumers, 87% of active borrowers between ages of 18 and 35	Prime and near-prime borrowers typically have bank accounts and credit cards but are under-served by traditional financial institutions	80% of borrowers are between ages of 20 and 40	Young borrowers who are financially literate; 93% of borrowers are between ages of 18 to 35	Prime borrowers, i.e., credit card holders with stable credit history and income for Yirendai. For CreditEase, 91.7% of the borrowers have credit record, aged around 40 on average
# of registered users (mn)	50.2	76	69.7	99	82.8	N/A
# of cumulative borrowers (mn)	N/A	18.3	N/A	16.5	9.8	4.5
# of users with credit line (mn)	13.5	33	N/A	N/A	7.8	N/A
# of active borrowers (mn)	4.1	6	N/A	3.5	0.6	0.14
YoY%	52%	50%	N/A	8%	-38%	-49%
# of cumulative investors (mn)	0.5	N/A	N/A	0.7	2.9	2.2
# of active investors (mn)	N/A	N/A	N/A	N/A	0.9	0.7
Repeat borrowing rate	68%	88%*	N/A	77%	83%	36%
Customer acquisition channel	- E-commerce channel on Fenqile - Word-of-mouth referrals - Cooperation with reputable commercial banks, other E-commerce channel and network service platform - Online marketing	- Word-of-mouth referrals - Online mobile app - Credit trials on existing user base	- Online channels - Internet traffic referrals from partners/ third-party online platforms - Offline outlets (shifted focus to borrower verification for O2O products)	- Online advertising: e.g. Tencent, Jinri Toutiao - Online partnership: e.g. 58.com, Rong360.com - Search engine marketing: e.g. Baidu and Sougo - Offline partnership	- Word-of-mouth marketing - General online marketing: e.g. search engine marketing, social media advertising - Online video platforms - Loyalty program - Partner referral	- Online marketing - Offline network channel
Borrower acquisition cost (Rmb)	119	N/A	N/A	190	312	N/A
Loan product						
Types of loan product (% of total loan origination volume)	(1) Personal installment loan (96%) (2) Installment purchase loan (4%)	(1) Cash credit products (2) Merchandise credit products	(1) Credit card balance transfer products (41%) (2) Consumption credit products (41%) (3) Online-to-offline credit products (18%)	(1) Standard loan products (98.3%) (2) Other loan products: e.g. revolving credit card loan (1.7%)	(1) Revolving loan products (88.4%) (2) Standard loan products (non-revolving) (9.9%) (3) Direct lending program/ traffic referral services (1.6%)	Standard loan products - Unsecured consumer loans (majority) - Secured consumer loans (Auto/housing) - Unsecured SME loans
Average loan amount (Rmb)	6,341	3,283	7,796	6,148	5,668 (Revolving loan products) 7,624 (Standard loan products)	60,000-70,000

Note: 2Q19 data unless otherwise specified. For 9F, # of registered users and active borrowers are 2Q19 data, others are 1Q19 data. *Qudian repeat borrowing rate based on 2018 data. Source: Company data, Credit Suisse estimates

Figure 24: Peer comp table (continued)

	Lexin	Qudian	VCredit	PPDai	9F	Yiren Digital
Average loan duration (months)	12.8	8.4	9	8.8	23 (Revolving loan) 21 (Standard loan)	24-36
Outstanding loan balance (Rmb bn)	40.6	28.7	15.8	32	59.2	58.1
Nominal APR	14%	20%	24%	23%	11.5% (Revolving loan) 9.3% (Standard loan)	20-25%
Effective APR (IRR basis)	25%	34%	>36%	36%	>36%	39%
Funding structure						
Quarterly loan origination volume by funding channel	- 22% individual - 78% institutional	- 0% individual - 100% institutional	- 0% individual - 100% institutional	- 45.2% individual - 44.8% institutional	- 42% individual - 58% Institutional	- >95% individual - <5% institutional
Outstanding loan balance by funding channel	- 33% individual - 67% institutional	- 100% Institutional (incl. 20.4% own equity)	- 0% individual - 100% Institutional	- 63% individual - 38% institutional	- 81% individual - 19% institutional	- >95% individual - <5% institutional
Institutional partnership	100+ institutional funding partners, including commercial banks, consumer finance companies and other licensed financial institutions, such as partnerships with ICBC and China Minsheng Bank	~30 institutional funding partners (including open-platform business)	38 licensed institutional funding partners; facilitation model with 27 (banks and consumer finance)	20+ institutional funding partners with more than Rmb45 bn of credit lines. Around half are commercial banks and consumer finance companies	More than Rmb70 bn credit line approved by 20+ institutional partners under direct lending program as of end-June	10+ institutional funding partners with ~Rmb30 bn credit line
Risk management						
<90 days delinquency rate	2.49%*	N/A	3.60%	3.65%	0.49%	4.80%
90-180 days delinquency rate	1.49%	6.90%	4.70%	3.66%	0.54%	
Charge-off rate by vintage (for loans originated in 2017)	M6+: just over 2.5%	M6+: <2.6%	N/A	M1+: 6.8%	M3+: below 8%	M3+: 14.0%
Protection of investors/funding partners	- Quality assurance program in Juzi Licai (Jul-2017 to Apr-2018) - Risk safeguard scheme (since Apr-2018) - Financial guarantee provided by Shenzhen Lexin Financing Guarantee	- Fraud prevention - Credit assessment	- Risk management engines: e.g. anti-fraud engine, user portrait engine	- Quality assurance fund (discontinued from Feb-2018) - New quality assurance fund (since Feb-2018) - Investor reserve fund (discontinued from Jan-2018)	- Quality assurance fund (Dec-2013 to Aug-2016) - Third-party insurance and guarantee investor protection plan (since Aug-2016) - Enhanced investor protection plan (since Sep-2017) - Further upgrade to investor protection plan (since Jan-2018)	- Guarantee system (Aug-2013 to Jan-2015) - Quality assurance program (Jan-2015 to May-2018) - PICC P&C arrangement for 12-M term loans (Since Jan-2018) - Third-party guarantee (Since May-2018)

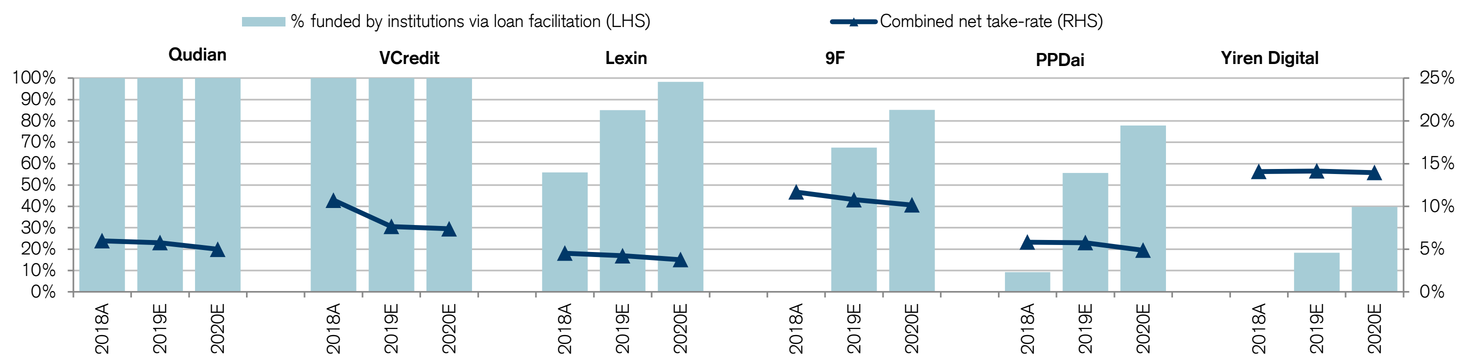
Note: 2Q19 data unless otherwise specified. For 9F, outstanding loan balance, funding structure and delinquency rates are 2Q19 data, others are 1Q19 data. *Lexin <90 days delinquency rate based on 4Q18 data. Source: Company data, Credit Suisse estimates

Financial forecasts: Volume recovery vs lower profitability

For the listed online lenders that used to rely on retail funding, we expect volume growth to be driven by institutional funding going forward. Beyond volume growth, we expect the transformation towards institutional funding to weigh on two fronts: (1) take-rate, and (2) sales & marketing expenses.

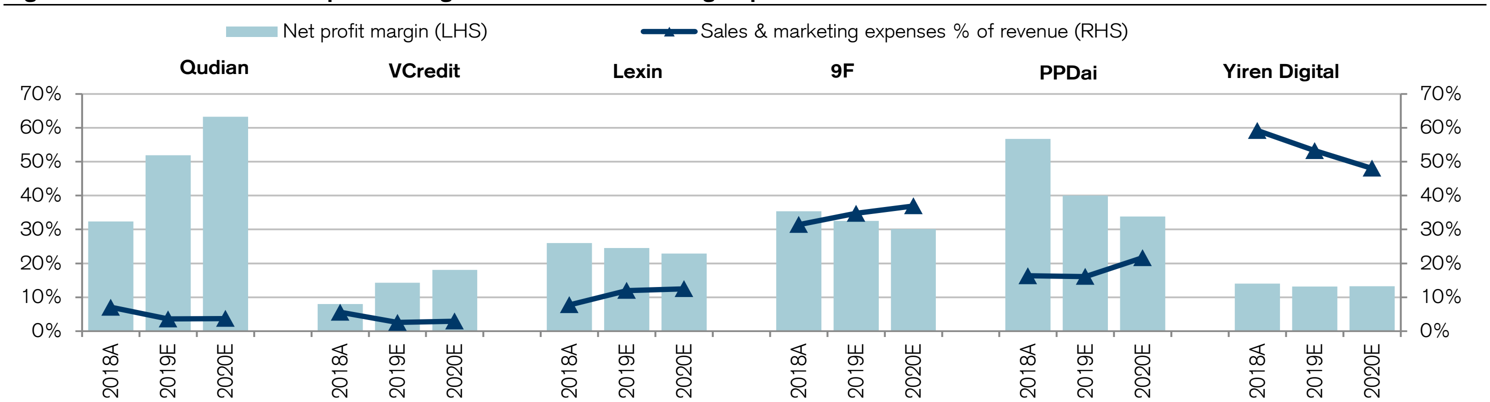
- We expect the loan facilitation take-rate to be negatively impacted given (1) slightly higher funding cost: Typically funding cost from banks and finance companies are 8-9%, thanks to their access to interbank funding. This is largely in-line with funding from P2P. However, the cost for trust funding is higher. For PPDai, which relies more heavily on trust funding, we expect the funding cost to be 2 pp higher vs P2P; (2) while most loan facilitation models currently adopts 36-APR, we believe the APR will be under pressure as the cooperation with commercial banks deepens. As shown in Figure 47-Figure 76, we forecast loan facilitation take rate to decline by 0.5-1.2 pp for our covered companies over FY19-21E, expect Qudian (due to the scale-back of its loan facilitation business and higher proportion of own-equity lending).
- We also forecast rising sales & marketing expenses for PPDai, 9F and Lexin as a shift to more quality cohort should lower the borrower approval rate and lead to higher customer acquisition cost. For Qudian, we expect the company to focus on converting its existing user base and do not rely on external customer acquisition. For Yiren Digital, its asset-heavy operations should contribute to some relief in S&M to sales ratio as volume recovers.

Figure 25: CS forecast: % institutional funding vs take rate



Note: Combined net take-rate reflects on- and off-B/S net revenue divided by total loan origination volume. Source: Company data, Credit Suisse estimates

Figure 26: CS forecast—net profit margin vs sales & marketing expenses to sales



Source: Company data, Credit Suisse estimates

Investment recommendation: Prefer Lexin and Qudian

Given the negative regulatory outlook and uncertainty around the P2P business model, we adjust the WACC in the DCF valuation models for our covered companies according to their relative position in the current regulatory environment (Figure 27).

We initiate coverage on Lexin with OUTPERFORM (TP of US$17.00) and 9F with NEUTRAL (TP at US$11.62). Maintain OUTPERFORM on Qudian (TP US$11.70) and VCredit (TP HK$13.00). We assume coverage on PPDai with OUTPERFORM (TP cut to US$5.80 from US$8.80). We also assume coverage on Yiren Digital with NEUTRAL (TP cut to US$6.92 from US$20). Regulatory concerns seem overdone for Lexin, Qudian, PPDai and Vcredit.

We prefer (1) Lexin for long-term sustainability, thanks to differentiated and focused customer base and effective risk control, and (2) Qudian for relative defensiveness of its evolving business model amid the regulatory uncertainty.

- For Lexin, we initiate with OUTPERFORM and TP of US$17.00. We believe Lexin has a sustainable business model with comparative advantage in the areas that institutional partners value the most from online lenders: (1) risk control capability, and (2) sustainable customer acquisition. We forecast robust origination volume growth of 71/44/15% YoY for FY19-21E. Our TP of US$17.00 implies FY19-20E P/E of 9.2x and 8.0x, and FY19E P/B of 3.2x.
- For Qudian, we maintain OUTPERFORM and TP of US$11.70. While we raise adjusted net income by 21/52/43% to Rmb4.5/5.9/6.4 bn for FY19-21E to factor in revenue contribution from QD's open platform initiative and expect such shift in revenue structure to significantly lift QE's ROE to 34/32/26% for FY19E-21E vs 24% in FY18, we lowered long-term growth to 3% from 5% to reflect lower visibility of the new business. Our TP implies 6.0x FY19E P/E and 1.7x FY19E P/B.

Figure 27: WACC, target price and rating recommendation

Ticker	Name	WACC		TP		Currency	Current P/E	Current P/B	Rating	Last price	Up/down
		New	Old	New	Old		FY19E	FY19E			to TP
LX.OQ	Lexin	15%	NA	17.0	NA	USD	4.7	1.6	Outperform	8.64	97%
QD.N	Qudian	15%	15%	11.7	11.7	USD	3.3	1.0	Outperform	6.48	81%
2003.HK	VCredit	15%	15%	13.0	13.0	HKD	5.5	1.1	Outperform	7.29	78%
PPDF.N	PPDai	17%	17%	5.8	8.8	USD	2.5	0.8	Outperform	2.78	109%
JFU.OQ	9F	17%	NA	11.62	NA	USD	8.2	1.7	Neutral	12.10	(6%)
YRD.N	Yiren Digital	18%	15%	6.92	20.0	USD	3.8	1.3	Neutral	6.48	6%

Last close as of 8 Oct 2019. Discount rate for VCredit represents the CoE. Source: Company data, Credit Suisse estimates

Valuations are depressed for most listed online lenders under our coverage, given the persistently lack of regulatory clarity over P2P sector, as well as recent headwinds over US-listed ADS. Lexin is trading at 1.6x and 4.7x FY19E P/B and P/E, respectively. Both are at premiums vs the rest of its peers which we believe is warranted, given its differentiated borrower cohort. PPDai, Qudian and VCredit are trading at depressed FY19E P/B levels of 0.8x, 1.0x and 1.0x, respectively. This compares to 9F's 1.7x FY19E P/B and Yiren Digital's 1.3x FY19E P/B.

Key risks

Key risks around the loan facilitation business model:

1. Sustainability of institutional funding. We believe the on-boarding cycle of 3-6 months reduces institutions' willingness to abruptly terminate partnership with loan facilitators; online lenders with better risk control and more diversified exposure to funding partners are at less risk.
2. Regulatory risks around loan facilitation, likely focusing on the practice of guarantee deposit as well as city/rural commercial banks' cooperation with loan facilitators to extend loan outside of their jurisdiction.

Other business risks around online micro-lending include:

1. macro-economic risks such as rising unemployment and slowing income growth, which negatively affect households' debt servicing capacity;
2. an abrupt clean-up of P2P platforms may cause asset quality volatilities like that in 2H17;
3. despite the targeted nature of recent investigations in big-data companies' practices of personal data crawling, a prolonged and wide-spread disruption of data feeds may negatively impact the effectiveness of online lenders' credit risk assessment and loan origination volume;
4. failure to effectively identify loan stacking by borrowers (i.e., simultaneous borrowing from multiple platforms), which we believe can be effectively addressed by the credit data shared via Baihang Credit.

Appendix

Figure 28: Key regulations over online lending in China

Date	Name	Area	Summary
Jul-15	Guidelines on Promoting the Healthy Development of the Internet Finance	Internet finance	- Defines the provision of online small loans as online lending business, which is under the supervision of the CBRC, and governed by the relevant regulations on small loan companies.
Aug-15	Provisions of Certain Issues of the Application of Laws in the Trial of Private Lending Cases	Private lending interest rate cap	Interest rate cap: - Agreements between a lender and a borrower for loans with interest rates below 24% are valid and enforceable - Loans with interest rates between 24% and 36%, if the interest has already been paid to lender, the court will likely dismiss the borrower's request to demand the return of the interest payment above 24% - Loans with interest rates higher than 36%, the agreement on that portion of the interest exceeding the maximum interest rate is invalid
Apr-16	Notice of the General Office of the State Council on the Issuance of Special Rectification Implementation Plan regarding Internet Finance (Circular 21)	Rectification	- Emphasizes the legitimacy and compliance of the internet finance business - Emphasize the information intermediary nature of P2P platforms - Specifies the rectification measures regarding the internet finance business and the institutions engaged in the internet finance business - Prohibit loans on down payment - Establish whistle blowing mechanism
Aug-16	Interim Measures on Administration of Business Activities of Online Lending Information Intermediaries	General legal framework	- Establish the legal framework to regulate the online lending industry - Prohibit 13 categories of activities, mainly including: taking deposits from public or creating asset pools, conducting offline promotion of financing projects, splitting the terms of financing projects, providing guarantees to borrowers, providing services similar to asset-backed securities, selling wealth management products - Require separation of own funds and funds of lenders and borrowers, and choice of qualified banking financial institutions as custodians for the funds of lenders and borrowers - Limit on fund balance: for individuals - not exceeding Rmb200k from a single platform and Rmb1mn from all platforms; for corporates - not exceeding Rmb1mn from a single platform and Rmb5mn from all platforms
Oct-16	Notice on Further Strengthening the Rectification of Campus Online Lending	Campus online lending	- Prohibits online lending platforms from providing online lending information services to college students under the age of 18 and sets forth certain restrictions on providing online lending information services to college students above the age of 18
Nov-16	Guidance of Administration on Online Lending Intermediaries Filing Rules	Registration	- Delegate filing and approval authority to local financial authorities - Newly established online lending intermediaries must file for registration within 10 business days after obtaining a business license; previously established online lending intermediaries shall file for registration after risk rectifications
Feb-17	Guidance to regulate funds depositories for Online Lending Intermediaries	Fund custodian	- Require online lending intermediary to designate only one commercial bank for online lending fund depository services - Depositories shall not be engaged in offering any security or guarantee
Apr-17	Guidance on Banking Industry Risk Prevention and Notice to Rectify Cash Loan Products	Cash loan business	- Require local branches of the National Rectification Office to perform comprehensive inspection of cash loan business of online lending platforms - Prohibit fraudulent promotion - Set up APR cap at 36% - No front-end fee can be charged - Prohibit collection in violence - Ban campus loan
May-17	Notice on Further Strengthening the Regulation and Management Work of Campus Online Lending Business (Circular 26)	Campus online lending	- Suspends online lending platforms from providing online lending information services to any college student and requires the outstanding balance of such campus loans to be gradually reduced until reaching a zero balance
Jun-17	Notice on Further Rectification on Internet Finance Risk	Rectification	- Nationwide internet finance risk rectification will continue to Jun 18 - No new illegal business can be added
Jul-17	Notice on rectification of illegal cooperation between Internet finance platforms and exchange platforms	Rectification	Ban the illegal cooperation of Internet finance platforms and financial asset exchanges (such as lowering investor threshold and capital pool)

Aug-17	Guidance on Information Disclosure of Online Lending Information Intermediaries	Information disclosure	- Clarify the disclosure requirements for online lending platforms - Information to be disclosed include: basic information of the online lending platforms, transaction-related information, and material changes of the online lending platforms
Aug-17	Regulations on the Supervision and Administration of Financing Guarantee Companies	Financing guarantee	- Sets out the approval requirements for the establishment of a financing guarantee company or engagement in the financing guarantee business - Outstanding guarantee liabilities of a financing guarantee company must not exceed 10x its net assets
Nov-17	Notice on the Immediate Suspension of Approvals for the Establishment of Online Small Loan Companies	Micro loan companies	- Requires all relevant regulatory authorities of small loan companies to suspend the approval of the establishment of any online small loan companies and the approval of any small loan business conducted across provinces
Dec-17	Notice on Rectification of Cash Loan Business (Circular 141)	Cash loan business	- Clarify the definition of cash loan - Clarify the definition of all-in rate: including up-front interests, commissions, management fees, deposits from principal disbursements and delinquency interest rates - Highlight four problems: extremely high rate, forcible debt collection, excessive borrowing and customer privacy infringement - Prohibit online lending platforms from the following activities: (i) conducting the lending without obtaining approvals; (ii) facilitating any loan the overall financing costs of which exceed the 24/36% interest cap; (iii) outsourcing core functions such as data collection, customer identification, credit assessment or account openings; (iv) enabling banking financial institutions to engage in P2P lending; (v) providing loan facilitation services to students or individuals who do not possess sufficient debt service capabilities; (vi) conducting real-estate financing such as down payment loans for real estate purchasing; (vii) facilitating loans without clear and specified purposes; or (viii) collecting debts by using violence, threats, humiliation, defamation or harassment.
Dec-17	Notice on rectification of online micro-loan business	Micro loan companies	-Review existing license -Put strict limitations on ABS -Cap interest rate at 36% -Investigate forcible debt collection, improper proceeds usage, illegal business cooperation
Dec-17	Notice on inspection of P2P platforms (Circular 57)	Rectification and registration	- Register platforms which comply with regulations by June 2018 - Force platforms which do not comply with regulations out of the market - Discontinue risk reserve funds
Apr-18	Notice on rectification of asset management in Internet platforms		- License is required to conduct online asset management - Ban internet platforms from cooperating with local financial exchanges - P2P platforms with such non-compliant business cannot get registration
Aug-18	Nationwide inspection standard for P2P platforms/ Compliance inspection checklist	Rectification	- Set a nationwide standard for P2P dos and don'ts - Compliance inspection focuses on: (i) whether the platform conducts business only as an information intermediary and whether it is engaged in any credit intermediary business; (ii) whether the platform maintains any capital pool and has advanced funds for the clients; (iii) whether the platform finances itself directly or in a disguised form; (iv) whether the platform provides the lenders with guarantees or promises to repay principals and interests thereon directly or in a disguised form; (v) whether the platform provides rigid payment for the lenders; (vi) whether the platform conducts risk assessments for the lenders and provide hierarchical management of lenders; (vii) whether the platform fully discloses risk related information of the borrowers to the lenders; (viii) whether the platform adheres to the online lending principle of small amount and dispersion; (ix) whether the platform raises funds by sale of wealth management products through itself or its affiliates; (x) whether the platform solicits lenders by high interests and other manners. - Three-level inspections: (1) self-inspection by the platform itself, (2) self-discipline inspection by local internet finance association, (3) administrative verification by provincial online lending rectification office
Jan-19	Circular on the Classification and Disposal of Risks of Online Lending Institutions and Risk Prevention (Circular 175)		- Clarify classification of online lending platforms: distressed category, continuing operational category, potential survivor category

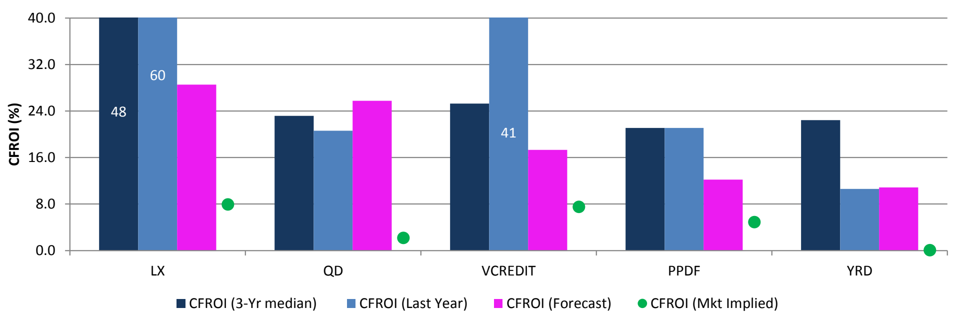
Source: Company data, Credit Suisse estimates

HOLT® view

We also look at the China online lenders through HOLT LensTM, a Credit Suisse equity analysis tool that focuses on a company's Cash Flow Return on Investment (CFROI®) and asset growth to better understand the underlying economics and valuation.

