

A Concept Study on Peer-to-Peer Lending

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Executive Summary

P2P Lending - A Sound Business Model

- P2P lending has emerged as a credible business model, with multiple revenue streams without assuming lending risk, using an online technology platform
- While investors gain from higher returns and asset diversification, borrowers gain from easy access (those not considered by banks also get a chance), lower rates and quick processing

Global Markets - Strong growth in P2P Lending

- P2P loan originations in US and UK delivered healthy growth, with US growing 8x over 2013-15 to over USD 7bn, while UK grew by 31% in 2016 to GBP 2.9bn
- Institutional investors funded 72% of P2P business loans and 53% of consumer loans in US, while retail investors dominate UK's P2P lending market
- Globally fundraising by FinTechs grew at 70% 5-yr CAGR to USD 36bn in 2016

Middle East - Long-term Positive Outlook

Rising FinTech investments

- FinTech investments in MENA have crossed USD 100mn, with number of firms and investments growing 5x during 2010-15; investments doubled in 2016 alone

Key drivers in place for P2P lending/crowdfunding in Middle East

- A significant credit gap for SMEs worth ~USD 300bn, increasing penetration of internet/smartphones and a large unbanked population (86% of adults)

UAE, the FinTech hub - Shariah compliant platforms gaining traction

- UAE dominates MENA's FinTech landscape with Dubai being the FinTech hub; huge scope for P2P lending to SMEs with 50%+ bank loan applications rejected
- Shariah compliant P2P lending platforms like Beehive (UAE) are gaining traction

P2P lending possesses immense potential in Saudi Arabia

- Rising internet penetration, large tech-savvy youth population, mere 3% of bank lending to SMEs, while FinTechs are a key part of Saudi Vision 2030
- Fundraising by FinTechs accelerated in 2017, depicting the growing interest



2. P2P Lending Overview

P2P Lending Overview - A Unique Value Offering

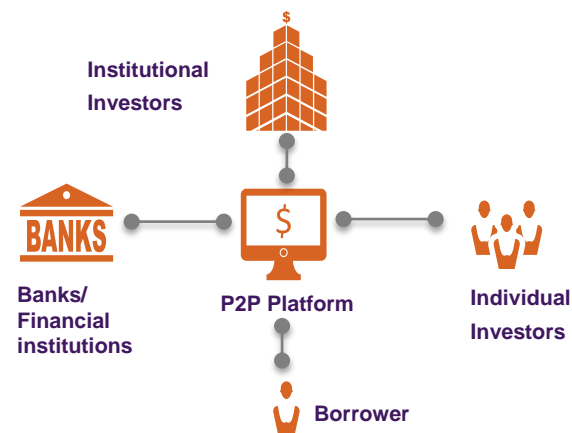
P2P lending concept

- Peer-to-peer (P2P) platforms are online marketplaces bringing together borrowers and lenders/investors, and offering quick, low cost, technology driven solutions
- P2P lending permits individuals to borrow as well as lend without the need of financial institutions or banks as intermediaries
- This model has gained popularity amongst borrowers in the US and other developed markets such as UK due to their lower interest rates, lower cost structure and simplified application process
- From initially facilitating unsecured personal loans, P2P platforms have diversified to other asset classes such as mortgage, auto and other secured loans

Unique features of P2P platforms

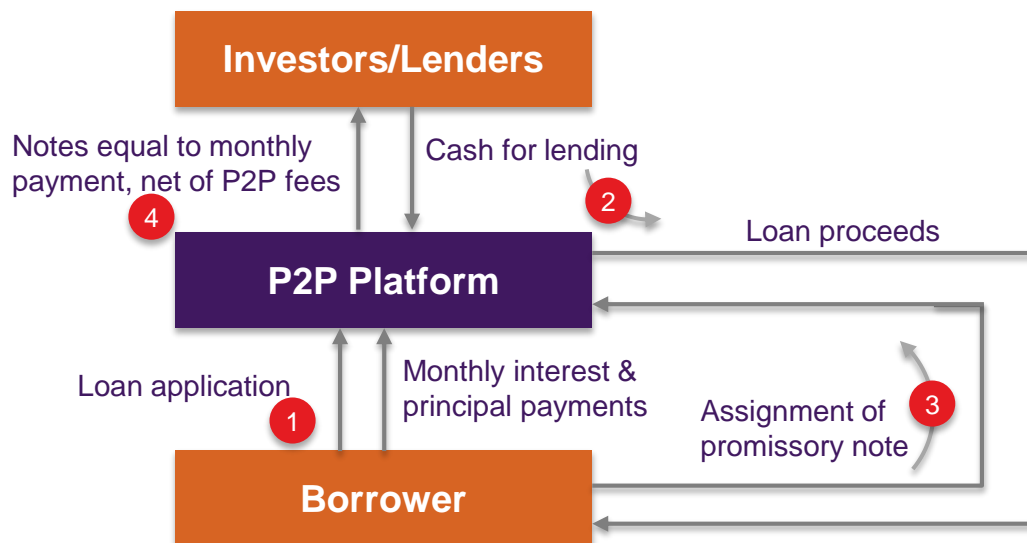
- P2P platforms employ innovative credit modeling and underwriting for lending, incorporating a variety of data sets (beyond credit scores) to target a wide set of potential customers, benefiting even those borrowers rejected by the traditional bank credit scoring system
- For investors, P2P platforms offer automated loan selection features, where predefined criteria can be set by investors for loans they intend to purchase. The flexibility to invest up to 100% of capital, also exists