Across the industry, most companies have CFROI forecast that is sharply lower compared to prior years reflecting the stress to future economic returns due to the negative regulatory outlook and uncertainty around the existing P2P business model. The market implied CFROI, representing the level of future economic returns embedded in today's share price is similarly conservative given existing uncertainties.

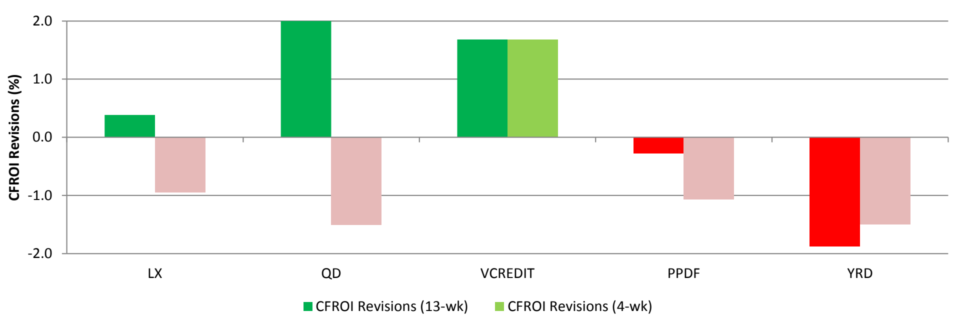
Figure 29: Weak forecast and low market implied expectations among the China online lenders



Source: *Credit Suisse HOLT. Companies sorted from left to right based on Forecast CFROI levels.*

The CFROI profile benchmarking is consistent with our stock calls with LX and QD exhibiting higher forecast. QD is also the only company expected to improve its CFROI this year. In contrast, YRD has the lowest CFROI within the group and while its implied expectations are undemanding, it has the weakest consensus earning sentiment among its peers.

Figure 30: Recent consensus earnings sentiment is weakest in YRD and PPDai



Source: Credit Suisse HOLT

Qudian Inc.

Open platform the new revenue driver

Consumer Finance

QD

Target price (12M, US$)

11.70

Outperform[V]

Price (7 Oct 19, US$)	6.48
Upside/downside (%)	80.6
Mkt cap (US$mn)	1,927
Enterprise value (Rmb mn)	7,769
Number of shares (mn)	297.37
Free float (%)	13.1
52-wk price range (US$)	9.14-4.10
ADTO-6M (US$ mn)	9.7

[V] = Stock Considered Volatile (see Disclosure Appendix)

Research Analysts

Charles Zhou, CFA
852 2101 6177
charles.zhou@credit-suisse.com

Yiran Zhong
852 2101 6125
yiran.zhong@credit-suisse.com

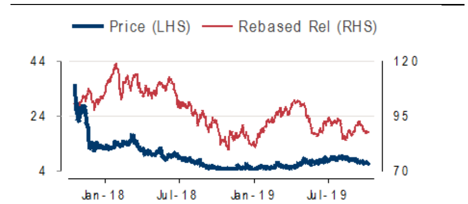
- **We maintain OUTPERFORM and TP of US$11.70.** While we raise adjusted net income by 20/52/43% to Rmb4.5/5.9/6.4 bn for FY19-21E to factor in revenue contribution from QD's open platform initiative, and expect such shift in revenue structure to significantly lift QE's ROE to 34/32/26% for FY19E-21E vs. 24% in FY18, we lower long-term growth to 3% from 5% to reflect lower visibility of the new business.
- **Open Platform Initiative to become a major revenue driver**. QD refers loan transactions to its institutional partners via the open platform for a commission fee. This is a model with low marginal operational cost and zero credit risk. Following strong growth momentum since launch in 4Q18, we forecast income contribution from referral fees to rise from 13% in 1H19 to 50% in 2H19, and further to 59/56% for FY20-21E.
- **Scaling back off-B/S loan facilitation business.** We expect QD to scale back its off-B/S loan facilitation and redirect its partnering institutions to its open platform business due to (1) deteriorating delinquency rate and (2) better operating efficiency on open-platform business model with strong revenue-generation momentum. Meanwhile, QD will keep on-B/S lending via own equity, given higher profitability. We expect such shift in revenue structure to significantly lift QD's ROE to 34/32/26% for FY19E-21E vs 24% in FY18.
- **QD is relatively sheltered from P2P-related regulatory headwinds,** thanks to (1) no reliance on P2P-sourced funding, while institutional and own-capital funding account for 79.6% and 20.4% of total loan balance as of end-2Q19; (2) the company's low leverage ratio of 2.3x as of 2Q19 makes it relatively less disruptive to transform into a licensed online micro-lender compared to peers. In particular, own-capital direct lending operates under an entrusted-loan model, with only 1x leverage.
- **Valuation:** we value the company using DCF assuming WACC of 15% and long-term growth of 3%. Our TP implies 6.0x FY19E P/E and 1.7x FY19E P/B.
- **Key risks:** unexpected disruption to institutional partnership, regulatory risk regarding the loan facilitation business and deterioration of asset quality amid macro slowdown.

Financial and valuation metrics

Year	12/18A	12/19E	12/20E	12/21E
Revenue (Rmb mn)	-	-	-	-
EBITDA (Rmb mn)	2,701.4	5,017.6	6,556.5	7,129.0
EBIT (Rmb mn)	2,689.4	4,996.4	6,528.3	7,094.9
Net profit (Rmb mn)	2,549.3	4,454.1	5,871.0	6,388.6
EPS (CS adj.) (Rmb)	7.92	13.83	18.24	19.84
Chg. from prev. EPS (%)	n.a.	20.2	52.2	43.2
Consensus EPS (Rmb)	n.a.	14.12	17.3	20.89
EPS growth (%)	8.5	74.7	31.8	8.8
P/E (x)	5.8	3.3	2.5	2.3
Dividend yield (%)	0.0	0.0	0.0	0.0
EV/EBITDA (x)	4.2	1.3	0.5	(0.1)
P/B (x)	1.37	0.98	0.71	0.54
ROE (%)	25.0	34.2	32.4	26.4
Net debt/equity (%)	(23.1)	(46.0)	(50.0)	(53.4)

Source: Company data, Refinitiv, Credit Suisse estimates

Share price performance



The price relative chart measures performance against the MSCI CHINA F IDX which closed at 7,689.89 on 07/10/19. On 07/10/19 the spot exchange rate was US$1/US$1

Performance	1M	3M	12M
Absolute (%)	(18.3)	(26.9)	31.2
Relative (%)	(14.7)	(23.3)	32.1

Qudian Inc. (QD.N / QD US)

Analyst: **Charles Zhou**

Price (07 Oct 2019): **US$6.48** Target Price: **US$11.70** Rating: **Outperform [V]**

Income Statement (Rmb mn)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Sales revenue	**-**	**-**	**-**	**-**
Cost of goods sold	-	-	-	-
EBITDA	**2,701**	**5,018**	**6,556**	**7,129**
EBIT	**2,689**	**4,996**	**6,528**	**7,095**
Net interest expense/(inc.)	-	-	-	-
Recurring PBT	**2,649**	**5,062**	**6,583**	**7,157**
Profit after tax	**2,491**	**4,403**	**5,808**	**6,314**
Reported net profit	**2,491**	**4,403**	**5,808**	**6,314**
Net profit (Credit Suisse)	**2,549**	**4,454**	**5,871**	**6,389**
Balance Sheet (Rmb mn)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Cash & cash equivalents	2,501	6,998	10,507	14,611
Current receivables	-	-	-	-
Inventories	-	-	-	-
Other current assets	0	0	0	0
Current assets	**2,501**	**6,998**	**10,507**	**14,611**
Property, plant & equip.	26	71	89	105
Investments	681	683	875	1,026
Intangibles	0	0	0	0
Other non-current assets	0	0	0	0
Total assets	**16,253**	**20,745**	**27,018**	**33,481**
Current liabilities	**-**	**-**	**-**	**-**
Total liabilities	**5,433**	**5,521**	**5,987**	**6,136**
Shareholders' equity	**10,821**	**15,224**	**21,031**	**27,346**
Minority interests	0	0	0	0
Total liabilities & equity	**16,253**	**20,745**	**27,018**	**33,481**
Cash Flow (Rmb mn)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
EBIT	**2,689**	**4,996**	**6,528**	**7,095**
Net interest	0	0	0	0
Tax paid	0	0	0	0
Working capital	0	0	0	0
Other cash & non-cash items	12	21	28	34
Operating cash flow	**2,701**	**5,018**	**6,556**	**7,129**
Capex	0	0	0	0
Free cash flow to the firm	**2,701**	**5,018**	**6,556**	**7,129**
Investing cash flow	**-**	**-**	**-**	**-**
Equity raised	0	0	0	0
Dividends paid	0	0	0	0
Financing cash flow	**-**	**-**	**-**	**-**
Total cash flow	**2,701**	**5,018**	**6,556**	**7,129**
Adjustments	0	0	0	0
Net change in cash	**2,701**	**5,018**	**6,556**	**7,129**
Per share	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Shares (wtd avg.) (mn)	322	322	322	322
EPS (Credit Suisse) (Rmb)	**7.92**	**13.83**	**18.24**	**19.84**
DPS (Rmb)	0.00	0.00	0.00	0.00
Operating CFPS (Rmb)	8.39	15.58	20.36	22.14
Earnings	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Growth (%)				
Sales revenue	-	-	-	-
EBIT	11.1	85.8	30.7	8.7
EPS	8.5	74.7	31.8	8.8
Margins (%)				
EBITDA	54.5	64.8	75.6	74.3
EBIT	54.3	64.6	75.3	73.9
Valuation (x)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
P/E	5.8	3.3	2.5	2.3
P/B	1.37	0.98	0.71	0.54
Dividend yield (%)	0.0	0.0	0.0	0.0
EV/sales	-	-	-	-
EV/EBITDA	4.2	1.3	0.5	(0.1)
EV/EBIT	4.2	1.3	0.5	(0.1)
ROE analysis (%)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
ROE	25.0	34.2	32.4	26.4
ROIC	45.9	52.5	61.4	53.8
Credit ratios	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Net debt/equity (%)	(23.1)	(46.0)	(50.0)	(53.4)
Net debt/EBITDA (x)	(0.93)	(1.39)	(1.60)	(2.05)

Source: Company data, Refinitiv, Credit Suisse estimates

Company Background

Qudian Inc. is a leading provider of online small consumer credit in China. It uses big data-enabled technologies, such as artificial intelligence and machine learning, to transform the consumer finance experience in China.

Blue/Grey Sky Scenario

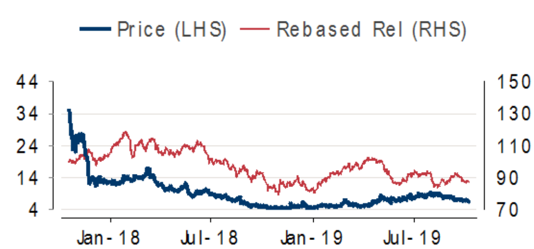
Our Blue Sky Scenario (US$) **(from 20.00) 13.10**

Our Blue Sky scenario of US$13.10 assumes 8% terminal growth rate and 11% WACC, implying 6.9x 2019E non-GAAP P/E

Our Grey Sky Scenario (US$) **(from 4.00) 5.90**

Our Grey Sky scenario of US$5.90 assumes 2% terminal growth rate and 60% WACC, implying 3.1x 2019E non-GAAP P/E

Share price performance



The price relative chart measures performance against the MSCI CHINA F IDX which closed at 7,689.89 on 07-Oct-2019

On 07-Oct-2019 the spot exchange rate was US$1/US$1

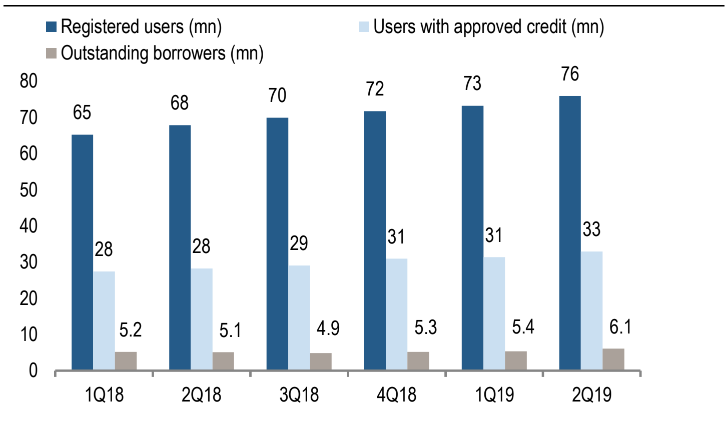
Revenue structure shifts

Open platform becoming a key revenue driver

Qudian launched the open platform initiative in 4Q18 to refer loan transactions to its institutional partners with a commission fee. The asset-light transaction-referral business model has low marginal operational cost and zero credit risk, and it is one of QD's growth priorities going forward.

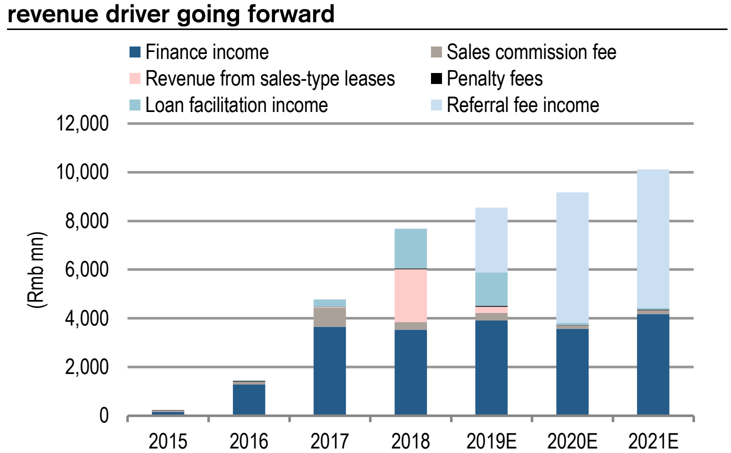
- Out of a total of 33 mn approved users, the company is serving 6.1 mn active borrowers. This is partly due to mismatch between small ticket size tolerated by QD's risk model (Rmb1,931) and larger-size demand by the borrowers. This portion of 27 mn unserved users will be referred to institutional partners, for which the company charges a commission fee without bearing any credit cost. QD participates in the collection process on a best effort basis but does not guarantee on defaults. On the other hand, QD includes traffic apps into its distributed traffic ecosystem.
- Revenue contribution from its open platform initiative (referral fee income) accounted for 18% of total revenue in 2Q19 vs 8/2% in 1Q19/4Q18. The number of partnering licensed FIs on its open platform had increased to eight as of latest, vs four/one in 2Q/1Q. The take-rate for referral fee increased to 10% vs 8% in 1Q. We expect take rate to gradually normalise toward a 7-8% range over a 3-year horizon, in-line with company's guidance, as (1) APR will decline from currently 36% as the ticket size increases (from Rmb4,300 in 2Q to around Rmb12,000-14,000), (2) the company will give out 20-30% revenue share of its net take-rate on a transaction basis to the traffic apps in its distributed ecosystem.
- We believe the lowest hanging fruit for this initiative is to convert its existing institutional partners from the company's off B/S loan facilitation business to a funding partner for its open-platform. Riding on the strong momentum in 1H19, we forecast referral fee income's revenue contribution to rise from 13% in 1H19 to 50% in 2H19, and further to 59/56% for FY20-21E.

Figure 31: QD's approved user bases 33 mn are much larger than active borrower base of 6.1 mn



Source: Company data, Credit Suisse estimates

Figure 32: We expect referral fee income to become a major revenue driver going forward



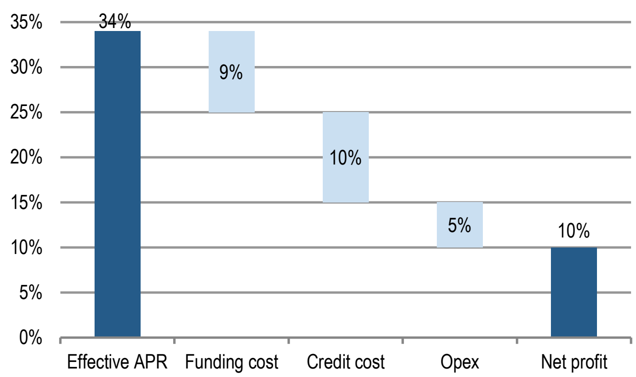
Source: Company data, Credit Suisse estimates

Scaling back on risk-taking business amid worsening asset quality trends

We expect QD to scale back its off-B/S loan facilitation and redirect its partnering institutions to its open platform business due to (1) deteriorating delinquency ratio and (2) better operating efficiency on open-platform business model strong revenue-generation momentum on the open platform side.

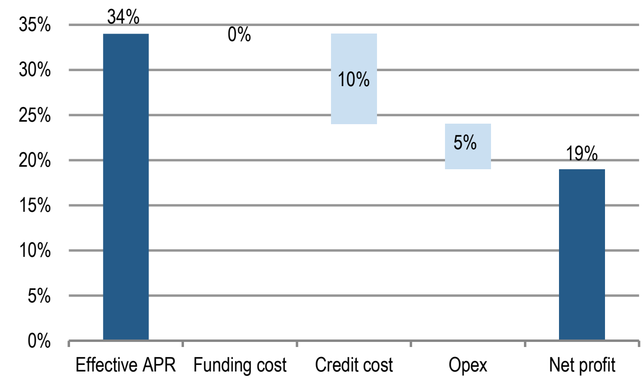
- M1+ delinquency ratio rising to 4.3% in 2Q19, from 3.3/2.5% in 1Q19/4Q18, while total vintage delinquency inching towards 10%. The company attributes 0.5 pp of this to credit trials conducted during the previous three quarters to activate dormant user base. Still, stripping out this effect suggest a roughly 50 bp sequential increase in underlying M1+ delinquency.
- As the credit cost erodes margin, we expect QD to scale back its off-B/S loan facilitation business while keeping the on-B/S lending via its own equity, for which net profit take-rate is ~9 pp higher.

Figure 33: QD's unit economics for off B/S loan facilitation: ~10% net profit take rate



Note: as % of loan balance. Source: Company data, Credit Suisse estimates

Figure 34: QD's unit economics for on B/S lending of own equity: ~19% net profit take rate



Note: as % of loan balance. Source: Company data, Credit Suisse estimates

Early signs of successful customer activation, but at the cost of higher provisions

QD has a massive proprietary user base of 76 mn registered users and 33 mn approved users, the majority of which was acquired via its privileged front-page access to Ant Financial's payment ecosystem. Since this agreement with Ant Financial terminated in August 2018, a prevailing market concern over QD's long-term growth sustainability has been whether the company has the capability and effective risk-control to expand its borrower base.

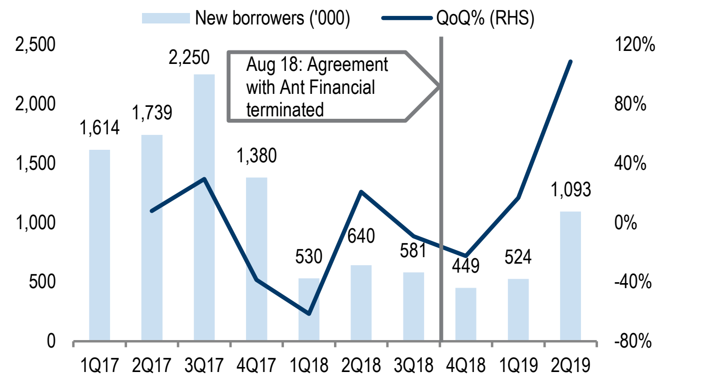
Since 3Q18, the company initiated a credit trial program aimed at activating its dormant user base. The credit trials are conducted by extending small-sized (Rmb 500-600) credit to cohorts of non-core borrowers identified by the company's risk assessment model, which may have been rejected by QD's previous credit standards.

We are encouraged by early signs of recovery in new users and accelerated expansion in outstanding borrower base.

- The number of new borrowers rebounded strongly to 1.1 mn during 2Q19, doubling the average quarterly run-rate of 545,000 over the five quarters during 1Q18-1Q19. This compares with an average of 1.7 mn during 1Q17-4Q17 before end-2017 – when the company started to direct its borrower acquisition channel from Alipay to its own app in November 2017.
- In 2Q19, the number of outstanding borrowers notably increased to 6.1 mn, up 13% QoQ, following seven quarters of lacklustre growth.
- New borrowers as % of total borrowers increased to 18% in 2Q19, from quarterly average of 11% during 3Q18-1Q19, a positive change compared to QD's over-reliance on repeat borrowers within a slow-growing pool of outstanding borrowers.

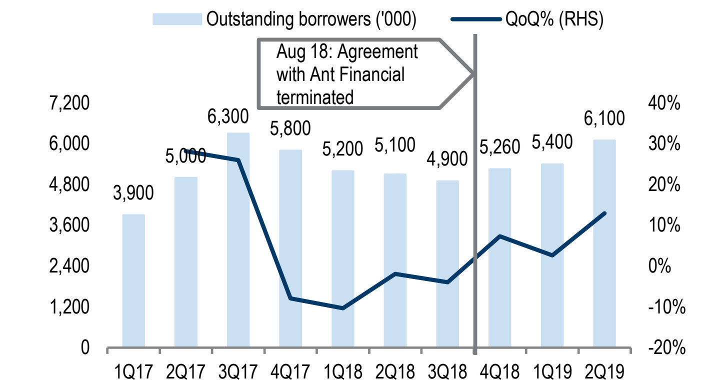
However, this exercise comes with the side effect of higher provisions and worsened asset quality measures. Provisions increased 123% YoY 2Q19 while M1+ delinquency rate picked up to 4.3%. We expect QD to take a pause in its credit trials for now.

Figure 35: New borrowers show strong rebound…



Source: Company data, Credit Suisse estimates

Figure 36: …outstanding borrower growth picked up



Source: Company data, Credit Suisse estimates

Financial forecast

The company intends to scale back its off-B/S loan facilitation business (loan facilitation income) and redirect transactions to its open platform (referral fee income) starting 2H19, while keeping on-B/S lending via own equity (finance income). Hence, on the loan book side, we expect (1) Qudian's credit cost to remain elevated at ~10% while funding cost significantly reduces (2) higher revenue contribution of referred income via the open platform (to 31/59/56% in FY19-21E, from nil in FY18). We expect such shift in revenue structure to lift QD's ROE to 34/32/26% for FY19E-21E vs 24% in FY18. Qudian is also less affected in higher opex trends, given its strategy to convert its existing customer base instead of acquiring new customers via online traffic platforms.

Figure 37: Qudian: summary of key operating trends

Rmb mn	2017A	2018A	2019E	2020E	2021E
Loan origination volume	88,906	57,800	53,490	43,638	31,406
YoY%	*176%*	*-35%*	*-7%*	*-18%*	*-28%*
% funded by institutions via loan facilitation	***99%***	***100%***	***100%***	***100%***	***100%***
Loan facilitation income	302	1,617	1,377	75	83
Yield (% off B/S loan balance)	19%	31%	14%	11%	21%
Finance income	3,642	3,535	3,905	3,565	4,170
Yield (% on B/S loan balance)	45%	37%	40%	34%	32%
Combined net take rate	***3.0%***	***4.5%***	***5.8%***	***5.0%***	***8.3%***
Referral fee income	0	30	2,658	5,369	5,686
Others	831	2,510	600	163	181
Total revenue	4,775	7,692	8,540	9,171	10,120
YoY%	*231%*	*61%*	*11%*	*7%*	*10%*
Operating cost	(881)	(2,735)	(802)	(504)	(529)
Sales and marketing	(432)	(541)	(305)	(340)	(410)
% of revenue	*-9%*	*-7%*	*-4%*	*-4%*	*-4%*
G&A and R&D expenses	(337)	(455)	(574)	(750)	(864)
% of revenue	*-7%*	*-6%*	*-7%*	*-8%*	*-9%*
Operating expenses	(1,524)	(2,291)	(2,755)	(2,182)	(2,549)
Operating profit	2,421	2,689	5,032	6,528	7,089
YoY%	*240%*	*11%*	*87%*	*30%*	*9%*
Operating profit margin	***50.7%***	***35.0%***	***58.9%***	***71.2%***	***70.1%***
Other income	(1)	(40)	66	54	62
Net profit/(loss)	2,164	2,491	4,435	5,808	6,309
YoY%	*275%*	*15%*	*78%*	*31%*	*9%*
Net profit margin	***45.3%***	***32.4%***	***51.9%***	***63.3%***	***62.4%***
ROA	16.3%	14.0%	24.0%	24.3%	20.9%
ROE	35.9%	24.5%	34.0%	32.0%	26.1%

Note: Combined net take-rate reflects on- and off-B/S net revenue divided by total loan origination volume.
Source: Company data, Credit Suisse estimates

Figure 38: Qudian: estimated economics of loan business (on- and off-B/S included)

Rmb mn	2017	2018	2019	2020	2021
Gross transaction fee income	4,242	5,333	6,908	3,797	4,306
% of loan balance	*44%*	*36%*	*36%*	*34%*	*32%*
Credit cost	(755)	(1,295)	(1,912)	(1,093)	(1,277)
% of loan balance	*-7.9%*	*-8.8%*	*-9.9%*	*-9.7%*	*-9.4%*
Funding cost	(821)	(586)	(1,917)	(531)	(438)
% of loan balance	*-8.5%*	*-4.0%*	*-9.9%*	*-4.7%*	*-3.2%*
Net revenue: lending	2,665	3,452	3,079	2,173	2,592
% of loan balance	*27.7%*	*23.5%*	*15.9%*	*19.2%*	*19.1%*
Net revenue: loan referral and others	831	2,540	3,258	5,532	5,868
Opex	(975)	(3,210)	(1,296)	(1,209)	(1,402)
% of net revenue	*-20.4%*	*-41.7%*	*-15.2%*	*-13.2%*	*-13.9%*

Source: Company data, Credit Suisse estimates

Maintain OUTPERFORM

For Qudian, we maintain OUTPERFORM and TP of US$11.70. While we raised adjusted net income by 20/52/43%, to Rmb4.5/5.8/6.3 bn for FY19-21E, to factor in revenue contribution from QD's open platform initiative, and expect such shift in revenue structure to significantly lift QE's ROE to 34/32/26% for FY19E-21E vs 24% in FY18, we lowered long-term growth to 3% from 5% to reflect lower visibility of the new business. Our TP implies 6.0x FY19E P/E and 1.7x FY19E P/B.

CREDIT SUISSE

LexinFintech

A sustainable model amid industry shake-up

Consumer Finance

LX

Target price (12M, US$)

17.00

Outperform[V]

Price (7 Oct 19, US$)	8.64
Upside/downside (%)	96.8
Mkt cap (US$mn)	1,431
Enterprise value (Rmb mn)	7,883
Number of shares (mn)	165.66
Free float (%)	64.7
52-wk price range (US$)	14.50-6.62
ADTO-6M (US$ mn)	3.9

[V] = Stock Considered Volatile (see Disclosure Appendix)

Research Analysts

Yiran Zhong
852 2101 6125
yiran.zhong@credit-suisse.com

Charles Zhou, CFA
852 2101 6177
charles.zhou@credit-suisse.com

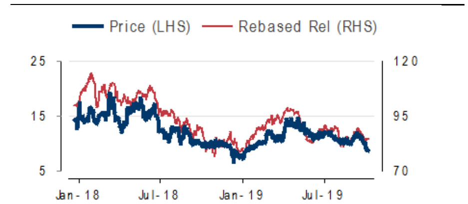
- **We initiate on Lexin with OUTPERFORM and TP of US$17.00**. Among the listed P2P platforms all trying to transform to institutional funding, we believe Lexin has comparative advantage in the areas that institutional partners value the most from online lenders: (1) risk control capability and (2) sustainable customer acquisition.
- **Lexin is strategically focused on borrower base of educated young adults;** a cohort with inherently lower credit risk and high income growth potential. The company's effective risk control is reflected in stable asset quality trends: the 90-day+ delinquency ratio, which remains within a narrow range over the past six quarters despite disruptions in the P2P sector.
- **Lexin's diversified customer acquisition strategy has proved to be cost-effective** as it steps up efforts to expand customer base, while its competitive pricing and innovative product help enhance stickiness of its existing users. Growth in the number of active borrowers has significantly accelerated in 2Q, to 52% YoY and 2% QoQ, while sales & marketing expense on a per-new-customer basis has declined, bucking industry-wide trends.
- **We forecast robust origination volume growth of 71/44/15% YoY for FY19-21E**, underpinned by the company's fast progress in transforming toward institutional funding. This will drive recovery in adjusted net income growth to 21/27/13% YoY for FY19-21E. With more than 100 institutional partners – and strategic agreements with dozens of large banks, insurance companies and consumer finance companies – institutional funding accounts for 78% of total loan origination volume as of 2Q19.
- **Valuation**: We value LX using DCF methodology assuming WACC of 15% and long-term growth assumption of 3%. Our TP of US$17.00 implies FY19E P/E of 9.2x and FY19E P/B of 3.2x. The stock currently trades at 4.7x FY19E P/E and 1.6x FY19E P/B.
- **Key risks**: a disorderly clean-up in the P2P industry, causing broad-based asset quality volatilities; regulatory risk around the loan facilitation model; competitive pressure from big tech platforms.

Financial and valuation metrics

Year	12/18A	12/19E	12/20E	12/21E
Revenue (Rmb mn)	-	-	-	-
EBITDA (Rmb mn)	1,821.9	2,503.5	3,234.0	3,692.8
EBIT (Rmb mn)	1,821.9	2,503.5	3,234.0	3,692.8
Net profit (Rmb mn)	1,977.3	2,392.8	2,755.1	3,145.1
EPS (CS adj.) (Rmb)	10.9	13.19	15.19	17.34
Chg. from prev. EPS (%)	n.a	n.a	n.a	n.a
Consensus EPS (Rmb)	n.a.	13.12	15.74	19.8
EPS growth (%)	2,853.5	21.0	15.1	14.2
P/E (x)	5.6	4.7	4.1	3.6
Dividend yield (%)	0.0	0.0	0.0	0.0
EV/EBITDA (x)	5.0	3.0	2.1	1.4
P/B (x)	2.53	1.6	1.12	0.84
ROE (%)	68.1	45.1	35.0	29.0
Net debt/equity (%)	(28.0)	(41.0)	(38.5)	(41.3)

Source: Company data, Refinitiv, Credit Suisse estimates

Share price performance



The price relative chart measures performance against the MSCI CHINA F IDX which closed at 7,689.89 on 07/10/19. On 07/10/19 the spot exchange rate was US$1/US$1

Performance	1M	3M	12M
Absolute (%)	(24.1)	(27.6)	(11.6)
Relative (%)	(20.5)	(24.1)	(10.7)

LexinFintech (LX.OQ / LX US)

Analyst: **Yiran Zhong**

Price (07 Oct 2019): **US$8.64** Target Price: **US$17.00**

Rating: **Outperform**

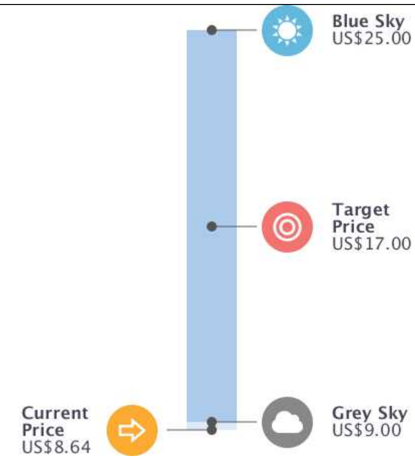
Income Statement (Rmb mn)	12/18A	12/19E	12/20E	12/21E
Sales revenue	-	-	-	-
Cost of goods sold	-	-	-	-
EBITDA	1,822	2,503	3,234	3,693
EBIT	1,822	2,503	3,234	3,693
Net interest expense/(inc.)	-	-	-	-
Recurring PBT	2,110	2,821	3,241	3,700
Profit after tax	1,977	2,393	2,755	3,145
Reported net profit	1,977	2,393	2,755	3,145
Net profit (Credit Suisse)	1,977	2,393	2,755	3,145
Balance Sheet (Rmb mn)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Cash & cash equivalents	1,148	2,667	3,561	5,119
Current receivables	-	-	-	-
Inventories	-	-	-	-
Other current assets	0	0	0	0
Current assets	1,148	2,667	3,561	5,119
Property, plant & equip.	82	108	142	180
Investments	0	0	0	0
Intangibles	0	0	0	0
Other non-current assets	0	0	0	0
Total assets	12,471	17,810	21,492	24,210
Current liabilities	-	-	-	-
Total liabilities	8,364	11,311	12,237	11,810
Shareholders' equity	4,107	6,500	9,255	12,400
Minority interests	0	0	0	0
Total liabilities & equity	12,471	17,810	21,492	24,210
Cash Flow (Rmb mn)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
EBIT	1,822	2,503	3,234	3,693
Net interest	0	0	0	0
Tax paid	0	0	0	0
Working capital	0	0	0	0
Other cash & non-cash items	0	0	0	0
Operating cash flow	1,822	2,503	3,234	3,693
Capex	0	0	0	0
Free cash flow to the firm	1,822	2,503	3,234	3,693
Investing cash flow	-	-	-	-
Equity raised	0	0	0	0
Dividends paid	0	0	0	0
Financing cash flow	-	-	-	-
Total cash flow	1,822	2,503	3,234	3,693
Adjustments	0	0	0	0
Net change in cash	1,822	2,503	3,234	3,693
Per share	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Shares (wtd avg.) (mn)	181	181	181	181
EPS (Credit Suisse) (Rmb)	10.90	13.19	15.19	17.34
DPS (Rmb)	0.00	0.00	0.00	0.00
Operating CFPS (Rmb)	10.04	13.80	17.83	20.36
Earnings	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Growth (%)				
Sales revenue	-	-	-	-
EBIT	283.0	37.4	29.2	14.2
EPS	2853.5	21.0	15.1	14.2
Margins (%)				
EBITDA	24.0	25.7	26.8	27.2
EBIT	24.0	25.7	26.8	27.2
Valuation (x)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
P/E	5.6	4.7	4.1	3.6
P/B	2.53	1.60	1.12	0.84
Dividend yield (%)	0.0	0.0	0.0	0.0
EV/sales	-	-	-	-
EV/EBITDA	5.0	3.0	2.1	1.4
EV/EBIT	5.0	3.0	2.1	1.4
ROE analysis (%)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
ROE	68.1	45.1	35.0	29.0
ROIC	96.7	62.5	57.7	48.4
Credit ratios	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Net debt/equity (%)	(28.0)	(41.0)	(38.5)	(41.3)
Net debt/EBITDA (x)	(0.63)	(1.07)	(1.10)	(1.39)

Source: Company data, Refinitiv, Credit Suisse estimates

Company Background

LexinFintech, through its subsidiaries, provides online consumer finance services, including offering installments, money loans, wealth management, and other financial services to customers in China.

Blue/Grey Sky Scenario



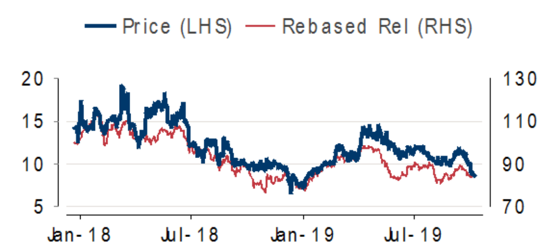
Our Blue Sky Scenario (US$) **25.00**

Our blue sky scenario of US$25.0 assumes successful P2P registration by end-year and better than expected loan origination. We assume 5% terminal growth rate and 12% WACC to arrive at the blue sky target price, implying FY19E P/E of 12.7x.

Our Grey Sky Scenario (US$) **9.00**

Our grey sky scenario of US$9.0 assumes disruptive clean-up of P2P sector and loss of market share to internet giants. We assume 0% terminal growth rate and 25% WACC to arrive at the blue sky target price, implying FY19E P/E of 4.6x.

Share price performance



The price relative chart measures performance against the MSCI CHINA F IDX which closed at 7,689.89 on 07-Oct-2019

On 07-Oct-2019 the spot exchange rate was US$1/US$1

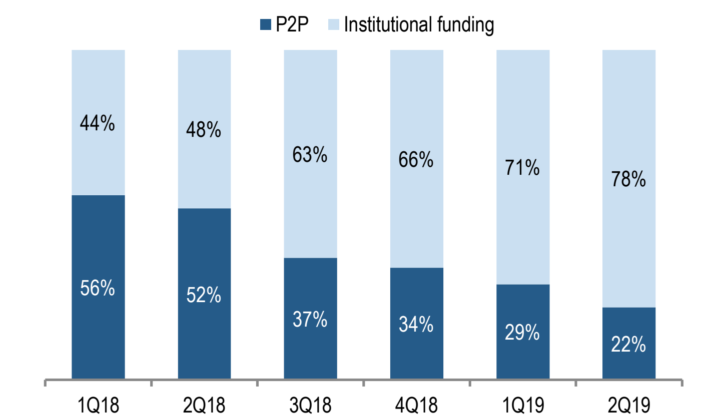
A sustainable model amid industry shakeup

In a challenging regulatory environment where sourcing institutional funding may be the only way for most P2P platforms to expand, Lexin is one of the industry's fastest movers to successfully adopt a 2B model.

- By 2Q19, Lexin cooperates with more than 100 institutional partners, and has strategic agreements with dozens of large banks, insurance companies and consumer finance companies covering technology, smart sales, payment, risk control and data, among others.
- Institutional funding accounts for 78% of total loan origination volume as of 2Q19, compared to 44% in 1Q18. Total outstanding balance expanded 25% YTD to Rmb40.6 bn by end-June, while the loan balance of its P2P platform (*Juzi Licai*) has shrunk by 10% YTD. With this, the company raised FY19 guidance for loan origination volume to exceed Rmb115 bn, from Rmb 90-100 bn previously. We forecast robust origination volume growth of 71/60/30% YoY for FY19-21E.

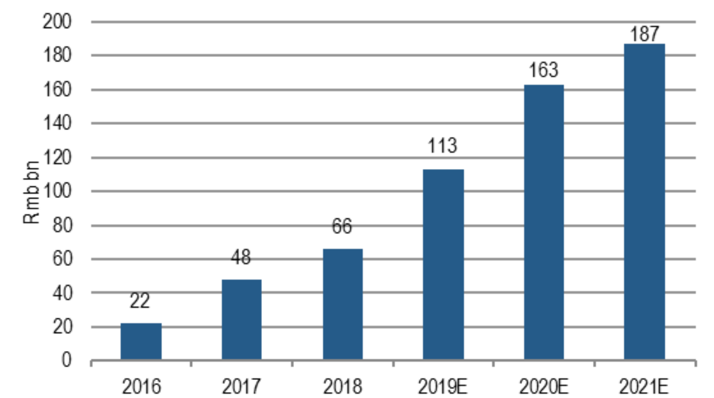
We believe Lexin has comparative advantage in the areas that institutional partners value the most from online lenders: (1) risk control capability and (2) sustainable customer acquisition.

Figure 39: Institutional funding accounts for 78% of total loan origination volume as of 2Q19



Source: Company data, Credit Suisse estimates

Figure 40: We forecast robust loan origination volume driven by institutional funding



Source: Company data, Credit Suisse estimates

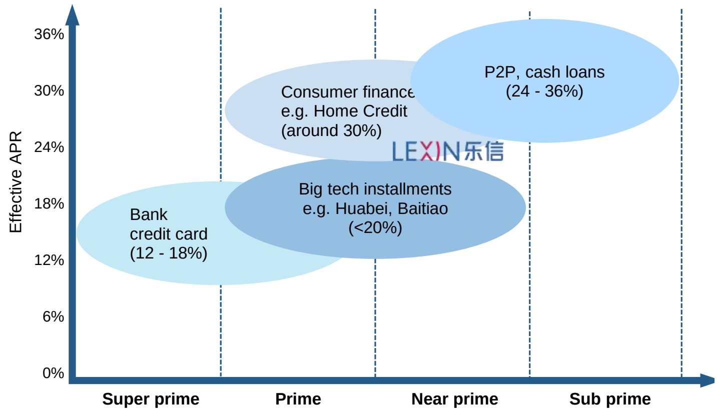
Targeted borrower base and effective risk model helps lower credit risk

Lexin's borrower base is strategically focused on educated young adults, i.e., college students and the working population with college or associate degrees and under the age of 36. This cohort inherently has (1) lower credit risk since they are more inclined to preserve a good credit profile, especially now that P2P platforms will be included into the Baihang credit reference system; (2) higher income growth potential as college graduates or educated early professionals. This better matches licensed financial institutions' preference for a quality customer base, given their low tolerance for NPL.

A focused borrower cohort also helps enhance the effectiveness of risk assessment: the company has been tracking the same cohort since 1Q15, accumulating proprietary data from over 13.5 mn users with credit line and 50 mn credit applications. This enables the company to conduct credit assessment based on information submitted in the users' credit applications and aggregated from a variety of sources, as well as the historical delinquency performance of its similarly situated users. Five information categories considered during risk assessment are: (1) geographic location, (2) education background, (3) level of income, (4) outstanding balance from other sources and (5) external credit reference.

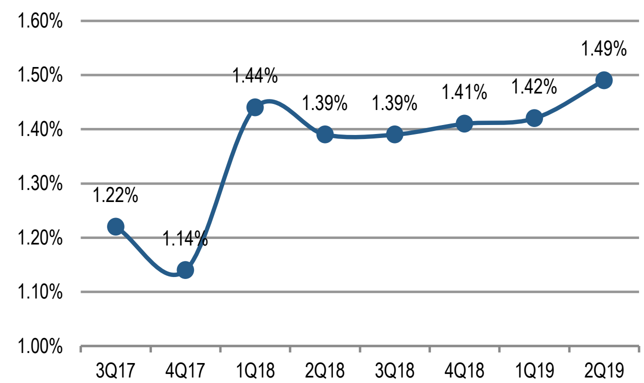
The company enjoys stable asset quality trends as reflected by largely stable 90-day+ delinquency ratios. The latest print in 2Q19 has ticked up slightly to 1.49% vs 1.42% in 1Q19, but remains within a narrow 10 bp range over the past six quarters, despite disruptions in the P2P sector during this period.

Figure 41: Lexin focuses on a better-quality cohort than its P2P/cash loan peers



Source: Company data, Credit Suisse estimates

Figure 42: Stable asset quality trends suggested by 90-day delinquency ratio



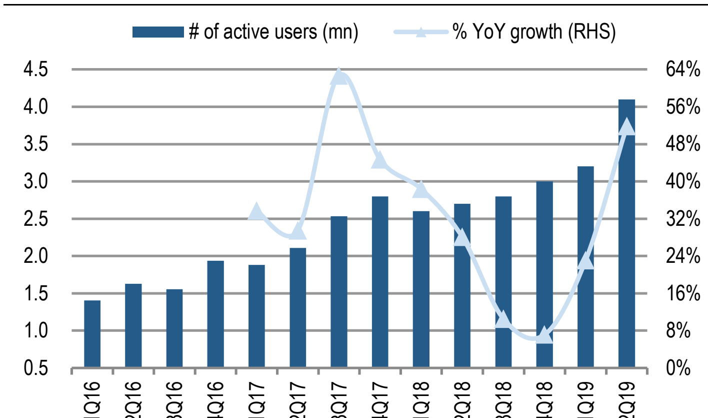
Source: Company data, Credit Suisse estimates

A sustainable customer-acquisition strategy

For online lenders trying to attract institutional partners, another core competence is customer acquisition. Compared to banks, where the sales and marketing function has not been prioritized traditionally, online lenders need to rely on customer acquisition as a key growth driver. Lexin's diversified customer acquisition strategy has proved to be a cost-effective one as it steps up efforts to expand customer base, while its competitive pricing and innovative product help enhance stickiness of its existing users.

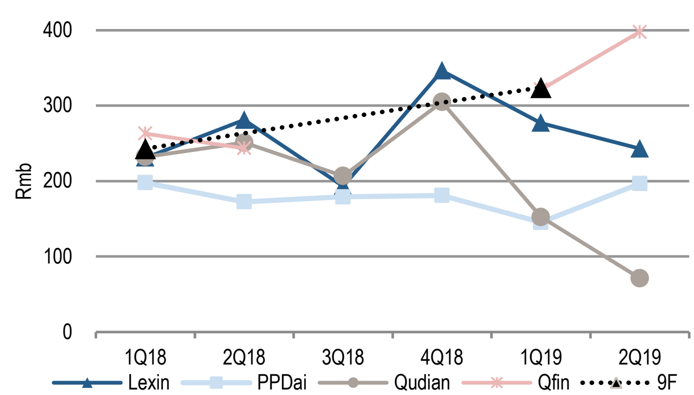
- Growth in the number of active borrowers has significantly accelerated in 2Q, to 52% YoY and 2% QoQ (to 4.1mn), as the company stepped up online marketing efforts to expand the borrower base. Meanwhile, sales & marketing expense on a per-new-customer basis has in fact *declined* by 14% and 12% YoY and QoQ, respectively. This contrasts an industry-wide trend of increasingly costly traffic acquisition as online lending platforms rush to diversify acquisition into higher-quality, non-P2P channels.

Figure 43: Active borrower growth surged to 52% YoY in 2Q19…



Source: Company data, Credit Suisse estimates

Figure 44: …while S&M expense per new customer sequentially declined



Note: Data for 9F reflects new borrower acquisition cost in 1Q18 and 1Q19.
Source: Company data, Credit Suisse estimates

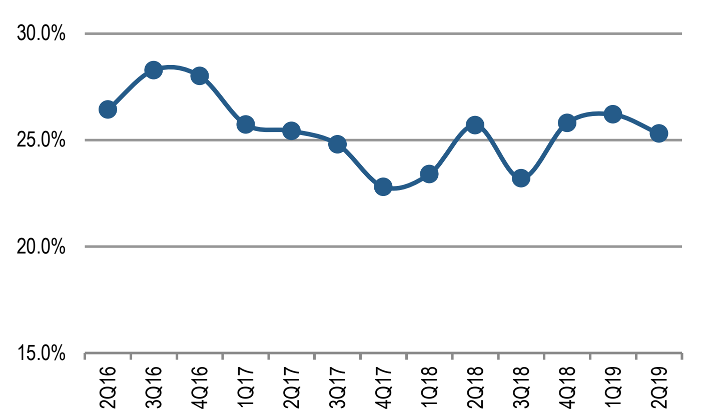
Lexin uses multiple channels for customer acquisition:

- Word-of-mouth referral by existing customers, as the educated young adult cohort are socially well connected,
- Own e-commerce channel (Fenqile), which offers pricing discounts on products and services specifically catering to the consumption demand of Lexin's target cohort. GMV growth in 2Q was robust at 26% YoY.
- Various brand marketing channels – via social media such as WeChat and Weibo, press outlets, paid placement on search engines, app stores, partnering with third-party e-commerce popular among young adults to co-host marketing events – as well as banks, to promote co-branded credit cards.
- Such a diversified approach to client acquisition improves cost effectiveness: every 100 customers acquired from online advertising beget an additional 30 to 40 customers via referrals or other means, per company's guidance in 2Q.