Players involved in P2P lending



Borrower Benefits	Investor Benefits
Low interest rates	Higher returns
Faster processing	Transparency
Secure, transparent and confidential	Diversification across pool of borrowers
Consumer convenience and superior experience	Additional asset class

P2P Lending Mechanism



1. After the borrower applies for a loan, his credentials (FICO score, credit report, etc.) are ascertained by the P2P platform through its proprietary scoring model. If the borrower meets the minimum criteria, his loan request is listed on the web site, calling on lenders/investors (institutions or individuals) to back them
2. Once a lender/investor commits to a borrower, the funds are transferred to the P2P firm after deducting its P2P origination fees, which transfers the funds to the borrowers through an electronic platform
3. On receipt of the loan proceeds, the borrower then sends a non-recourse promissory note assigned to the P2P firm
4. The P2P firm uses these promissory notes to distribute interest and principal payments to lenders after deducting its fees

P2P Business Model and Simplified Customer Experience

Business model

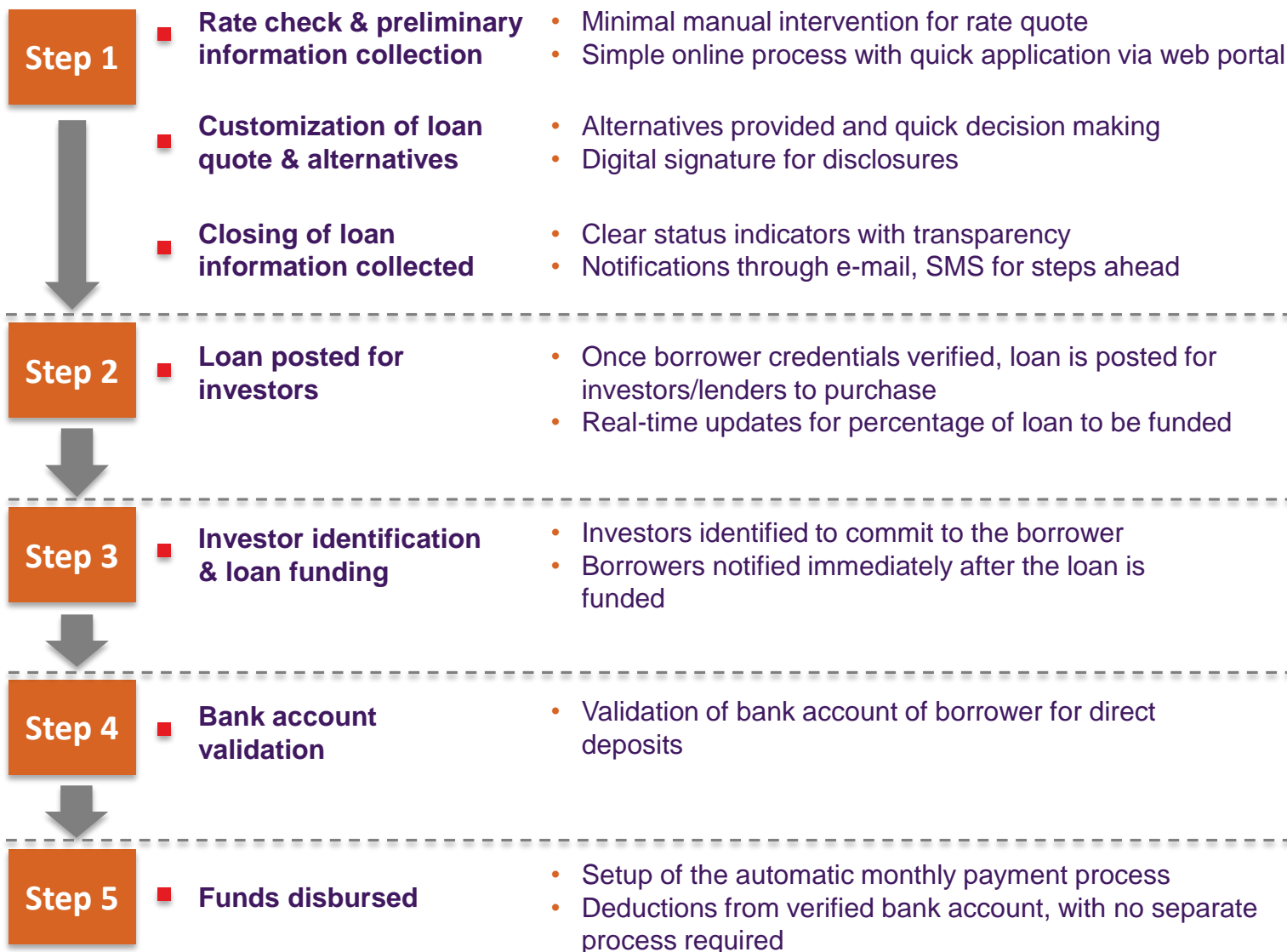
- The P2P lending firm does not assume any credit risk (no lending of own funds) and only acts as a facilitator between borrowers and investors
- P2P platforms earn revenue primarily from origination fees charged to borrowers, recurring interest/principal payments charged to investors, fees on late payments or defaults and others
- Investors or lenders generate income from the servicing of the loan by the borrower (less the P2P platform's fees)
- The loans are generally unsecured and lenders have no recourse in case the borrower defaults