Meanwhile, competitive pricing and innovative loan products help enhance customer stickiness and allows Lexin to reap the benefits of longer-term income growth potential of its borrower base:

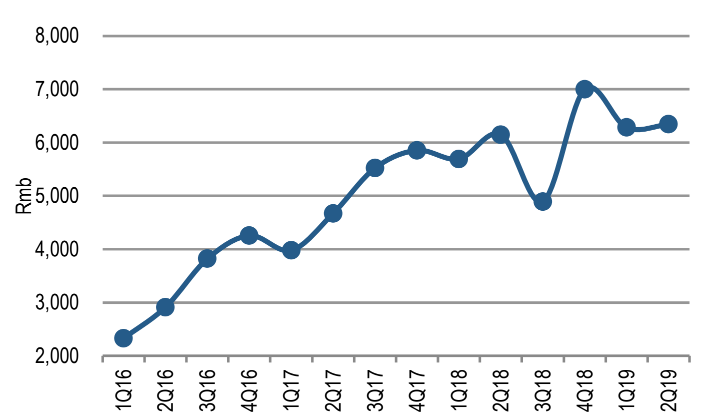
- Leveraging on its credit risk assessment model, the company is able to adjust pricing and credit line as it accumulates the payment histories of its existing customers.
- More recent product initiatives include: (1) launch of "Lehua Card" – which allows consumers to use Lexin's installment purchase services when settling payment via WeChat Pay – thus significantly expanding offline scenarios and facilitating access to Lexin's credit products; (2) a newly developed Le Card benefits platform that offers consumption coupons through a membership package.
- The company's CEO, President, and many in the senior management team are from Tencent, retaining a customer-centric culture and respond quickly to changes in the market environment.

Figure 45: Lexin's effective APR stood at around 25% for all (on- and off-B/S) loans



Source: Company data, Credit Suisse estimates

Figure 46: The average loan amount per borrower steadily trended up



Source: Company data, Credit Suisse estimates

Financial forecast

For Lexin, we expect the proportion of institutional funding to reach 85/98/100% for FY2019-21E, vs 56% in FY18, driving total loan volume growth of 71/44/15% over the same period. Meanwhile, we forecast loan origination volume funded by Juzilicai – its P2P platform – to drop sharply by 42/83/87% YoY. We expect the transition to the (off-balance sheet) facilitation model to result in: (1) a small (less than 1 pp) increase in funding cost vs retail funding, (2) 1 pp increase in credit-related cost, given ~5% guarantee deposit vs M3+ delinquency of 1.49% and life-time charge-off rate of just over 2.5% as of 2Q19; (3) some downside pressure on APR as a way to retain customers amid intensified competition among the 24-APR cohort. This contributes to (1) higher operating margin on lower provisions and funding cost due to shrinking on-B/S loan balance, but (2) lower net profit margin given lower gains from guarantee liabilities (other income gains), (3) lower combined net take-rate (4.2/3.8/3.8% for FY19-21E).

Figure 47: Lexin: summary of key operating trends

Rmb mn	2017A	2018A	2019E	2020E	2021E
Loan origination volume	47,704	66,100	113,192	162,611	186,874
YoY%	115%	39%	71%	44%	15%
% funded by institutions via loan facilitation	***n.a.***	***56%***	***85%***	***98%***	***100%***
Loan facilitation and servicing fees	379	2,076	4,709	5,922	6,853
Yield (% off B/S loan balance)	***10.2%***	***15.1%***	***12.8%***	***10.9%***	***10.7%***
Interest and financial services income	2,444	2,743	1,338	1,453	1,350
Yield (% on B/S loan balance)	*24.6%*	*25.0%*	*22.2%*	*23.1%*	*22.9%*
Combined net take rate	***3.0%***	***4.5%***	***4.2%***	***3.8%***	***3.8%***
Online direct sales and other revenue	2,760	2,778	3,706	4,672	5,373
Total revenue	5,582	7,597	9,753	12,048	13,576
YoY%	*29%*	*36%*	*28%*	*24%*	*13%*
Operating cost	(4,262)	(4,585)	(5,279)	(6,371)	(7,090)
GPM	24%	40%	46%	47%	48%
Sales and marketing expenses	(406)	(590)	(1,169)	(1,506)	(1,738)
% of revenue	*-7%*	*-8%*	*-12%*	*-13%*	*-13%*
G&A and R&D expenses	(439)	(600)	(801)	(936)	(1,055)
% of revenue	*-7.9%*	*-7.9%*	*-8.2%*	*-7.8%*	*-7.8%*
Operating expenses	(5,107)	(5,775)	(7,250)	(8,814)	(9,883)
Operating profit	476	1,822	2,503	3,234	3,693
YoY%	*4209%*	*283%*	*37%*	*29%*	*14%*
Operating profit margin	***8.5%***	***24.0%***	***25.7%***	***26.8%***	***27.2%***
Other income	(1)	288	318	7	7
Net profit/(loss)	240	1,977	2,393	2,755	3,145
Net profit margin	***4.3%***	***26.0%***	***24.5%***	***22.9%***	***23.2%***
ROA	0.2%	14.5%	15.8%	14.0%	13.7%
ROE	4.8%	68.1%	45.1%	35.0%	29.0%

Note: Combined net take-rate reflects on- and off-B/S net revenue divided by total loan origination volume.
Source: Company data, Credit Suisse estimates

Figure 48: Lexin: estimated economics of loan business (on- and off-B/S included)

Rmb mn	2017	2018	2019	2020	2021
Gross transaction fee income	3,223	6,172	10,514	14,669	16,902
% of loan balance	*23.6%*	*25.0%*	*24.5%*	*24.2%*	*24.2%*
Credit cost	(649)	(1,059)	(2,199)	(3,398)	(3,894)
% of loan balance	*-4.8%*	*-4.3%*	*-5.1%*	*-5.6%*	*-5.6%*
Funding cost	(1,156)	(2,115)	(3,528)	(5,128)	(5,950)
% of loan balance	*-8.5%*	*-8.6%*	*-8.2%*	*-8.5%*	*-8.5%*
Net revenue: lending	1,419	2,998	4,787	6,143	7,059
% of loan balance	*10.4%*	*12.1%*	*11.2%*	*10.1%*	*10.1%*
Net revenue: others	2,760	2,778	3,706	4,672	5,373
Opex	(3,702)	(3,955)	(5,990)	(7,582)	(8,739)
% of net revenue	*-66.3%*	*-52.1%*	*-61.4%*	*-62.9%*	*-64.4%*

Source: Company data, Credit Suisse estimates

Initiate with OUTPERFORM

We initiate with TP of US$17.00 and OUTPERFORM rating. We believe Lexin has a sustainable business model with comparative advantage in the areas that institutional partners value the most from online lenders: (1) risk control capability and (2) sustainable customer acquisition. We forecast adjusted net income growth of 21/15/14% YoY for FY19-21E to Rmb2.6/2.9/3.3 bn and ROE of 45/35/29% over the same period. We value Lexin using DCF methodology assuming WACC of 15% and long-term growth assumption of 3%. Our TP of US$17.00 implies FY19-20E P/E of 9.2x and 8.0x, and FY19E P/B of 3.2x. The stock currently trades at 4.7x FY19E P/E and 1.6x FY19E P/B.

Figure 49: DCF valuation

Rmb mn	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Revenue	5,582	7,597	9,753	12,048	13,576	15,205	17,029	18,732	20,606	22,048	23,591	24,299	25,028
YoY % chg		36%	28%	24%	13%	12%	12%	10%	10%	7%	7%	3%	3%
Non-GAAP EBIT	1,268	2,720	3,038	3,787	4,207	3,647	4,085	3,557	3,912	3,084	3,300	3,399	3,501
EBIT margin	23%	36%	31%	31%	31%	24%	24%	19%	19%	14%	14%	14%	14%
D&A	19	30	39	48	54	(46)	(51)	(431)	(474)	(507)	(543)	(1,118)	(1,151)
EBITDA	1,287	2,750	3,078	3,836	4,261	3,602	4,034	3,126	3,439	2,577	2,757	2,281	2,350
EBITDA margin	23%	36%	32%	32%	31%	24%	24%	17%	17%	12%	12%	9%	9%
Tax	(234)	(132)	(429)	(486)	(555)	540	605	469	516	387	414	342	352
Tax rate	-49%	-6%	-15%	-15%	-15%	-15%	-15%	-15%	-15%	-15%	-15%	-15%	-15%
Chang in working capital	503	(498)	(931)	(398)	63	71	79	87	96	102	109	113	116
CAPEX	(38)	(54)	(70)	(86)	(97)	(109)	(122)	(134)	(147)	(157)	(168)	(173)	(179)
FCF	1,518	2,065	1,649	2,865	3,672	4,104	4,596	3,548	3,903	2,908	3,112	2,563	2,639

Source: Company data, Credit Suisse estimates

Key downside risks to our positive view

- Sector-wise, a disorderly clean-up in the P2P industry could cause broad-based asset quality volatilities.
- Regulatory risk around the loan facilitation model, focusing on: (1) the practice of guarantee deposits; (2) limiting city/rural commercial banks' cooperation with fin-tech to offer loans outside of their jurisdiction.
- Intensified competitive pressure from big tech platforms, given an overlap of their near-prime customer segment vs that of Lexin.

Appendix

Figure 50: Key management and board members

Name	Age	Position/Title	Experience
Jay Wenjie Xiao	36	CEO and Chairman of the Board	Past: product manager in the infrastructure platform department of Tenpay. Bachelor's degree in design from Nanchang Hangkong University (2005).
Jared Yi Wu	40	President and Director	Past: general manager of WeChat Pay, director of product development/ deputy general manager at Tenpay. Master's degree in computing and internet systems from King's College London (2003) and Bachelor's degree in automation from South China University Technology (2002). EMBA degree from China Europe International Business School.
Craig Yan Zeng	51	Chief Financial Officer and Director	Past: CFO of YeePay; vice president of Hop Hing Group Holdings Limited; executive vice president of VanceInfo Technologies Inc.; financial director at Microsoft (Greater China); chief operating officer and chief financial officer of Venustech Group Inc. Master's degree in business administration from the Stern School of Business at New York University (1999) and Bachelor's degree in chemistry from Beijing University of Chemical Technology (1991).
Kris Qian Qiao	41	Chief Financing Cooperation Officer	Past: senior manager of China Universal Asset Management Co., Ltd.; senior product manager for financing cooperation at Tenpay; software engineer and project manager at the Bank of China Software Development Center (Shenzhen). Master's degree in business administration from the Hong Kong Polytechnic University and Bachelor's degree in applied computer science from Henan University. EMBA degree from Cheung Kong Graduate School of Business.
Ryan Huanian Liu	41	Chief Risk Officer	Past: general manager at the Zhejiang Province branch of PingAn Private Bank; executive director of PingAn Trust Co., Ltd.; senior vice president of risk at Societé Générale; senior risk manager of Standard Chartered Bank; Asia risk manager at GE Capital. Master's degree in informatics from the University of Edinburgh (2002) and Bachelor's degree in statistics from Zhejiang University (2000).
Shirley Yunwen Yang	48	Chief Human Resources Officer	Past: Assistant General Manager at Tencent's Interactive Entertainment Group in charge of human resources for overseas business; senior human resources executive positions at major multinational companies including Walmart; overseas working experience in North America and Hong Kong. College degree from Ningbo University and an MBA degree from the Hong Kong University of Science and Technology.
Keyi Chen	42	Director	Past: managing partner for K2 Partners in charge of fund operations; principal in Ce Yuan Ventures covering early stage investments in the companies from the technology, media and telecommunication sector. Bachelor's degree in economics from Peking University (2001).
Yibo Shao	46	Director	Past: co-founder of Matrix Partners China; director/ co-founder of BabyTree Group; chairman/ co-founder of Nuance Biotech Inc.; CEO/ founder of EachNet.com; worked at Boston Consulting Group and Goldman Sachs. Bachelor degree in physics and electrical engineering from Harvard College (1995) and MBA degree from Harvard Business School (1999). One of the Young Global Leaders of the World Economic Forum and Entrepreneur of the Year 2003 by Asian Venture Capital Journal.

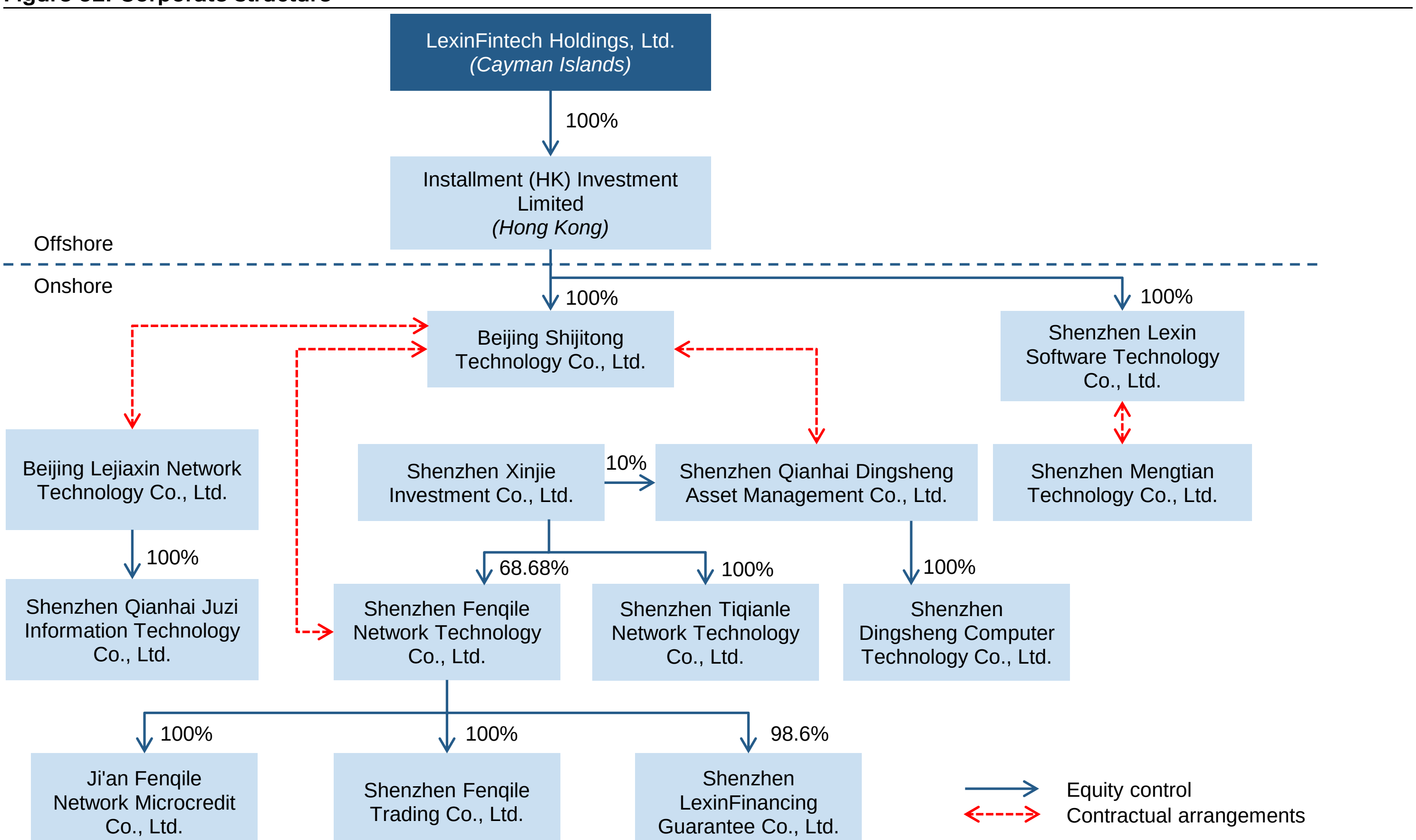
Source: Company data, Credit Suisse estimates

Figure 51: Principal shareholders

As of 31 Mar 2019	Class A Ordinary Shares	Class B Ordinary Shares	% of total ordinary shares on an as-converted basis	% of aggregate voting power
Jay Wenjie Xiao	3,911,948	104,147,199	30.5	80.9
All Directors and Executive Officers as a Group	7,703,448	104,147,199	31.6	81.2
Principal shareholders:				
Installment Payment Investment Inc*	3,911,948	104,147,199	30.5	80.9
K2 Partners entities	47,098,256	0	13.3	3.6
Matrix Partners China III Hong Kong Limited	36,490,086	0	10.3	2.8
JD.com Inc. and its affiliates	29,886,555	0	8.4	2.3
Magic Peak Investments Limited	17,927,557	0	5.1	1.4

*Represents 3,911,948 Class A ordinary shares in the form of ADSs and 104,147,199 Class B ordinary shares beneficially owned by Mr. Jay Wenjie Xiao through The JX Chen Family Trust. Source: Company data, Credit Suisse estimates

Figure 52: Corporate structure



Source: Company data, Credit Suisse estimates

CREDIT SUISSE

PPDai Group Inc.

A volume-driven growth recovery

Consumer Finance

PPDF

Target price (12M, US$)

5.80

Outperform[V]

- **We assume coverage of PPDF with OUTPERFORM on attractive valuation.** Despite a regulatory headwind, we believe the company's transformation toward institutional funding will drive loan volume growth for FY19-21E and earnings growth recovery in FY21E.
- **Good progress in institutionally funded loan volume expansion YTD.** We forecast net income growth at 13% YoY for FY21E, after a 5/6% decline for FY19E/FY20E. This is on the back of loan origination volume forecast of Rmb85/108/139bn for FY19-21E, representing growth of 39/27/28% YoY. Meanwhile, we expect institutional funding to account for 56/78/82% of total volume by for FY2019-21E while P2P funding reduce by 18/37% YoY in FY19/20E, followed by flat (4%) growth in FY21E. PPDF's institutional partners are also increasingly diversified: by 2Q19, half of its 20-plus institutional partners are consumer finance companies and commercial banks, compared to a trust-dominated model previously.
- **…while net profit take rate trends down.** 1) Revenue take-rate is slightly lower for institutional vs retail funding (8.1% vs 6.3% in 1H19 per our estimates). 2) We believe PPDF will continue to step up its efforts in customer acquisition since the borrower quality of its existing user base is worse than that preferred by institutional funding partners. We forecast operating margin to trend down sequentially from 1Q19's peak.
- **Stable asset quality trend remains stable.** <90-day and 90-180-day delinquency ratios both declined to 3.7%, from 2H18 peaks of 4.3% and 4.2%. Stabilized asset quality trend should in turn support the company's effort in attracting institutional partners.
- **Valuation**: We cut TP to US$5.80 from US$8.80, after cutting FY20-21E net profit by 14% and 15%, respectively, while raising FY19E net profit by 5%. Our DCF methodology assumes 17% WACC and long-term growth assumption of 3%. PPDF is trading at 2.5x FY19E P/E and 0.8x FY19E P/B. We maintain OUTPERFORM on attractive valuation.
- **Key risks**: a disorderly clean-up in the P2P industry causing broad-based asset quality volatilities, regulatory risk around the loan facilitation model.

Previous target price (12M, US$)	8.80
Price (7 Oct 19, US$)	2.78
Upside/downside (%)	108.6
Mkt cap (US$mn)	853.2
Enterprise value (Rmb mn)	3,277
Number of shares (mn)	306.92
Free float (%)	28.0
52-wk price range (US$)	6.29-2.78
ADTO-6M (US$ mn)	1.5

[V] = Stock Considered Volatile (see Disclosure Appendix)

Research Analysts

Yiran Zhong
852 2101 6125
yiran.zhong@credit-suisse.com

Charles Zhou, CFA
852 2101 6177
charles.zhou@credit-suisse.com

Richie Jiang
852 2101 6198
richie.jiang@credit-suisse.com

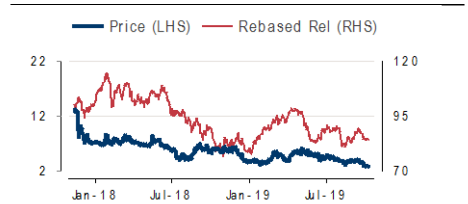
Ashley Dai
852 2101 6102
ashley.dai@credit-suisse.com

Financial and valuation metrics

Year	12/18A	12/19E	12/20E	12/21E
Revenue (Rmb mn)	-	-	-	-
EBITDA (Rmb mn)	1,739.9	2,521.9	2,330.7	2,615.5
EBIT (Rmb mn)	1,739.9	2,458.4	2,221.1	2,478.2
Net profit (Rmb mn)	2,469.5	2,338.5	2,197.3	2,490.8
EPS (CS adj.) (Rmb)	7.72	7.8	7.33	8.31
Chg. from prev. EPS (%)	n.a.	5.0	(14.3)	(14.7)
Consensus EPS (Rmb)	n.a.	7.16	7.67	9.32
EPS growth (%)	11.2	1.1	(6.0)	13.4
P/E (x)	2.6	2.5	2.7	2.4
Dividend yield (%)	1.0	0.0	0.0	0.0
EV/EBITDA (x)	2.6	1.2	0.9	0.5
P/B (x)	1.0	0.75	0.59	0.47
ROE (%)	51.7	33.9	24.5	22.0
Net debt/equity (%)	(27.0)	(39.8)	(38.4)	(38.3)

Source: Company data, Refinitiv, Credit Suisse estimates

Share price performance



The price relative chart measures performance against the MSCI CHINA F IDX which closed at 7,689.89 on 07/10/19. On 07/10/19 the spot exchange rate was US$1/US$1

Performance	1M	3M	12M
Absolute (%)	(26.5)	(37.4)	(53.5)
Relative (%)	(22.9)	(33.9)	(52.6)

CREDIT SUISSE

PPDai Group Inc. (PPDF.N / PPDF US)

Analyst: **Yiran Zhong**

Price (07 Oct 2019): **US$2.78** Target Price: **(from US$8.80) US$5.80** Rating: **Outperform [V]**

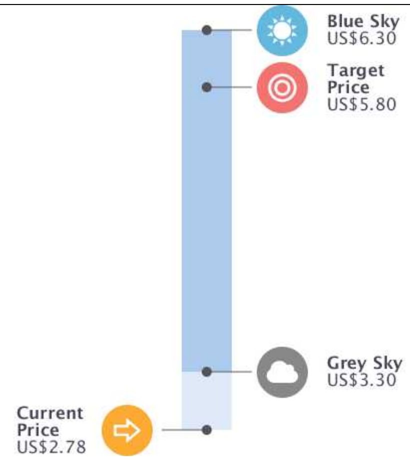
Income Statement (Rmb mn)	12/18A	12/19E	12/20E	12/21E
Sales revenue	-	-	-	-
Cost of goods sold	-	-	-	-
EBITDA	1,740	2,522	2,331	2,616
EBIT	1,740	2,458	2,221	2,478
Net interest expense/(inc.)	-	-	-	-
Recurring PBT	2,621	2,861	2,713	3,075
Profit after tax	2,469	2,338	2,197	2,491
Reported net profit	2,469	2,338	2,197	2,491
Net profit (Credit Suisse)	2,469	2,338	2,197	2,491
Balance Sheet (Rmb mn)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Cash & cash equivalents	1,616	3,159	3,890	4,838
Current receivables	-	-	-	-
Inventories	-	-	-	-
Other current assets	56	0	0	0
Current assets	1,672	3,159	3,890	4,838
Property, plant & equip.	144	183	229	281
Investments	0	0	0	0
Intangibles	0	0	0	0
Other non-current assets	0	0	0	0
Total assets	13,142	16,928	21,622	27,572
Current liabilities	-	-	-	-
Total liabilities	7,157	8,995	11,492	14,952
Shareholders' equity	5,924	7,871	10,068	12,559
Minority interests	62	62	62	62
Total liabilities & equity	13,142	16,928	21,622	27,572
Cash Flow (Rmb mn)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
EBIT	1,740	2,458	2,221	2,478
Net interest	0	0	0	0
Tax paid	0	0	0	0
Working capital	0	0	0	0
Other cash & non-cash items	0	64	110	137
Operating cash flow	1,740	2,522	2,331	2,616
Capex	0	0	0	0
Free cash flow to the firm	1,740	2,522	2,331	2,616
Investing cash flow	-	-	-	-
Equity raised	0	0	0	0
Dividends paid	0	0	0	0
Financing cash flow	-	-	-	-
Total cash flow	1,740	2,522	2,331	2,616
Adjustments	0	0	0	0
Net change in cash	1,740	2,522	2,331	2,616
Per share	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Shares (wtd avg.) (mn)	320	300	300	300
EPS (Credit Suisse) (Rmb)	7.72	7.80	7.33	8.31
DPS (Rmb)	0.19	0.00	0.00	0.00
Operating CFPS (Rmb)	5.44	8.41	7.78	8.73
Earnings	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Growth (%)				
Sales revenue	-	-	-	-
EBIT	13.8	41.3	(9.7)	11.6
EPS	11.2	1.1	(6.0)	13.4
Margins (%)				
EBITDA	41.0	45.2	37.7	34.8
EBIT	41.0	44.1	35.9	32.9
Valuation (x)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
P/E	2.6	2.5	2.7	2.4
P/B	1.00	0.75	0.59	0.47
Dividend yield (%)	1.0	0.0	0.0	0.0
EV/sales	-	-	-	-
EV/EBITDA	2.6	1.2	0.9	0.5
EV/EBIT	2.6	1.2	1.0	0.5
ROE analysis (%)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
ROE	51.7	33.9	24.5	22.0
ROIC	53.2	43.9	32.7	28.6
Credit ratios	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Net debt/equity (%)	(27.0)	(39.8)	(38.4)	(38.3)
Net debt/EBITDA (x)	(0.93)	(1.25)	(1.67)	(1.85)

Source: Company data, Refinitiv, Credit Suisse estimates

Company Background

PPDAI Group Inc. (Paipaidai) is a leading online consumer finance marketplace in China with strong brand recognition. Launched in 2007, Paipaidai is the first online consumer finance marketplace in China.

Blue/Grey Sky Scenario



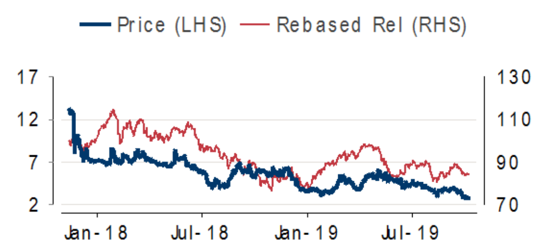
Our Blue Sky Scenario (US$) (from 11.00) 6.30

Our blue sky scenario of US$6.30 assumes better than expected loan origination. We assume 5% terminal growth rate and 12% WACC to get the blue sky target price with 2019E P/E of 5.9x.

Our Grey Sky Scenario (US$) (from 5.10) 3.30

Our grey sky scenario of US$3.30 assumes funding becomes insufficient and its proprietary credit-scoring model is not effective. We assume 0% terminal growth rate and 70% WACC to get the grey skey target price wtih 2019E P/E of 3.1x.

Share price performance



The price relative chart measures performance against the MSCI CHINA F IDX which closed at 7,689.89 on 07-Oct-2019
On 07-Oct-2019 the spot exchange rate was US$1/US$1

For PPDai, we expect the proportion of loan origination volume funded by institutional partners to rise from 9% in FY18 to 56/78/82% for FY19-21E, while P2P funding reduce by 18/37% YoY in FY19/20E, followed by flat (4%) growth in FY21E. This should drive total origination volume growth of 39/27/28% over the same period. We expect the combined take rate to decline by 1.3 pp over FY18A-21E due to 1) higher funding cost (~11%) vs P2P (~9%) and lower effective APR as the cooperation with banks deepens. Furthermore, we forecast a 10.7pp operating margin decline over FY19-21 for PPDai largely driven by higher sales & marketing expenses.

Figure 53: PPDai: summary of key operating trends

Rmb mn	2017A	2018A	2019E	2020E	2021E
Loan origination volume	65,568	61,498	85,444	108,224	138,740
YoY%	*230%*	*-6%*	*39%*	*27%*	*28%*
% funded by institutions via loan facilitation	***0%***	***9%***	***56%***	***78%***	***82%***
Loan facilitation service fees	2,843	2,919	3,668	4,268	5,272
Post-facilitation service fees	669	923	1,143	1,040	1,146
Yield (% off B/S loan balance)	***20%***	***16%***	***18%***	***16%***	***15%***
Net interest income and loan provision losses	(15)	63	620	626	725
Yield (% on B/S loan balance)	*-6%*	*5%*	*19%*	*16%*	*15%*
Combined net take rate	***5.3%***	***5.8%***	***5.8%***	***4.9%***	***4.6%***
Other revenue	384	446	417	555	732
Total revenue	3,881	4,351	5,848	6,491	7,875
YoY%	*219%*	*12%*	*34%*	*11%*	*21%*
Sales and marketing expenses	(788)	(711)	(941)	(1,407)	(1,804)
% of revenue	*-20%*	*-16%*	*-16%*	*-22%*	*-23%*
Origination and servicing expenses	(975)	(986)	(1,242)	(1,608)	(2,060)
% of revenue	*-25%*	*-23%*	*-21%*	*-25%*	*-26%*
G&A expenses	(589)	(701)	(668)	(649)	(832)
% of revenue	*-15%*	*-16%*	*-11%*	*-10%*	*-11%*
Provision for doubtful accounts	-	(107)	(270)	(303)	(350)
% of volume	*0.0%*	*-0.2%*	*-0.3%*	*-0.3%*	*-0.3%*
Operating expenses	(2,351)	(2,504)	(3,120)	(3,967)	(5,046)
Operating profit	1,529	1,847	2,728	2,524	2,828
YoY%	*546%*	*21%*	*48%*	*-7%*	*12%*
Operating profit margin	***39.4%***	***42.4%***	***46.6%***	***38.9%***	***35.9%***
Other income	(172)	774	133	189	247
Net profit/(loss)	(1,991)	2,469	2,338	2,197	2,491
YoY%			*-5%*	*-6%*	*13%*
Net profit margin	***-51.3%***	***56.8%***	***40.0%***	***33.9%***	***31.6%***
ROA	20.1%	22.7%	15.6%	11.4%	10.1%
ROE	66.8%	51.1%	33.6%	24.3%	21.9%

Note: Combined net take-rate reflects on- and off-B/S net revenue divided by total loan origination volume.

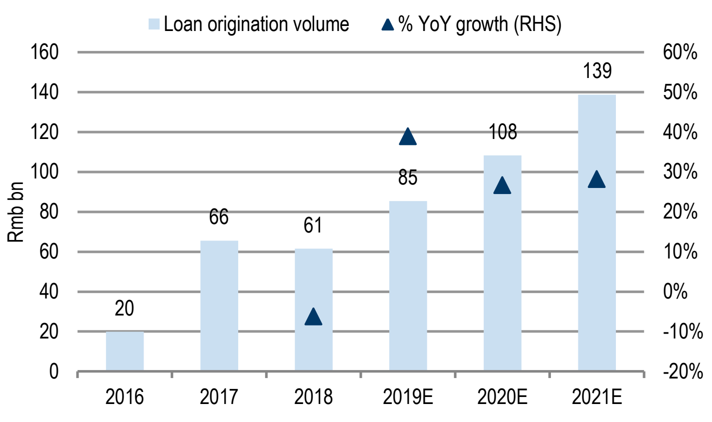
Source: Company data, Credit Suisse estimates

Figure 54: PPDai: estimated economics of loan business (on- and off-B/S included)

Rmb mn	2017	2018	2019	2020	2021
Gross transaction fee income	7,910	10,169	12,001	14,188	17,965
% of loan balance	*44%*	*41%*	*40%*	*38%*	*37%*
Credit cost	(2,479)	(3,836)	(3,713)	(4,445)	(5,569)
% of loan balance	*-13.8%*	*-15.5%*	*-12.4%*	*-12.0%*	*-11.6%*
Funding cost	(1,933)	(2,428)	(2,857)	(3,808)	(5,254)
% of loan balance	*-10.8%*	*-9.8%*	*-9.6%*	*-10.3%*	*-10.9%*
Net revenue: lending	3,497	3,905	5,431	5,935	7,143
% of loan balance	*19.5%*	*15.7%*	*18.2%*	*16.0%*	*14.8%*
Net revenue: others	384	446	417	555	732
Opex	(2,351)	(2,398)	(2,851)	(3,664)	(4,696)
% of net revenue	*-60.6%*	*-55.1%*	*-48.7%*	*-56.5%*	*-59.6%*

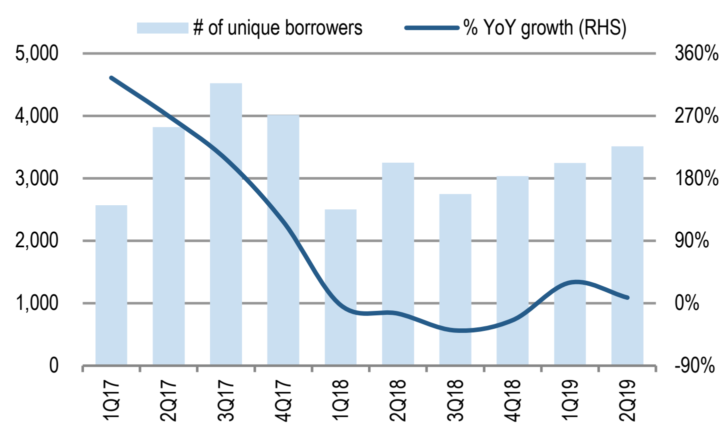
Source: Company data, Credit Suisse estimates

Figure 55: We forecast solid loan origination volume growth for Fy19-21E



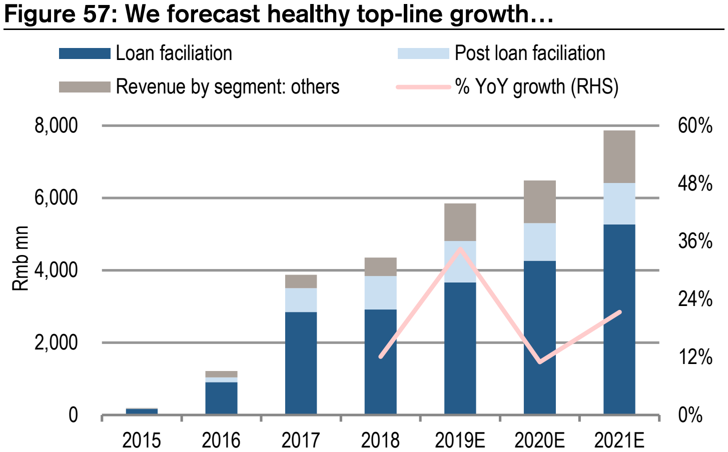
Source: Company data, Credit Suisse estimates

Figure 56: PPDF to continue spending on customer acquisition to drive borrower growth



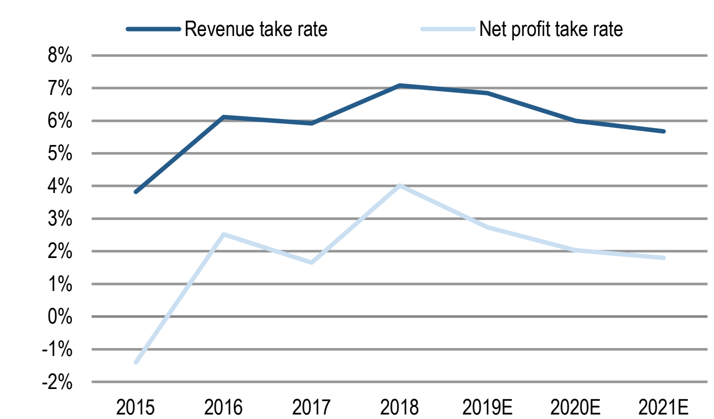
Source: Company data, Credit Suisse estimates

Figure 57: We forecast healthy top-line growth…



Source: Company data, Credit Suisse estimates

Figure 58: …while take-rate and margin decline



Source: Company data, Credit Suisse estimates

Yirendai Ltd.

P2P remains a drag; assume at Neutral

Consumer Finance

YRD

Target price (12M, US$)

6.92

Neutral[V]

- **We assume coverage of YRD with NEUTRAL and TP of US$6.92**. We believe Yiren Digital's product strategy (i.e., large ticket-size, high APR and long tenor) and unfavourable asset quality trends make it harder to secure institutional partnership vs. other P2P peers.
- **P2P exposure to remain a drag.** Following the business realignment between Yirendai and CreditEase, YRD's combined P2P outstanding loan balance increased to Rmb68 bn, the largest among listed peers. This leaves YRD especially vulnerable to "triple reductions". The number of active borrowers and investors halved YoY in 2Q19. While business transition to an asset-allocation based online WM platform can help diversify revenue source from P2P, its non-P2P AUM is still too small (at 354mn, or 0.5% of total AUM).
- **Asset quality trend unfavourable**. While the delinquency ratios for its 3Q18 vintage suggest some early signs of stabilization in asset quality, those for the 2017 vintages should continue to worsen as they complete the cycle. <90-day delinquency ratio also picked up 0.3 pp QoQ to 4.8%. This plays to YRD's disadvantage when trying to attain institutional funding. Meanwhile, large ticket size (60-70k) and long duration (24-36 months) vs peers make it more vulnerable to cyclical headwind.
- **Transformation to institutional funding lagging peers.** YRD has made notable progress by securing Rmb 30bn line of credit from 10+ institutional funding partners. Still, 2Q19 institutional volume accounted for 20% of total loan origination volume, compared with Lexin's 78%, 9F's 58% and PPDai's 45%. YRD faces more challenges in its efforts to source institutional funding vs peers, due to its product strategy and unfavorable delinquency trend. We forecast FY19E/20E/21E loan volume of Rmb40.8/48.3/63.0 bn, down 35% YoY for FY19E and 18/31% YoY for FY20-21E
- **Valuation**: We value YRD using DCF methodology assuming WACC of 18% and long-term growth of 3%. Our TP of US$6.92 implies FY19E P/E of 4.1x and FY19E P/B of 1.4x. **Key risks** include further deterioration in asset quality causing worse-than-expected credit cost and loan volume (downside); better progress in transformation to institutional funding and better-than-expected cost synergies (upside).

Previous rating	Outperform
Previous target price (12M, US$)	20.00
Price (7 Oct 19, US$)	6.48
Upside/downside (%)	6.8
Mkt cap (US$mn)	599.5
Enterprise value (Rmb mn)	1,201
Number of shares (mn)	92.52
Free float (%)	16.4
52-wk price range (US$)	17.92-6.43
ADTO-6M (US$ mn)	0.6

[V] = Stock Considered Volatile (see Disclosure Appendix)

Research Analysts

Yiran Zhong
852 2101 6125
yiran.zhong@credit-suisse.com

Charles Zhou, CFA
852 2101 6177
charles.zhou@credit-suisse.com

Richie Jiang
852 2101 6198
richie.jiang@credit-suisse.com

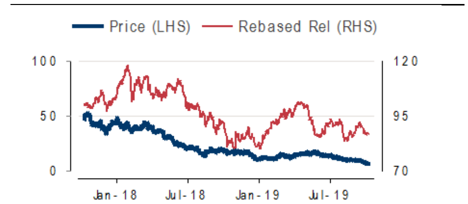
Ashley Dai
852 2101 6102
ashley.dai@credit-suisse.com

Financial and valuation metrics

Year	12/18A	12/19E	12/20E	12/21E
Revenue (Rmb mn)	-	-	-	-
EBITDA (Rmb mn)	924.3	1,108.7	1,522.8	2,047.6
EBIT (Rmb mn)	776.3	946.9	1,383.3	1,905.4
Net profit (Rmb mn)	1,580.0	1,126.6	1,262.0	1,681.3
EPS (CS adj.) (Rmb)	16.96	12.07	13.52	18.01
Chg. from prev. EPS (%)	n.a.	(5.4)	(37.0)	n.a.
Consensus EPS (Rmb)	n.a.	15.04	17.82	18.03
EPS growth (%)	-	(28.8)	12.0	33.2
P/E (x)	2.7	3.8	3.4	2.6
Dividend yield (%)	0.0	0.0	0.0	0.0
EV/EBITDA (x)	1.8	1.0	1.2	0.7
P/B (x)	n.m.	1.33	1.01	0.78
ROE (%)	n.m.	78.5	33.7	34.3
Net debt/equity (%)	n.m.	(99.3)	(58.9)	(50.2)

Source: Company data, Refinitiv, Credit Suisse estimates

Share price performance



The price relative chart measures performance against the MSCI CHINA F IDX which closed at 7,689.89 on 07/10/19. On 07/10/19 the spot exchange rate was US$1/US$1

Performance	1M	3M	12M
Absolute (%)	(27.1)	(46.3)	(64.2)
Relative (%)	(23.6)	(42.8)	(63.3)

CREDIT SUISSE

Yirendai Ltd. (YRD.N / YRD US)

Analyst: **Yiran Zhong**

Price (07 Oct 2019): **US$6.48** Target Price: **(from US$20.00) US$6.92**

Rating: **(from Outperform) Neutral [V]**

Income Statement (Rmb mn)	12/18A	12/19E	12/20E	12/21E
Sales revenue	-	-	-	-
Cost of goods sold	-	-	-	-
EBITDA	924	1,109	1,523	2,048
EBIT	776	947	1,383	1,905
Net interest expense/(inc.)	-	-	-	-
Recurring PBT	1,784	1,400	1,578	2,102
Profit after tax	1,580	1,127	1,262	1,681
Reported net profit	1,580	1,127	1,262	1,681
Net profit (Credit Suisse)	1,580	1,127	1,262	1,681
Balance Sheet (Rmb mn)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Cash & cash equivalents	2,607	3,211	2,506	2,785
Current receivables	-	-	-	-
Inventories	-	-	-	-
Other current assets	0	0	0	0
Current assets	2,607	3,211	2,506	2,785
Property, plant & equip.	266	208	212	246
Investments	0	0	0	0
Intangibles	0	0	0	0
Other non-current assets	0	0	0	0
Total assets	14,252	11,475	12,000	14,229
Current liabilities	-	-	-	-
Total liabilities	14,615	8,242	7,746	8,683
Shareholders' equity	(363)	3,233	4,254	5,546
Minority interests	0	0	0	0
Total liabilities & equity	14,252	11,475	12,000	14,229
Cash Flow (Rmb mn)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
EBIT	776	947	1,383	1,905
Net interest	0	0	0	0
Tax paid	0	0	0	0
Working capital	0	0	0	0
Other cash & non-cash items	148	162	140	142
Operating cash flow	924	1,109	1,523	2,048
Capex	0	0	0	0
Free cash flow to the firm	924	1,109	1,523	2,048
Investing cash flow	-	-	-	-
Equity raised	0	0	0	0
Dividends paid	0	0	0	0
Financing cash flow	-	-	-	-
Total cash flow	924	1,109	1,523	2,048
Adjustments	0	0	0	0
Net change in cash	924	1,109	1,523	2,048
Per share	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Shares (wtd avg.) (mn)	93	93	93	93
EPS (Credit Suisse) (Rmb)	16.96	12.07	13.52	18.01
DPS (Rmb)	0.00	0.00	0.00	0.00
Operating CFPS (Rmb)	9.92	11.88	16.32	21.94
Earnings	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Growth (%)				
Sales revenue	-	-	-	-
EBIT		22.0	46.1	37.7
EPS	-	(28.8)	12.0	33.2
Margins (%)				
EBITDA	8.2	12.9	15.9	17.4
EBIT	6.9	11.0	14.5	16.2
Valuation (x)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
P/E	2.7	3.8	3.4	2.6
P/B	(11.84)	1.33	1.01	0.78
Dividend yield (%)	0.0	0.0	0.0	0.0
EV/sales	-	-	-	-
EV/EBITDA	1.8	1.0	1.2	0.7
EV/EBIT	2.1	1.1	1.3	0.8
ROE analysis (%)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
ROE	(434.8)	78.5	33.7	34.3
ROIC	-	(52.0)	125.0	67.6
Credit ratios	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Net debt/equity (%)	717.3	(99.3)	(58.9)	(50.2)
Net debt/EBITDA (x)	(2.82)	(2.90)	(1.65)	(1.36)

Source: Company data, Refinitiv, Credit Suisse estimates

Company Background

Yirendai is a leading fintech company in China.

Blue/Grey Sky Scenario

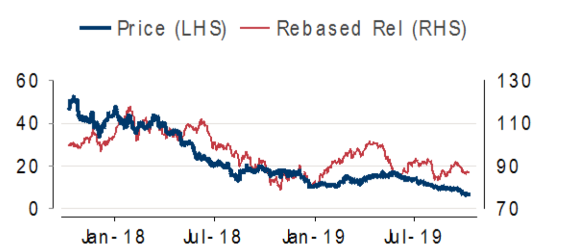
Our Blue Sky Scenario (US$) **(from 30.00) 13.00**

Our blue sky scenario of US$13 assumes successful P2P registration and higher-than-expected loan volume. We assume 5% terminal growth rate and 12% WACC to arrive at the blue sky target price, implying FY19E P/E of 7.6x.

Our Grey Sky Scenario (US$) **(from 10.00) 5.50**

Our grey sky scenario of US$5.50 assumes a disruptive clean-up of P2P sector and lack of progress in sourcing institutional funding. We assume zero terminal growth rate and 25% WACC to arrive at the blue sky target price, implying FY19E P/E of 3.2x.

Share price performance



The price relative chart measures performance against the MSCI CHINA F IDX which closed at 7,689.89 on 07-Oct-2019

On 07-Oct-2019 the spot exchange rate was US$1/US$1

For Yiren Digital, we expect the proportion of institutional-funded origination volume to increase from nil in FY18 to 18/40/52% in FY19-21E, significantly lagging its peers. We believe Yiren Digital's product strategy (i.e., large ticket-size with high APR) and unfavourable asset quality trends make it harder to secure institutional partnership vs other P2P peers. Meanwhile, we forecast P2P-funded volume declines YoY, -48/-14% in FY19-20E, followed by flat growth in FY21E. We expect loan facilitation take-rate to decline by 0.6 pp over FY18-21E due to potentially lower APR and slightly higher funding cost, partly offset by improvement in credit cost. The decline in loan facilitation take-rate is smaller than peers, given slower rate of transition to institutional funding. Furthermore, we expect opex (excluding provisions) to improve YoY in FY19E after QAF-related expense under G&A normalises. A high fixed-cost proportion in its sales and marketing expenses following the acquisition of CreditEase's offline network should help with further improvement in operating leverage over FY20-21E as loan volume starts to recover.

Figure 59: Yiren Digital: summary of key operating trends

Rmb mn	2018A	2019E	2020E	2021E
Loan origination volume	63,303	40,833	48,269	63,021
YoY%		*-35%*	*18%*	*31%*
% funded by institutions via loan facilitation	***0%***	***18%***	***40%***	***52%***
Loan facilitation service fees	7,309	4,737	5,573	7,054
Post-facilitation service fees	1,601	1,040	1,158	1,449
Loan facilitation take rate	***14.1%***	***14.1%***	***13.9%***	***13.5%***
Account mgmt service fees and other revenue	2,333	2,796	2,829	3,233
Total revenue	11,244	8,573	9,560	11,737
YoY%		*-24%*	*12%*	*23%*
Sales and marketing expenses	(6,658)	(4,568)	(4,597)	(5,357)
% of revenue	*-59%*	*-53%*	*-48%*	*-46%*
Origination and servicing expenses	(1,061)	(658)	(772)	(1,008)
% of revenue	*-9%*	*-8%*	*-8%*	*-9%*
G&A expenses	(1,756)	(799)	(917)	(1,134)
% of revenue	*-16%*	*-9%*	*-10%*	*-10%*
Provision expenses	(993)	(1,601)	(1,891)	(2,332)
% of volume	*-2%*	*-4%*	*-4%*	*-4%*
Operating expenses	(10,468)	(7,626)	(8,177)	(9,831)
Operating profit	776	947	1,383	1,905
YoY%		*22%*	*46%*	*38%*
Operating profit margin	***6.9%***	***11.0%***	***14.5%***	***16.2%***
Other income	1,007	240	124	126
Net profit/(loss)	1,580	1,127	1,262	1,681
YoY%		*-29%*	*12%*	*33%*
Net profit margin	***14.1%***	***13.1%***	***13.2%***	***14.3%***
ROA	11.1%	8.9%	11.1%	13.3%
ROE	-434.8%	78.5%	33.7%	34.3%

Note: Combined net take-rate reflects on- and off-B/S net revenue divided by total loan origination volume.

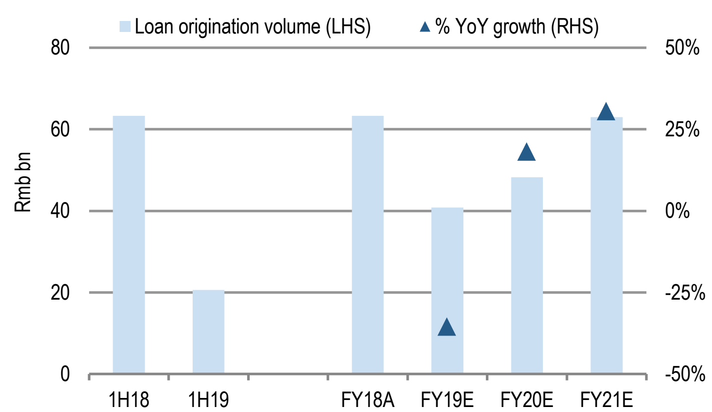
Source: Company data, Credit Suisse estimates

Figure 60: Yiren Digital: estimated economics of loan business

Rmb mn	2018	2019	2020	2021
Gross transaction fee income	23,739	14,700	17,136	22,309
% of loan volume	*38%*	*36%*	*36%*	*35%*
Credit cost	(8,862)	(5,717)	(6,275)	(8,193)
% of loan volume	*-14%*	*-14%*	*-13%*	*-13%*
Funding cost	(5,965)	(3,206)	(4,129)	(5,613)
% of loan volume	*-9.4%*	*-7.9%*	*-8.6%*	*-8.9%*
Net revenue: lending	8,911	5,777	6,731	8,504
% of loan volume	*14.1%*	*14.1%*	*13.9%*	*13.5%*
Net revenue: others	2,333	2,796	2,829	3,233
Opex	(9,475)	(5,672)	(6,034)	(7,499)
% of net revenue	*-84.3%*	*-66.2%*	*-63.1%*	*-63.9%*

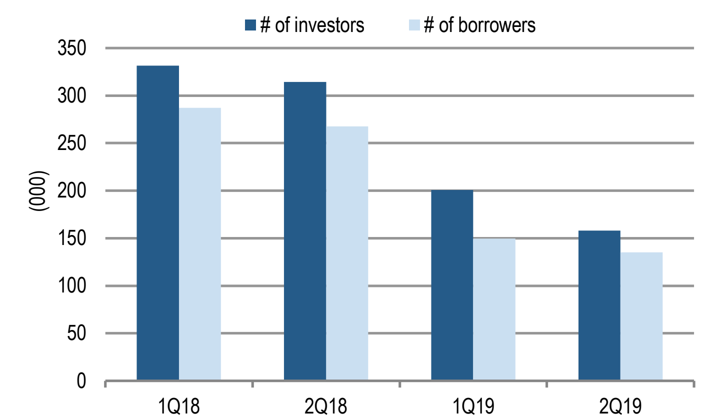
Source: Company data, Credit Suisse estimates

Figure 61: We forecast loan volume growth of down 35% YoY for FY19E and 18/31% YoY for FY20-21E



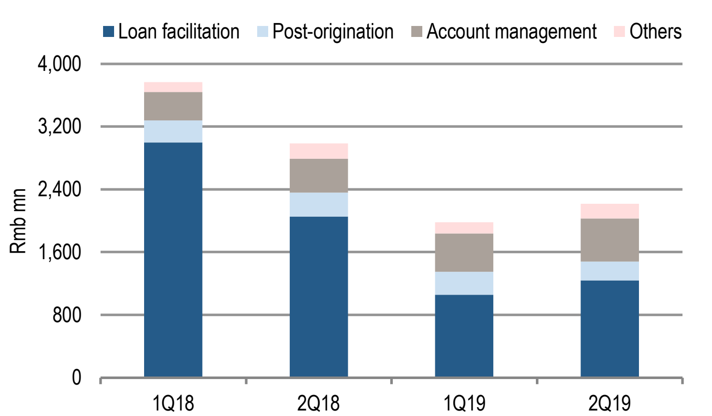
Source: Company data, Credit Suisse estimates

Figure 62: # of investors and borrowers both under pressure amid regulatory headwind around P2P



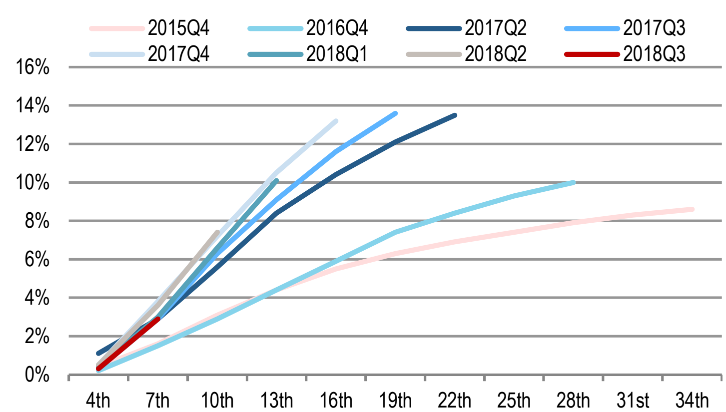
Source: Company data, Credit Suisse estimates

Figure 63: Revenue contribution from account management at 25% as of 2Q19



Source: Company data, Credit Suisse estimates

Figure 64: Delinquency rates for the 2017 vintages should continue to worsen as they complete the cycle



Source: Company data, Credit Suisse estimates

VCREDIT Holdings Limited

Portfolio transformation to lift profitability

Consumer Finance

2003.HK

Target price (12M, HK$)

13.00

Outperform[V]

- **We maintain OUTPERFORM and TP of HK$13.00**. We remain positive on the early evidence of success in VCredit's business transformation**,** thanks to (1) adequate institutional funding, and (2) rising profitability after the drag from provisions (fair-value loss) subsides.
- **100% institutional funding helps ensure limited disruption amid P2P cleanup**. VCredit completed transformation into a pure online business during 1H19; the company secured eight new institutional funding partners, bringing the total number of partners to 38. The type of institutional partners has also shifted to banks and consumer finance companies, compared to the earlier trust-dominated funding model (lower capital efficiency). The split of origination volume by trust model vs facilitation model was 35/63% in 1H19, compared to 60/34%, respectively, in FY18 (the remainder being direct lending).
- **We expect VCredit's profitability to gradually rise following its business transformation**: (1) portfolio shift towards smaller ticket size and shorter-term credit allows for a higher combined net yield; (2) a new customer segmentation rolled out in 1H19 allows more effective risk-pricing; (3) the disposal of O2O business leads to higher operating efficiency after FV loss due to runoff of legacy portfolio normalises, which we expect to be in FY2020E. This should result in improvements in operating margin to 16.2/21.3/19.3% in FY19-21E from 11.5% in FY18. Opex excluding credit cost accounted for 46% of the total revenue in 1H19, a 20 pp drop vs 66% in 2018.
- **Valuation:** We forecast loan originations of Rmb33.0/48.7/68.4 bn for FY19-20E. We forecast adjusted net income of Rmb596/983/1,160 mn, representing YoY growth of 102/65/18%, respectively. Our primary valuation methodology is a P/B-based valuation with key assumptions of 25.3% 3-year avg. ROE, 15% COE and a 3.0% long-term growth rate. Based on a 1.9x target P/B multiple, we derive our TP of HK$13.00. The stock is currently trading at 1.1x FY19E P/B and 5.5x FY19E P/E.
- **Key risks:** deterioration in asset quality, uncertainties in regulatory environment, and unexpected disruptions in institutional partnerships.

Price (8 Oct 19, HK$)	7.29
Upside/downside (%)	78.3
Mkt cap (HK$/US$ mn)	3,643 / 464.43
Enterprise value (Rmb mn)	2,489
Number of shares (mn)	499.70
Free float (%)	35.3
52-wk price range (HK$)	9.98-6.58
ADTO-6M (US$ mn)	0.7

[V] = Stock Considered Volatile (see Disclosure Appendix)

Research Analysts

Charles Zhou, CFA
852 2101 6177
charles.zhou@credit-suisse.com

Alex Xie
852 2101 7462
alex.xie@credit-suisse.com

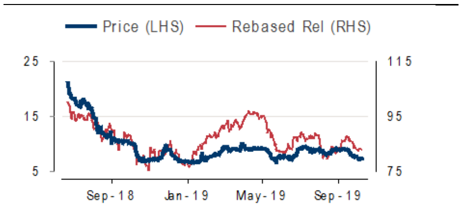
Yiran Zhong
852 2101 6125
yiran.zhong@credit-suisse.com

Financial and valuation metrics

Year	12/18A	12/19E	12/20E	12/21E
Revenue (Rmb mn)	-	-	-	-
EBITDA (Rmb mn)	130.9	435.9	926.9	1,159.0
EBIT (Rmb mn)	101.6	400.7	884.3	1,105.7
Net profit (Rmb mn)	295.8	596.2	983.0	1,160.1
EPS (CS adj.) (Rmb)	0.84	1.19	1.97	2.32
Chg. from prev. EPS (%)	n.a.	0.0	0.0	11.4
Consensus EPS (Rmb)	n.a.	1.02	1.88	2.33
EPS growth (%)	(58.4)	41.3	64.9	18.0
P/E (x)	7.8	5.5	3.4	2.9
Dividend yield (%)	0.0	0.0	0.0	0.0
EV/EBITDA (x)	17.3	5.9	1.0	(0.3)
P/B (x)	1.19	1.07	0.87	0.7
ROE (%)	46.4	20.2	28.4	27.3
Net debt/equity (%)	(37.7)	(24.2)	(63.6)	(78.3)

Source: Company data, Refinitiv, Credit Suisse estimates

Share price performance



The price relative chart measures performance against the MSCI CHINA F IDX which closed at 7,689.89 on 08/10/19. On 08/10/19 the spot exchange rate was HK$7.84/US$1

Performance	1M	3M	12M
Absolute (%)	(18.9)	(21.6)	(24.6)
Relative (%)	(15.4)	(17.4)	(25.7)

VCREDIT Holdings Limited (2003.HK / 2003 HK)

Analyst: **Charles Zhou**

Price (08 Oct 2019): **HK$7.29** Target Price: **HK$13.00**

Rating: **Outperform [V]**

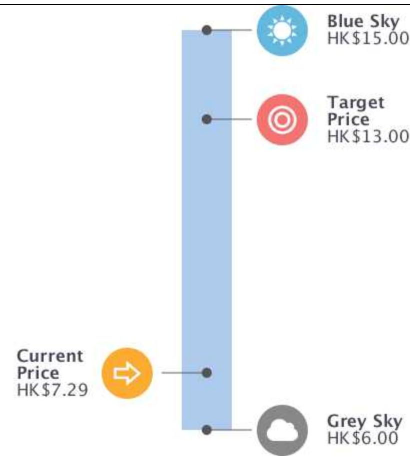
Income Statement (Rmb mn)	12/18A	12/19E	12/20E	12/21E
Sales revenue	-	-	-	-
Cost of goods sold	-	-	-	-
EBITDA	131	436	927	1,159
EBIT	102	401	884	1,106
Net interest expense/(inc.)	-	-	-	-
Recurring PBT	99	401	884	1,106
Profit after tax	(1,027)	321	707	885
Reported net profit	(1,027)	321	707	885
Net profit (Credit Suisse)	296	596	983	1,160
Balance Sheet (Rmb mn)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Cash & cash equivalents	1,050	753	2,424	3,678
Current receivables	-	-	-	-
Inventories	-	-	-	-
Other current assets	0	0	0	0
Current assets	1,050	753	2,424	3,678
Property, plant & equip.	59	108	133	169
Investments	28	28	28	28
Intangibles	0	0	0	0
Other non-current assets	0	0	0	0
Total assets	11,678	10,874	12,833	18,335
Current liabilities	-	-	-	-
Total liabilities	8,893	7,768	9,020	13,638
Shareholders' equity	2,785	3,105	3,813	4,697
Minority interests	0	0	0	0
Total liabilities & equity	11,678	10,874	12,833	18,335
Cash Flow (Rmb mn)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
EBIT	102	401	884	1,106
Net interest	0	0	0	0
Tax paid	0	0	0	0
Working capital	0	0	0	0
Other cash & non-cash items	29	35	43	53
Operating cash flow	131	436	927	1,159
Capex	0	0	0	0
Free cash flow to the firm	131	436	927	1,159
Investing cash flow	-	-	-	-
Equity raised	0	0	0	0
Dividends paid	0	0	0	0
Financing cash flow	-	-	-	-
Total cash flow	131	436	927	1,159
Adjustments	0	0	0	0
Net change in cash	131	436	927	1,159
Per share	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Shares (wtd avg.) (mn)	350	499	499	499
EPS (Credit Suisse) (Rmb)	0.84	1.19	1.97	2.32
DPS (Rmb)	0.00	0.00	0.00	0.00
Operating CFPS (Rmb)	0.37	0.87	1.86	2.32
Earnings	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Growth (%)				
Sales revenue	-	-	-	-
EBIT	(70.7)	294.3	120.7	25.0
EPS	(58.4)	41.3	64.9	18.0
Margins (%)				
EBITDA	4.8	12.4	19.1	17.9
EBIT	3.7	11.4	18.2	17.1
Valuation (x)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
P/E	7.8	5.5	3.4	2.9
P/B	1.19	1.07	0.87	0.70
Dividend yield (%)	0.0	0.0	0.0	0.0
EV/sales	-	-	-	-
EV/EBITDA	17.3	5.9	1.0	(0.3)
EV/EBIT	22.2	6.4	1.0	(0.3)
ROE analysis (%)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
ROE	46.4	20.2	28.4	27.3
ROIC	(64.3)	15.7	37.8	73.5
Credit ratios	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Net debt/equity (%)	(37.7)	(24.2)	(63.6)	(78.3)
Net debt/EBITDA (x)	(8.02)	(1.73)	(2.61)	(3.17)

Source: Company data, Refinitiv, Credit Suisse estimates

Company Background

VCREDIT is one of the leading consumer finance providers in China and focuses on credit card balance transfer product.

Blue/Grey Sky Scenario



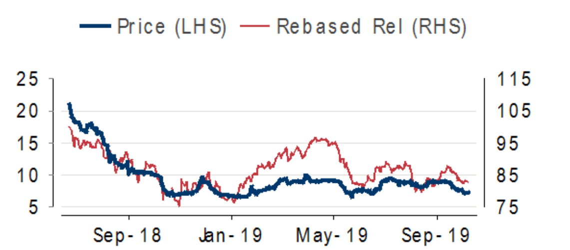
Our Blue Sky Scenario (HK$) **(from 21.00) 15.00**

Our blue sky scenario of HK$15.0 applies a higher P/B of 2.2x vs the original 1.9x due to faster-than-expected loan volume growth and stronger funding capabilities.

Our Grey Sky Scenario (HK$) **(from 10.00) 6.00**

Our grey sky scenario of HK$6.0 applies a lower P/B of 0.9x vs the original 1.9x due to intensified competition and deterioration of asset quality

Share price performance



The price relative chart measures performance against the MSCI CHINA F IDX which closed at 7,689.89 on 08-Oct-2019

On 08-Oct-2019 the spot exchange rate was HK$7.84/US$1

VCredit has no exposure to retail funding sources, like Qudian. VCredit completed transformation into a pure online business during 1H19. This should result in noticeable improvement in operating margin to 16.2/21.3/19.3% in FY19-21E, from 11.5% in FY18, thanks to (1) the disposal of its offline business, and (2) the normalization of FV loss incurred from the disposal of O2O business starting FY2020E. On the other hand, we expect downside pressure on APR to weigh on the combined take rate.

Figure 65: VCredit: summary of key operating trends

Rmb mn	2017A	2018A	2019E	2020E	2021E
Loan origination volume	24,544	20,756	32,959	48,693	68,390
YoY%	*212%*	*-15%*	*59%*	*48%*	*40%*
% funded by institutions via loan facilitation	***100%***	***100%***	***100%***	***100%***	***100%***
Loan facilitation income	84	270	1,389	2,310	3,211
Gross investment income	3,255	2,930	1,814	1,868	2,336
Combined net take rate	***9.9%***	***10.7%***	***7.6%***	***7.4%***	***7.1%***
Overdue and others	286	511	984	1,258	1,615
Total revenue	3,625	3,711	4,187	5,436	7,162
YoY%	*93%*	*2%*	*13%*	*30%*	*32%*
Sales and marketing	(69)	(206)	(107)	(158)	(222)
% of revenue	*-1.9%*	*-5.6%*	*-2.6%*	*-2.9%*	*-3.1%*
Origination and servicing expenses	(608)	(685)	(527)	(779)	(1,026)
% of revenue	*-16.8%*	*-18.4%*	*-12.6%*	*-14.3%*	*-14.3%*
G&A and R&D expenses	(256)	(577)	(511)	(755)	(992)
% of revenue	*-7.1%*	*-15.6%*	*-12.2%*	*-13.9%*	*-13.8%*
Interest expenses	(918)	(975)	(683)	(580)	(683)
Yield (% on B/S loan balance)	*-9%*	*-9%*	*-8%*	*-8%*	*-8%*
FV loss	(1,417)	(1,184)	(1,958)	(2,279)	(3,134)
% of volume	*-6%*	*-6%*	*-6%*	*-5%*	*-5%*
Operating expenses	(3,268)	(3,627)	(3,786)	(4,551)	(6,056)
Adj. operating profit	364	427	676	1,160	1,381
YoY%	*n.a.*	*17%*	*58%*	*71%*	*19%*
Adj. operating profit margin	***10.1%***	***11.5%***	***16.2%***	***21.3%***	***19.3%***
Adj. net profit/(loss)	292	296	596	983	1,160
YoY%	*n.a.*	*1%*	*102%*	*65%*	*18%*
Adj. net profit margin	***8.1%***	***8.0%***	***14.2%***	***18.1%***	***16.2%***
ROA	2.8%	2.4%	5.3%	8.3%	7.4%
ROE	25.6%	13.7%	20.2%	28.4%	27.3%

Note: Combined net take-rate reflects on- and off-B/S net revenue divided by total loan origination volume.

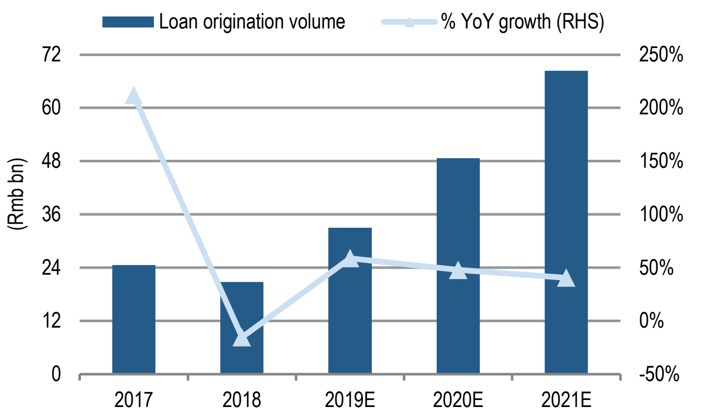
Source: Company data, Credit Suisse estimates

Figure 66: VCredit: estimated economics of loan business

Rmb mn	2017	2018	2019	2020	2021
Gross transaction fee income	7,608	5,813	8,043	10,983	15,459
% of loan volume	*31%*	*28%*	*24%*	*23%*	*23%*
Credit cost	(2,399)	(1,807)	(3,276)	(4,178)	(5,869)
% of loan volume	*-9.8%*	*-8.7%*	*-9.9%*	*-8.6%*	*-8.6%*
Funding cost	(2,789)	(1,780)	(2,247)	(3,208)	(4,726)
% of loan volume	*-11.4%*	*-8.6%*	*-6.8%*	*-6.6%*	*-6.9%*
Net revenue: lending	2,420	2,225	2,520	3,597	4,864
% of loan volume	*9.9%*	*10.7%*	*7.6%*	*7.4%*	*7.1%*
Net revenue: others	286	511	984	1,258	1,615
Opex	(933)	(1,468)	(1,145)	(1,692)	(2,240)
% of net revenue	*-25.7%*	*-39.6%*	*-27.4%*	*-31.1%*	*-31.3%*

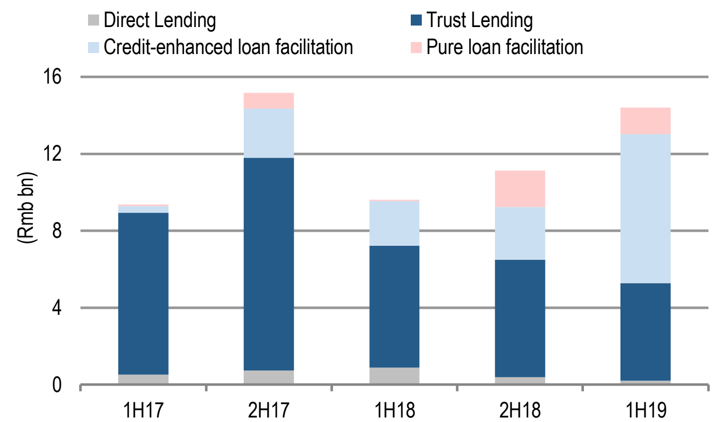
Source: Company data, Credit Suisse estimates

Figure 67: We forecast robust loan origination CAGR of 49% for FY19-21E



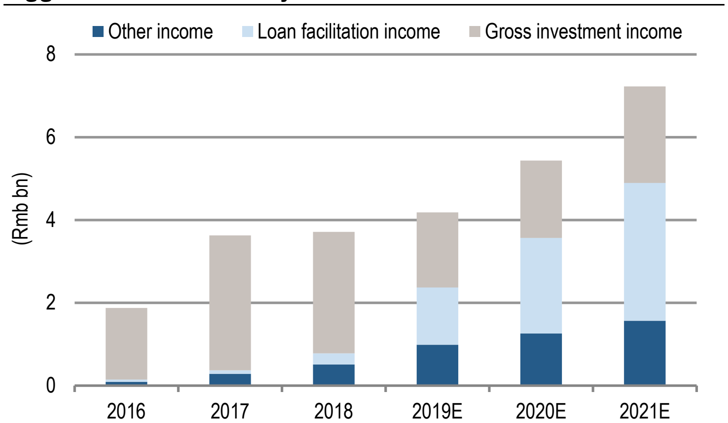
Source: Company data, Credit Suisse estimates

Figure 68: Facilitation model an increased funding source (54% vs 4% for 1H17 vs 1H19)



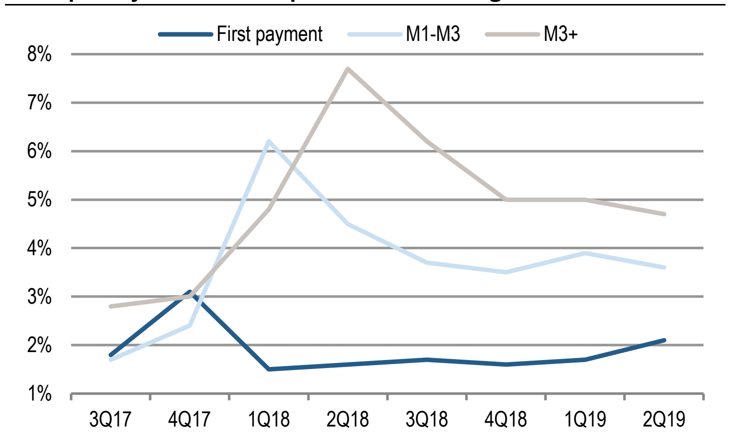
Source: Company data, Credit Suisse estimates

Figure 69: Revenue breakdown: loan facilitation income the biggest revenue driver by FY2021E



Source: Company data, Credit Suisse estimates

Figure 70: Delinquency ratio trends stable, first payment delinquency reflective of product mix change



Source: Company data, Credit Suisse estimates

9F Inc.

JFU

Initiate with Neutral; fair valuation

Target price (12M, US$)
11.62
Neutral[V]

Consumer Finance

- **We initiate coverage of 9F with NEUTRAL and TP of US$11.62.** 9F is an integrated fin-tech group with its P2P platform being the largest revenue and profit generator. By outstanding loan balance, 9F's P2P ranks second among listed P2P peers, at Rmb47 bn as of end-July, after Yiren Digital's combined balance after the latter's business realignment. 9F's share price has gained 27% since IPO at US$9.5.
- **9F's exposure to P2P business remains sizeable.** As of June 2019, 9F's P2P balance stood at Rmb48 bn, representing 81% of total loan balance of Rmb59 bn. Due to the challenging regulatory environment, the company's loan origination volume declined by 37% YoY to Rmb19.5 bn in 1H19, while active borrowers decreased 40% YoY to 1.2 mn.
- **Strategic partnership with leading P&C insurers helps better secure institutional funding.** Cooperation with PICC and third-party guarantee companies makes it easier for 9F to attract institutional funding via the direct lending program: the proportion of loan origination volume funded by institutional partners rose from 10.5% (Rmb1.0 bn) in 1Q19 to 58% (Rmb5.7 bn) 2Q19, largely offsetting the decline in retail funding. Post 2Q results, the company set out a strong guidance for 3Q total origination volume of Rmb20-21 bn. We forecast FY19-21E loan origination volumes of Rmb57.7/71.4/83.1 bn, respectively.
- **Advantage in consumption scenario enabled by cooperation with UnionPay and merchant partners.** 9F's core product, One Card, allows customers to draw upon approved credit lines when making online and offline transactions in 9F's vast consumption scenarios, enhancing user stickiness.
- **Valuation:** We forecast NPAT of Rmb2.1/2.3/2.6 bn in 2019-21E, implying YoY growth of 7/8/13% in FY19-21E. We value the company using DCF methodology with WACC of 17%, and 3% terminal growth rate, arriving at our TP of US$11.62. This implies FY19E P/B of 1.6x and FY19E P/E of 7.9x.
- **Key risks**: downside risks include a disorderly clean-up in the P2P industry causing broad-based asset quality volatilities and unexpected termination of institutional partnerships; upside risks include a faster-than-expected inclusion into P2P trial regulation.

Price (7 Oct 19, US$)	12.10
Upside/downside (%)	-3.9
Mkt cap (US$mn)	2,346
Enterprise value (Rmb mn)	10,028
Number of shares (mn)	193.86
Free float (%)	66.0
52-wk price range (US$)	13.35-9.58
ADTO-6M (US$ mn)	1.1

[V] = Stock Considered Volatile (see Disclosure Appendix)

Research Analysts

Yiran Zhong
852 2101 6125
yiran.zhong@credit-suisse.com

Charles Zhou, CFA
852 2101 6177
charles.zhou@credit-suisse.com

Richie Jiang
852 2101 6198
richie.jiang@credit-suisse.com

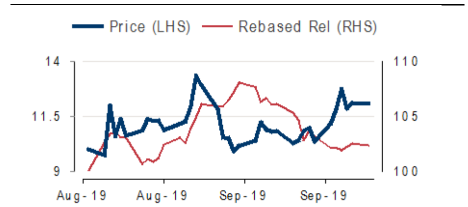
Ashley Dai
852 2101 6102
ashley.dai@credit-suisse.com

Financial and valuation metrics

Year	12/18A	12/19E	12/20E	12/21E
Revenue (Rmb mn)	-	-	-	-
EBITDA (Rmb mn)	2,208.2	2,318.8	2,393.0	2,737.4
EBIT (Rmb mn)	2,208.2	2,318.8	2,393.0	2,737.4
Net profit (Rmb mn)	1,964.6	2,105.0	2,270.7	2,559.0
EPS (CS adj.) (Rmb)	10.58	10.49	11.32	12.76
Chg. from prev. EPS (%)	n.a	n.a	n.a	n.a
Consensus EPS (Rmb)	n.a.	-	-	-
EPS growth (%)	228.1	(0.8)	7.9	12.7
P/E (x)	8.2	8.2	7.6	6.8
Dividend yield (%)	0.0	0.0	0.0	0.0
EV/EBITDA (x)	5.1	4.2	4.3	3.5
P/B (x)	2.56	1.67	1.37	1.14
ROE (%)	39.6	25.4	19.8	18.4
Net debt/equity (%)	(71.6)	(60.3)	(50.4)	(47.4)

Source: Company data, Refinitiv, Credit Suisse estimates

Share price performance



The price relative chart measures performance against the MSCI CHINA F IDX which closed at 7,689.89 on 07/10/19. On 07/10/19 the spot exchange rate was US$1/US$1

Performance	1M	3M	12M
Absolute (%)	(6.2)	-	-
Relative (%)	(2.7)	-	-

9F Inc. (JFU.OQ /)

Analyst: **Yiran Zhong**

Price (07 Oct 2019): **US$12.10** Target Price: **US$11.62** Rating: **Neutral**

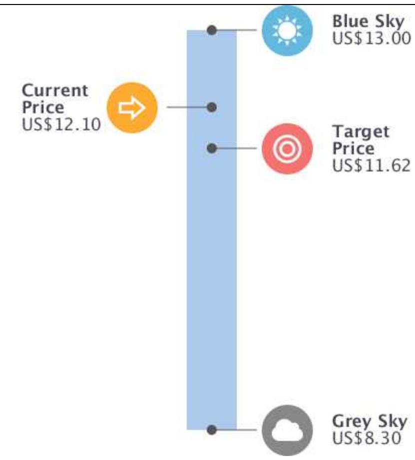
Income Statement (Rmb mn)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Sales revenue	**-**	**-**	**-**	**-**
Cost of goods sold	-	-	-	-
EBITDA	**2,208**	**2,319**	**2,393**	**2,737**
EBIT	**2,208**	**2,319**	**2,393**	**2,737**
Net interest expense/(inc.)	-	-	-	-
Recurring PBT	**2,419**	**2,618**	**2,824**	**3,184**
Profit after tax	**1,975**	**2,105**	**2,271**	**2,559**
Reported net profit	**1,965**	**2,105**	**2,271**	**2,559**
Net profit (Credit Suisse)	**1,965**	**2,105**	**2,271**	**2,559**
Balance Sheet (Rmb mn)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Cash & cash equivalents	5,469	7,054	6,315	7,125
Current receivables	-	-	-	-
Inventories	-	-	-	-
Other current assets	0	0	0	0
Current assets	**5,469**	**7,054**	**6,315**	**7,125**
Property, plant & equip.	86	317	357	276
Investments	0	0	0	0
Intangibles	0	0	0	0
Other non-current assets	0	0	0	0
Total assets	**9,108**	**13,562**	**14,723**	**17,572**
Current liabilities	**-**	**-**	**-**	**-**
Total liabilities	**1,471**	**1,862**	**2,188**	**2,529**
Total debt	-	-	-	-
Shareholders' equity	**6,244**	**10,341**	**12,612**	**15,171**
Minority interests	10	(32)	(77)	(128)
Total liabilities & equity	**9,108**	**13,562**	**14,723**	**17,572**
Cash Flow (Rmb mn)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
EBIT	**2,208**	**2,319**	**2,393**	**2,737**
Net interest	0	0	0	0
Tax paid	0	0	0	0
Working capital	0	0	0	0
Other cash & non-cash items	0	0	0	0
Operating cash flow	**2,208**	**2,319**	**2,393**	**2,737**
Capex	0	0	0	0
Free cash flow to the firm	**2,208**	**2,319**	**2,393**	**2,737**
Investing cash flow	**-**	**-**	**-**	**-**
Equity raised	0	0	0	0
Dividends paid	0	0	0	0
Financing cash flow	**-**	**-**	**-**	**-**
Total cash flow	**2,208**	**2,319**	**2,393**	**2,737**
Adjustments	0	0	0	0
Net change in cash	**2,208**	**2,319**	**2,393**	**2,737**
Per share	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Shares (wtd avg.) (mn)	186	201	201	201
EPS (Credit Suisse) (Rmb)	**10.58**	**10.49**	**11.32**	**12.76**
DPS (Rmb)	0.00	0.00	0.00	0.00
Operating CFPS (Rmb)	11.80	11.56	11.93	13.65
Earnings	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Growth (%)				
Sales revenue	-	-	-	-
EBIT	139.9	5.0	3.2	14.4
EPS	228.1	(0.8)	7.9	12.7
Margins (%)				
EBITDA	39.7	35.8	31.8	31.4
EBIT	39.7	35.8	31.8	31.4
Valuation (x)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
P/E	8.2	8.2	7.6	6.8
P/B	2.56	1.67	1.37	1.14
Dividend yield (%)	0.0	0.0	0.0	0.0
EV/sales	-	-	-	-
EV/EBITDA	5.1	4.2	4.3	3.5
EV/EBIT	5.1	4.2	4.3	3.5
ROE analysis (%)	**12/18A**	**12/19E**	**12/20E**	**12/21E**
ROE	39.6	25.4	19.8	18.4
ROIC	126.3	54.4	35.2	31.0
Credit ratios	**12/18A**	**12/19E**	**12/20E**	**12/21E**
Net debt/equity (%)	(71.6)	(60.3)	(50.4)	(47.4)
Net debt/EBITDA (x)	(2.48)	(3.04)	(2.64)	(2.60)

Source: Company data, Refinitiv, Credit Suisse estimates

Company Background

9F is an integrated fintech group, with multiple financial licenses in domestic and overseas market.

Blue/Grey Sky Scenario



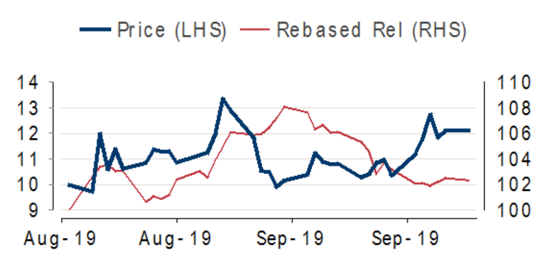
Our Blue Sky Scenario (US$) **13.00**

Our blue sky scenario of US$13.0 assumes successful P2P registration, and better than expected loan origination. We assume 5% terminal growth rate and 16% WACC to arrive at the blue sky target price, implying FY19E P/E of 8.8x.

Our Grey Sky Scenario (US$) **8.30**

Our grey sky scenario of US$8.30 assumes disruptive clean-up of P2P sector and termination of cooperation with institutional funding partners. We assume 0% terminal growth rate and 45% WACC to arrive at the blue sky target price, implying FY19E P/E of 5.7x.

Share price performance



The price relative chart measures performance against the MSCI CHINA F IDX which closed at 7,689.89 on 07-Oct-2019

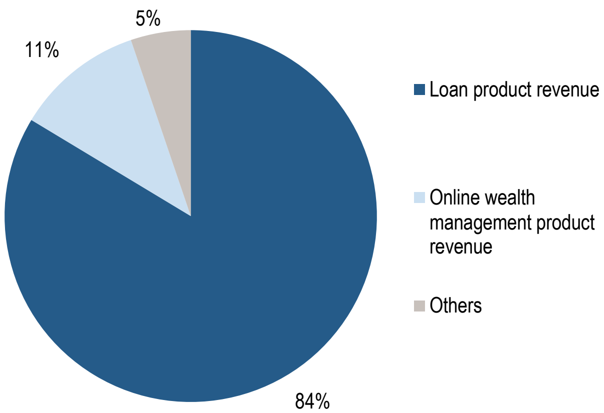
On 07-Oct-2019 the spot exchange rate was US$1/US$1

A leading digital financial account platform

9F is an integrated fin-tech group with multiple financial licenses domestically and overseas, offering a wide range of financial products including loan products (primarily revolving loan products), online wealth management products, and revenues from online sales of goods via the company's online shopping platform and third-party platforms. Revenue from loan products is primarily driven by loan facilitation income from the company's revolving loan products ('One Card'), which accounts for 80% of 1Q19 revenue. Contribution from the rest of the business is limited at this stage, with 11/5% revenue contribution from WM products/others.

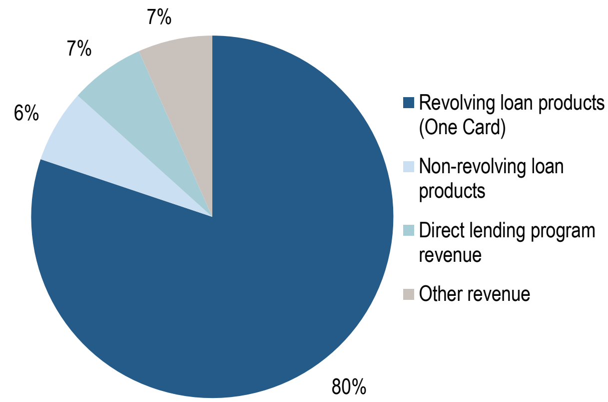
9F's exposure to P2P business remains sizeable. As of June 2019, 9F's P2P balance stood at Rmb48 bn, representing 81% of total loan balance of Rmb59 bn. Due to the challenging regulatory environment, the company's loan origination volume declined by 37% YoY to Rmb19.5 bn in 1H19, while active borrowers decreased 40% YoY to 1.2 mn

Figure 71: Loan product revenue represents 84% of total revenue in 1Q19



Source: Company data, Credit Suisse estimates

Figure 72: Revolving loan products accounts for 80% of total revenue in 1Q19



Source: Company data, Credit Suisse estimates

Strategic partnership with leading P&C insurers helps better secure institutional funding

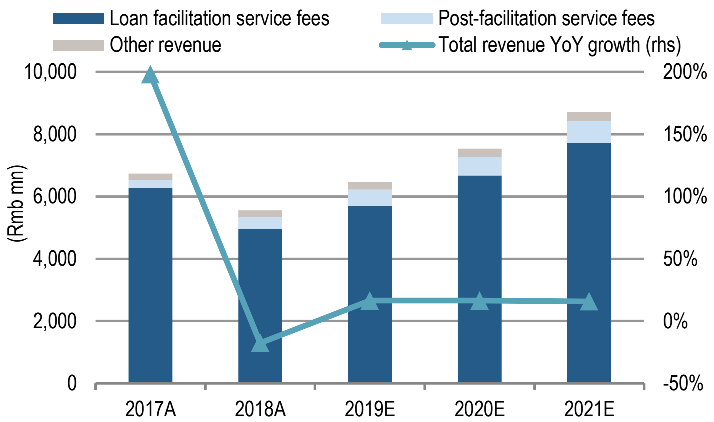
9F partners with leading insurers including PICC and China Taiping to provide third-party insurance protection to P2P investors. PICC also provides credit insurance to institutional funding partners under the loan facilitation model (direct lending program), helping 9F to quickly expand its institutional funding partners.

- PICC provides insurance protection for all new loans with terms of no more than 12 months that have been originated since May 2018 and are covered by the insurance protection plan.
- 9F also cooperates with financing guarantee company, Guangdong Success, which is an independent third-party and supervised by PICC. For loans with terms of over 12 months, if a borrower defaults while the balance of the guarantee fund reserve account is insufficient to cover, Guangdong Success will make additional repayment up to a cap equal to five times of the guarantee fee paid by the borrowers.
- Unlike the loan facilitation adopted by many P2P peers, 9F does not provide back-to-back guarantee for these extensional guarantee companies.

Cooperation with PICC and third-party guarantee companies makes it easier for 9F to attract institutional funding via the direct lending program: the proportion of loan origination volume funded by institutional partners rose from 10.5% (Rmb1.0 bn) in 1Q19 to 58% (Rmb5.7 bn) 2Q19, largely offsetting the decline in retail funding. 9F had also attained a total funding limit of Rmb70 bn from institutional funding partners as of 2Q19, vs Rmb30 bn in1Q19. Post 2Q results, the company set out a strong guidance for 3Q total origination volume of Rmb20-21 bn.

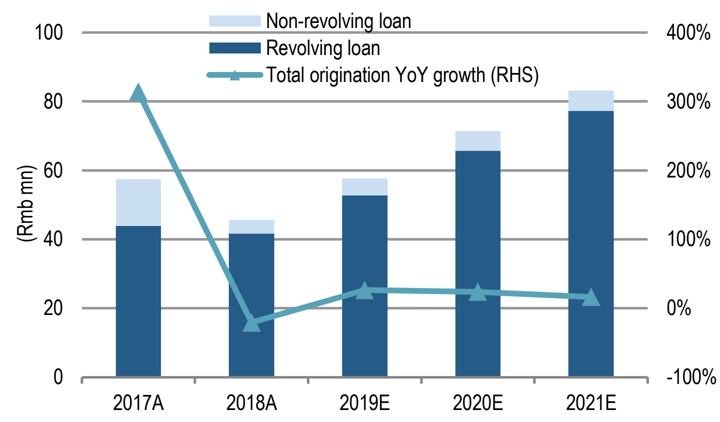
Looking forward, we expect institutional funding partners to drive funding volume growth. We forecast FY19/20/21E loan origination volumes of Rmb57.7/71.4/83.1 bn, respectively, representing growth of 26/24/16% in FY19-21E. Our base case for loan origination volume assumes institutional-sourced funding to account for 67/85/87% of total volume, respectively, while P2P funding declines by 59/43% YoY in FY19/20E followed by flat growth in FY21E.

Figure 73: Revenue forecast for 9F: loan facilitation service fees remains the primary driver



Source: Company data, Credit Suisse estimates

Figure 74: Loan origination volume to be driven by institutional funding



Source: Company data, Credit Suisse estimates

Advantage in consumption scenario enabled by cooperation with UnionPay and merchant partners

9F's core product, One Card, allows customers to draw upon approved credit lines when making online and offline transaction in 9F's vast consumption scenarios, thus enhancing user stickiness:

- Online: 9F's proprietary e-commerce platform (*One Card Mall)* with 124 merchant partners including JD.com and NetEase's Yanxuan.
- Offline: 9F partners with China UnionPay and commercial banks to offer virtual credit solutions, allowing users to draw credit for payments to merchants connected by China UnionPay.

Financial Forecast

For 9F, we expect the proportion of institutional funding to increase to 67/85/87% for FY19-21E, vs nil in FY18, driving total loan origination growth of 26/24/16% YoY to Rmb57.7/71.4/83.1 bn for FY19-21E. We expect loan facilitation take-rate to decline by 1.2 pp over FY18-21E, due to an increasing proportion of loan facilitation under the insurance model (18% insurance cost, vs 10% guarantee deposit under the non-insurance model), and partially offset by slightly lower funding cost (we estimate 10-11% retail funding cost for 9F vs ~9% institutional funding cost). In addition, we forecast a 4.5 pp operating margin decline over FY18-21 primarily driven by increasing sales & marketing expenses as a percentage of revenue.

Figure 75: 9F: summary of key operating trends

Rmb mn	2017A	2018A	2019E	2020E	2021E
Loan origination volume	57,524	45,606	57,667	71,430	83,148
YoY%	*314%*	*-21%*	*26%*	*24%*	*16%*
% funded by institutions via loan facilitation	***0%***	***0%***	***67%***	***85%***	***87%***
Loan facilitation service fees	6,273	4,961	5,703	6,679	7,724
Post-facilitation service fees	257	367	516	581	696
Yield (% loan balance)	***21.4%***	***10.9%***	***10.6%***	***9.9%***	***9.6%***
Loan facilitation take rate	***11.4%***	***11.7%***	***11.2%***	***10.8%***	***10.5%***
Other revenue	212	228	251	276	304
Total revenue	6,742	5,556	6,471	7,536	8,724
YoY%	*198%*	*-18%*	*16%*	*16%*	*16%*
Sales and marketing expenses	(2,244)	(1,746)	(2,249)	(2,786)	(3,243)
% of revenue	*-33.3%*	*-31.4%*	*-34.8%*	*-37.0%*	*-37.2%*
Origination and servicing expenses	(502)	(445)	(577)	(714)	(831)
% of revenue	*-7.4%*	*-8.0%*	*-8.9%*	*-9.5%*	*-9.5%*
General and administrative expenses	(3,075)	(1,157)	(1,326)	(1,643)	(1,912)
% of revenue	*-45.6%*	*-20.8%*	*-20.5%*	*-21.8%*	*-21.9%*
Operating expenses	(5,821)	(3,348)	(4,152)	(5,143)	(5,987)
Operating profit	921	2,208	2,319	2,393	2,737
YoY%	*132%*	*140%*	*5%*	*3%*	*14%*
Operating profit margin	***13.7%***	***39.7%***	***35.8%***	***31.8%***	***31.4%***
Other income	91	211	299	431	446
Net profit/(loss)	446	1,965	2,105	2,271	2,559
YoY%	*186%*	*340%*	*7%*	*8%*	*13%*
Net profit margin	***6.6%***	***35.4%***	***32.5%***	***30.1%***	***29.3%***
ROA	14.2%	25.8%	18.6%	16.1%	15.8%
ROE	25.4%	39.8%	25.4%	19.9%	18.6%

Note: Combined net take-rate reflects on- and off-B/S net revenue divided by total loan origination volume.
Source: Company data, Credit Suisse estimates

Figure 76: 9F: estimated economics of loan business

Rmb mn	2017	2018	2019	2020	2021
Gross transaction fee income	19,558	15,871	20,183	25,715	29,933
% of loan volume	*34%*	*35%*	*35%*	*36%*	*36%*
Credit cost	(6,443)	(5,245)	(8,073)	(10,715)	(12,472)
% of loan volume	*-11.2%*	*-11.5%*	*-14.0%*	*-15.0%*	*-15.0%*
Funding cost	(6,586)	(5,298)	(5,890)	(7,741)	(9,041)
% of loan volume	*-11.4%*	*-11.6%*	*-10.2%*	*-10.8%*	*-10.9%*
Net revenue: lending	6,530	5,328	6,220	7,260	8,420
% of loan volume	*11.4%*	*11.7%*	*10.8%*	*10.2%*	*10.1%*
Net revenue: others	212	228	251	276	304
Opex	(5,821)	(3,348)	(4,152)	(5,143)	(5,987)
% of net revenue	*-86.3%*	*-60.3%*	*-64.2%*	*-68.2%*	*-68.6%*

Source: Company data, Credit Suisse estimates

Initiate with NEUTRAL

We initiate 9F with NEUTRAL. The stock has gained 27% since its 15 Aug IPO at US$9.5. We forecast NPAT of Rmb2.1/2.3/2.6 bn in 2019-21E, implying YoY growth of 7/8/13% in FY19-21E. We value the company using DCF methodology with WACC of 17% and 3% terminal growth rate, arriving at our TP of US$11.62. This implies FY19E P/B of 1.6x and FY19E P/E of 7.9x.

Figure 77: DCF valuation

(Rmb mn)	2017A	2018A	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E
Revenue	6,742	5,556	6,471	7,536	8,724	9,596	10,268	10,782	11,321	11,887	12,481	12,855	13,241
YoY % chg.	198%	-18%	16%	16%	16%	10%	7%	5%	5%	5%	5%	3%	3%
Non-GAAP EBIT	1,011	2,419	2,618	2,824	3,184	3,167	2,362	1,725	1,019	357	374	386	397
EBIT margin	15%	44%	40%	37%	36%	33%	23.00%	16%	9%	3%	3%	3%	3%
D&A	12	19	31	111	125	96	103	108	113	832	874	900	927
EBITDA	1,023	2,437	2,649	2,935	3,308	3,263	2,464	1,833	1,132	1,189	1,248	1,286	1,324
EBITDA margin	15%	44%	41%	39%	38%	34%	24%	17%	10%	10%	10%	10%	10%
Tax	(352)	(402)	(524)	(565)	(637)	(685)	(493)	(367)	(226)	(238)	(250)	(257)	(265)
Tax rate	34%	17%	20%	19%	19%	21%	20%	20%	20%	20%	20%	20%	20%
Chang in working capital	4	(219)	(572)	(412)	(430)	(236)	(126)	(66)	(35)	(18)	(10)	(5)	(3)
CAPEX	(48)	(49)	(259)	(151)	(44)	(48)	(51)	(54)	(57)	(59)	(62)	(64)	(66)
FCF	627	1,768	1,294	1,807	2,198	2,293	1,794	1,346	814	873	926	959	991

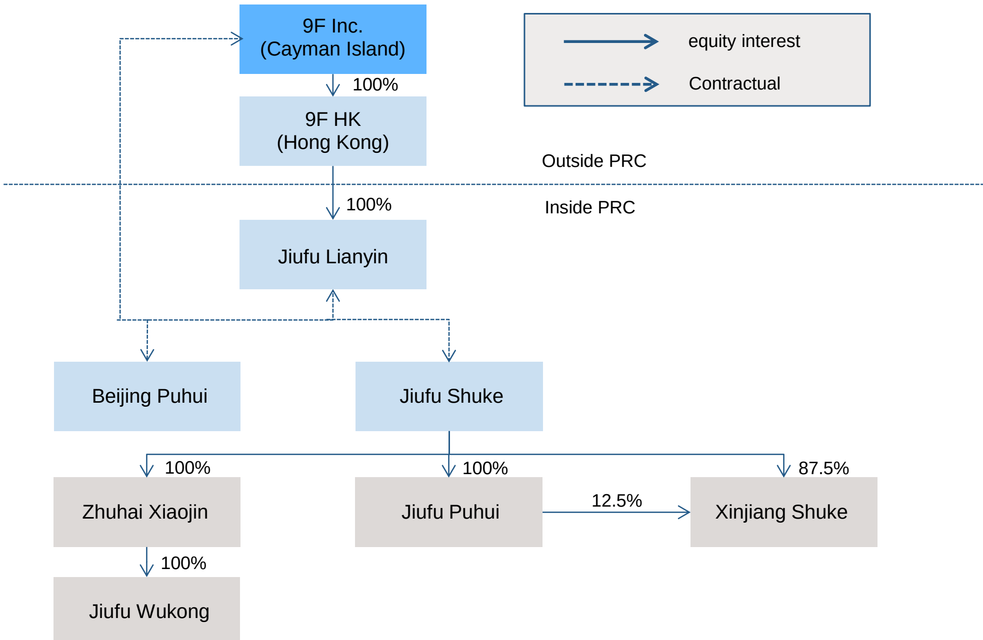
Source: Company data, Credit Suisse estimates

Key upside and downside risks to our neutral view

- Key downside risks include (1) a disorderly clean-up in the P2P industry causing broad-based asset quality volatilities and (2) unexpected termination of institutional partnership, resulting in a funding shortage.
- Key upside risks include a faster-than-expected inclusion into P2P trial regulation, resulting in higher-than-expected recovery in loan origination volume.

Appendix

Figure 78: Corporate structure



Source: Company data, Credit Suisse estimates

Figure 79: Main business of key entities

Entities	Description of main business
Jiufu Lianyin	Providing online financial account management service, technology support and development, and IT system support services
Jiufu Shuke	Holding company of the majority of its businesses in PRC, also providing online financial account management services
Beijing Puhui	No substantive business
Zhuhai Hengqin	Providing information consulting and risk management related services, such as credit data collection and analysis services, account management services, loan collection assistance services and borrower referral services
Jiufu Wukong	Providing technology support services for the purpose of operating its fixed income products related business
Zhuhai Xiaojin	Providing information consulting and risk management related services
Jiufu Puhui	Operating its online lending information intermediary platform, or online lending platform, providing information gathering and publishing, credit assessment, information interaction, loan facilitation services and account management services
Xinjiang Shuke	Providing information consulting and risk management related services

Source: Company data, Credit Suisse estimates

Figure 80: Key management and board members

Name	Age	Position/Title	Experience
Lei Sun	40	Chairman and CEO	Past: Senior manager at the head office of China Minsheng Bank; Department head with Digital China Group, in charge of the development of internet financing products; Bachelor's degree in finance and EMBA from Peking University
Yifan Ren	36	Director	Past: General manager of Beijing Aidi Telecommunication; general manager of Beijing Tiantianfeidu Information Technology; Bachelor's degree in journalism from Peking University and Master's degree in media & communications from Fordham University
Changxing Xiao	46	Director	Past: Mr. Xiao founded Will Hunting Capital in 2014 and has been serving as a partner since its inception; Bachelor's degree in international finance from Peking University
Flynn Xuxian Huang	49	Director	Past: Chairman of Jih Sun Life Insurance Agency Co. since 2013, a director of Jih Sun Financial Holding Co., Ltd. (TWO:5820) and its subsidiaries since 2012. Executive director of Carry Wealth Holdings Limited (HKEX: 0643).
Ivan Xu	44	Director	Past: Executive director of Trendy International Group; EMBA from Cheung Kong Graduate School of Business.
Junsheng Zhang	50	Director	Current Chairman of Hehe Holdings Co. Past: General manager at Beijing Xiangshanyishu Real Estate Development Co; Master's degree in business administration from Cheung Kong Graduate School of Business
Wing Hon Cheung	41	Director	Senior venture capitalist, has over 18 years of experience in entrepreneurship; Current Chairman of HGI Capital Holdings. Past: non-executive director at Guru Online and founder of OOH Media Network Group in 2002.
Fangxiong Gong	55	Independent Director appointee	Currently: Responsible officer of First Seafront Financial Limited; Independent non-executive director of Bank of Shanghai Co., Ltd. (SSE:601229); Past: Managing Director of JPMorgan Securities (Asia Pacific) Ltd and Chairman of JPM China Investment Banking
Yanjun Lin	40	CFO and CEO of international business and 9F Primasia	Past: independent non-executive director of Bank of Jinzhou Co., Ltd. (HKEX: 0416); Director of Barclays Capital Asia
Lei Liu	37	Executive President and CRO	Past: senior product manager of the retail banking department of the head office of China Minsheng Bank
Lixing Chen	37	Vice President, CEO of Jiufu Puhui	Past: project manager with Regal Lloyds International Real Estate Consultants Beijing Co Ltd.
Xiaojun Yang	44	President, Chairman of Jiufu Puhui	Past: Vice chairman of Lufax; deputy general director of the Financial Innovation Supervision Department of the CBRC.
Zhijun Li	38	Vice President and Chief Marketing Officer	Past: product marketing manager of Tencent Technology; co-founder of Beijing Kuailete Education Consultation.
Guisheng Li	40	Vice President, CEO of financial institution business	Past: ten years of experience in Internet industry, marketing management and working with financial institutions; vice president of Beijing Groupwise Technology Co.

Source: Company data, Credit Suisse estimates

Figure 81: Principal shareholders

	Ordinary shares beneficially owned prior to this offering	
Directors and Executive Officers	**Numbers**	**%**
Lei Sun	775,268	39.1
Yifan Ren	435,834	23.3
Changxing Xiao	139,203	7.4
Flynn Xuxian Huang	NA	NA
Ivan Xu	72,730	3.8
Junsheng Zhang	39,127	2.1
Wing Hon Cheung	NA	NA
Fangxiong Gong	NA	NA
Yanjun Lin	NA	NA
Lei Liu	43,476	2.3
Lixing Chen	32,668	1.7
Xiaojun Yang	30,620	1.6
Zhijun Li	20,987	1.1
Guisheng Li	NA	NA
All Directors and Executive Officers as a Group	**1,619,378**	**76.2**

Source: Company data, Credit Suisse estimates

Companies Mentioned *(Price as of 07-Oct-2019)*

360 Finance (QFIN.OQ, $8.6)
51 Credit Card (2051.HK, HK$3.15)
58.com Inc. (WUBA.N, $48.79)
9F Inc. (JFU.OQ, $12.1, NEUTRAL[V], TP $11.62)
American Express Co. (AXP.N, $113.65)
Baidu (BIDU.OQ, $101.47)
Capital One Financial Corp. (COF.N, $86.88)
China Minsheng Banking Co Ltd (1988.HK, HK$5.29)
China Minsheng Banking Co Ltd (600016.SS, Rmb6.02)
China Taiping (0966.HK, HK$17.16)
Discover Financial Services (DFS.N, $77.7)
Enova Intl (ENVA.N, $20.43)
GreenSky, Inc. (GSKY.OQ, $6.94)
Hexindai (HX.OQ, $1.47)
Industrial & Commercial Bank of China (1398.HK, HK$5.16)
Industrial & Commercial Bank of China (601398.SS, Rmb5.53)
JD.com (JD.OQ, $28.85)
Jianpu Tech (JT.N, $2.25)
LendingClub Corporation (LC.N, $11.45)
LendingTree US (TREE.OQ, $313.5)
LexinFintech (LX.OQ, $8.64, OUTPERFORM[V], TP $17.0)
NetEase.com (NTES.OQ, $264.39)
PICC Group (1339.HK, HK$3.12)
PPDai Group Inc. (PPDF.N, $2.78, OUTPERFORM[V], TP $5.8)
Ping An (2318.HK, HK$90.05)
Ping An (601318.SS, Rmb87.04)
Qudian Inc. (QD.N, $6.48, OUTPERFORM[V], TP $11.7)
Sogou Inc. (SOGO.N, $5.45)
Synchrony Financial (SYF.N, $32.42)
Tencent Holdings (0700.HK, HK$322.8)
VCREDIT Holdings Limited (2003.HK, HK$7.13, OUTPERFORM[V], TP HK$13.0)
Weibo Corporation (WB.OQ, $48.2)
X Financial (XYF.N, $2.02)
Yirendai Ltd. (YRD.N, $6.48, NEUTRAL[V], TP $6.92)

Disclosure Appendix

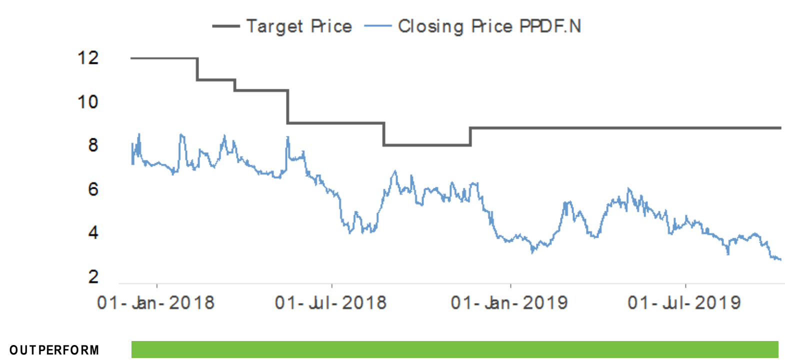
Analyst Certification

Yiran Zhong and Charles Zhou, CFA, each certify, with respect to the companies or securities that the individual analyzes, that (1) the views expressed in this report accurately reflect his or her personal views about all of the subject companies and securities and (2) no part of his or her compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report.

3-Year Price and Rating History for PPDai Group Inc. (PPDF.N)

PPDF.N	Closing Price	Target Price	
Date	(US$)	(US$)	Rating
06-Dec-17	8.06	12.00	O *
12-Feb-18	7.11	11.00	
22-Mar-18	8.00	10.50	
16-May-18	8.35	9.00	
23-Aug-18	5.50	8.00	
21-Nov-18	6.19	8.80	
18-Feb-19	3.91		*
14-Mar-19	4.98	8.80	O

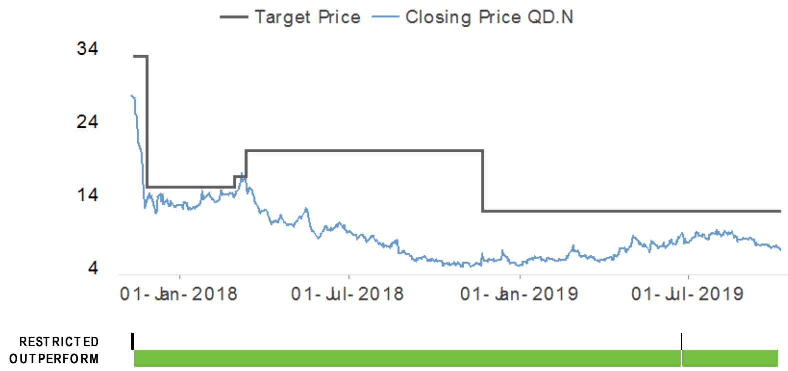
** Asterisk signifies initiation or assumption of coverage.*



3-Year Price and Rating History for Qudian Inc. (QD.N)

QD.N Date	Closing Price (US$)	Target Price (US$)	Rating
10-Nov-17	27.51		R
13-Nov-17	27.23	33.00	O *
27-Nov-17	13.51	15.00	
28-Feb-18	13.65	16.50	
13-Mar-18	15.23	20.00	
22-Nov-18	5.87	11.70	
25-Jun-19	8.46		R
27-Jun-19	7.38	11.70	O

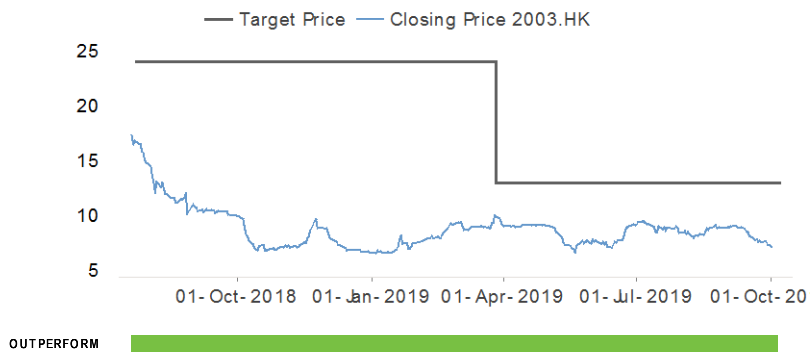
** Asterisk signifies initiation or assumption of coverage.*



3-Year Price and Rating History for VCREDIT Holdings Limited (2003.HK)

2003.HK Date	Closing Price (HK$)	Target Price (HK$)	Rating
24-Jul-18	17.26	24.00	O *
27-Mar-19	9.30	13.00	

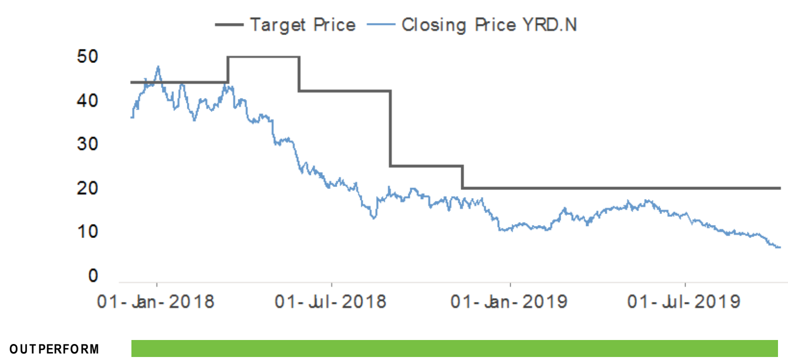
** Asterisk signifies initiation or assumption of coverage.*



3-Year Price and Rating History for Yirendai Ltd. (YRD.N)

YRD.N Date	Closing Price (US$)	Target Price (US$)	Rating
06-Dec-17	36.05	44.00	O *
15-Mar-18	42.04	50.00	
28-May-18	27.50	42.00	
30-Aug-18	18.50	25.00	
13-Nov-18	15.99	20.00	
18-Feb-19	12.31	20.00	*

** Asterisk signifies initiation or assumption of coverage.*



As of December 10, 2012 Analysts' stock rating are defined as follows:

Outperform (O) : The stock's total return is expected to outperform the relevant benchmark* over the next 12 months.

Neutral (N) : The stock's total return is expected to be in line with the relevant benchmark* over the next 12 months.

Underperform (U) : The stock's total return is expected to underperform the relevant benchmark* over the next 12 months.

**Relevant benchmark by region: As of 10th December 2012, Japanese ratings are based on a stock's total return relative to the analyst's coverage universe which consists of all companies covered by the analyst within the relevant sector, with Outperforms representing the most attractive, Neutrals the less attractive, and Underperforms the least attractive investment opportunities. As of 2nd October 2012, U.S. and Canadian as well as European ratings are based on a stock's total return relative to the analyst's coverage universe which consists of all companies covered by the analyst within the relevant sector, with Outperforms representing the most attractive, Neutrals the less attractive, and Underperforms the least attractive investment opportunities. For Latin American and Asia stocks (excluding Japan and Australia), ratings are based on a stock's total return relative to the average total return of the relevant country or regional benchmark (India - S&P BSE Sensex Index); prior to 2nd October 2012 U.S. and Canadian ratings were based on (1) a stock's absolute total return potential to its current share price and (2) the relative attractiveness of a stock's total return potential within an analyst's coverage universe. For Australian and New Zealand stocks, the expected total return (ETR) calculation includes 12-month rolling dividend yield. An Outperform rating is assigned where an ETR is greater than or equal to 7.5%; Underperform where an ETR less than or equal to 5%. A Neutral may be assigned where the ETR is between -5% and 15%. The overlapping rating range allows analysts to assign a rating that puts ETR in the context of associated risks. Prior to 18 May 2015, ETR ranges for Outperform and Underperform ratings did not overlap with Neutral thresholds between 15% and 7.5%, which was in operation from 7 July 2011.*

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Overweight : The analyst's expectation for the sector's fundamentals and/or valuation is favorable over the next 12 months.
Market Weight : The analyst's expectation for the sector's fundamentals and/or valuation is neutral over the next 12 months.
Underweight : The analyst's expectation for the sector's fundamentals and/or valuation is cautious over the next 12 months.
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Neutral/Hold*	38%	(26% banking clients)
Underperform/Sell*	13%	(23% banking clients)
Restricted	2%	

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The analyst(s) responsible for preparing this research report received compensation that is based upon various factors including Credit Suisse's total revenues, a portion of which are generated by Credit Suisse's investment banking activities

Target Price and Rating
Valuation Methodology and Risks: (12 months) for 9F Inc. (JFU.OQ)

Method: We value 9F Inc. using a DCF (discounted cash flow) methodology with WACC (weighted average cost of capital) of 17% and 3% terminal growth rate, arriving at our target price of US$11.62. This implies FY19E P/B (price-to-book) of 1.6x and FY19E P/E (price-to-earnings) of 7.9x. Our NEUTRAL rating is based on 9F's fair valuation.

Risk: Key downside risks to our TP of US$11.62 and NEUTRAL rating for 9F Inc. include: (1) a disorderly clean-up in the P2P industry causing broad-based asset quality volatilities and (2) unexpected termination of institutional partnership, resulting in a funding shortage. Key upside risks include a faster-than-expected inclusion into P2P trial regulation, resulting in higher-than-expected recovery in loan origination volume.

Target Price and Rating
Valuation Methodology and Risks: (12 months) for LexinFintech (LX.OQ)

Method: We value Lexin using DCF methodology assuming WACC of 15% and long-term growth assumption of 3%. Our TP of US$17.0 implies FY19-20E P/E of 9.2x and 8.0x, and FY19E P/B of 3.2x. Our OUTPERFORM rating is based on a sustainable business model with comparative advantage in the areas that institutional partners value the most from online lenders: (1) risk control capability and (2) sustainable customer acquisition.

Risk: Key risks to our OUTPERFORM rating and US$17.0 target price includes: a disorderly clean-up in the P2P industry could cause broad-based asset quality volatilities; regulatory risk around the loan facilitation model; intensified competitive pressure from big tech platforms, given an overlap of their near-prime customer segment vs that of Lexin.

Target Price and Rating
Valuation Methodology and Risks: (12 months) for PPDai Group Inc. (PPDF.N)

Method: Our US$5.8 target price for PPDai is based on our base case DCF valuation, using 3% terminal growth rate and 17% WACC. We rate PPDai OUTPERFORM as its sufficient risk buffer and made good progress in sourcing institutional funding. In addition asset quality has improved recently, reducing credit cost.

Risk: Key risks to our OUTPERFORM rating and US$5.8 target price for PPDai include: (1) Sufficiency of funding from institutional partners to support liquidity and business growth; (2) interest rates of loan products may exceed regulatory ceiling; (3) effectiveness of its proprietary credit-scoring model

Target Price and Rating
Valuation Methodology and Risks: (12 months) for Qudian Inc. (QD.N)

Method: Our US$11.7 target price for Qudian is based on DCF valuation, using 3% terminal growth rate and 15% WACC. We rate Qudian OUTPERFORM on the back of strong momentum from its open platform initiative, which will drive revenue growth and raise ROE going forward.

Risk: Key risks to our US$11.7 target price and OUTPERFORM rating for Qudian include: (1) regulatory uncertainties; (2) borrower engagement turning out to be weaker than expected; and (3) a general economic downturn.

Target Price and Rating
Valuation Methodology and Risks: (12 months) for VCREDIT Holdings Limited (2003.HK)

Method: We use a P/B (price-to-book)-based approach and Gordon growth model with key assumptions of 25.3% ROE (return on equity), 15% COE (cost of equity) and 3.0% long-term growth rate. This derives our target P/B multiple of 1.9x and target price of HK$13 for VCREDIT Holdings Limited. We rate the company OUTPERFORM, on the back of rising profitability following its bussiness tranformation to a pure online model.

Risk: Key risks to our OUTPERFORM rating and HK$13 target price for VCREDIT Holdings Limited include: (1) failure to keep up with market evolvement, (2) uncertainties in regulatory environment, (3) deterioration in credit risk management system and (4) intensified competition.

Target Price and Rating
Valuation Methodology and Risks: (12 months) for Yirendai Ltd. (YRD.N)

Method: Our US$6.92 target price for YRD is based on our base case DCF valuation using a 3% terminal growth rate and 18% WACC. We have an NEUTRAL rating on YRD given bigger P2P exposure than peers.

Risk: Key upside risks to our US$6.92 target price and NEUTRAL rating for YRD include: successfull registration and better-than-expected loan volume; downside risks include a disruptive clean-up of the P2P sector and deterioating asset quality.

Please refer to the firm's disclosure website at https://rave.credit-suisse.com/disclosures/view/selectArchive for the definitions of abbreviations typically used in the target price method and risk sections.

See the Companies Mentioned section for full company names
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Credit Suisse currently has, or had within the past 12 months, the following issuer(s) as client(s), and the services provided were non-investment-banking, non securities-related: 0700.HK, 1988.HK, 600016.SS, 1398.HK, 601398.SS, 2318.HK, 601318.SS
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Spouse of employee, Joy Hu Lan-Ya, is a Senior Officer of Tencent Holdings Ltd.

For date and time of production, dissemination and history of recommendation for the subject company(ies) featured in this report, disseminated within the past 12 months, please refer to the link: https://rave.credit-suisse.com/disclosures/view/report?i=457565&v=60mth2wy9adlhvnrnbsk535g3 .

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Credit Suisse (Hong Kong) Limited ....Yiran Zhong ; Charles Zhou, CFA ; Richie Jiang ; Ashley Dai
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Credit Suisse (Hong Kong) Limited ....Yiran Zhong ; Charles Zhou, CFA ; Richie Jiang ; Ashley Dai

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