Fees mix	Typical quantum
Service charge on origination	1-6% of principal
Service fees from investors (monthly payments)	1% of amount received from borrowers
Fees on collection from defaulted loans	4-30%
Fee on late payment	NA (firm's discretion)
Management fees	NA

Streamlined customer experience

- The P2P platform's key strength lies in its simplified lending process through an online interface. While many features of the platform benefit borrowers, the investor also gains from the wide acceptance of the platform. Key features include:
 - Quick check of interest rates online by providing some basic information regarding income, credit score, etc. on the P2P website
 - Real-time updates of the approval and funding process
 - After approval, the borrower can quickly access the percentage of loan that has been funded

P2P Lending Process - A 5-step Effort



Note: A step generally takes place over one day

Collaboration Opportunities for P2P and Financial Institutions

Competition for consumer credit

- While P2P platforms and FIs/ banks are competitors in the consumer credit segment, collaboration opportunities do exist between them

Collaborate as an Investor

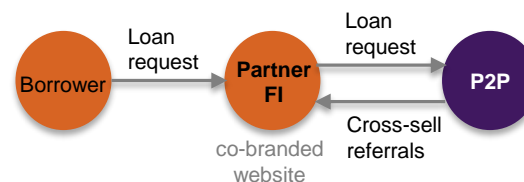
- FIs/banks or individual/institutional investors could enter into agreements with P2P platforms to purchase loans originated by them
- Institutional investors could develop custom algorithms using the P2P platform's API* to automatically assess and purchase loans, before general investors get aware of the loan listing
- While the FI acquires loans through the platform that it would traditionally not lend and generate higher risk-adjusted returns by applying own proprietary credit risk models, the P2P platform gains by securing funding from the FI
- However, this opportunity lacks the ability to cross-sell any banking products



* Application Program Interface

Collaborate through 'White Label' partnership

- FIs could use P2P platforms as a distribution channel for its banking/financial products
- FIs could refer those borrowers who do not meet the firm's lending criteria, to the P2P platform
- These customers would apply for loans on the co-branded web site promoting the P2P platform. Alternatively, the partner FI could also ask such customers to fill out an application on the white label P2P platform to offer its own loans
- The FI benefits from referral fees from the P2P firm and retains clients it would otherwise lose
- Opportunities exist for P2P platforms to cross-sell bank's deposit or other products and in turn leverage their physical space for offering customer service to its own customers





3. Global Market (US and UK): Emergence of P2P Lending Markets

US P2P Lending Growing Rapidly

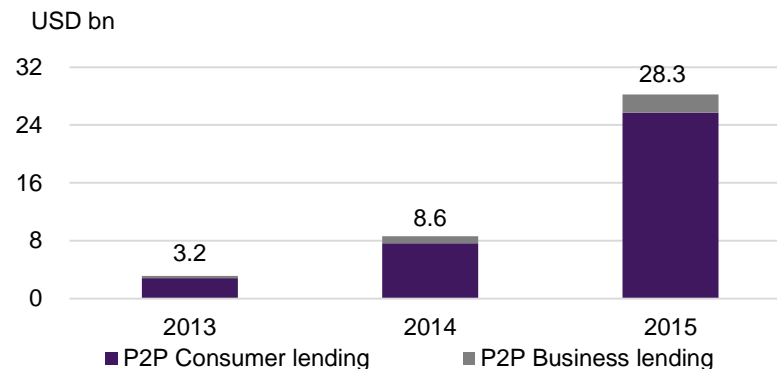
Evolution of P2P

- P2P lending emerged in 2006 when firms such as Lending Club and Prosper were incorporated
- P2P lending really evolved as a concept only after the financial crisis of 2008, when the era of obtaining quick and cheap loans was nearly over
- The Dodd Frank regulations and the Consumer Protection Act (2010), made it more difficult for consumers to get loans, despite good credit
- The funding shortfall led to the emergence of online lending sites (LendingClub/Prosper), focusing on consumer loans in the USD 20-30K range for consumers with high credit scores
- P2P lending firms like OnDeck, Funding Circle & Kabbage now target small business loans, focusing in the range of USD 100-200K range

US Online Alternative Finance Market (AFM)

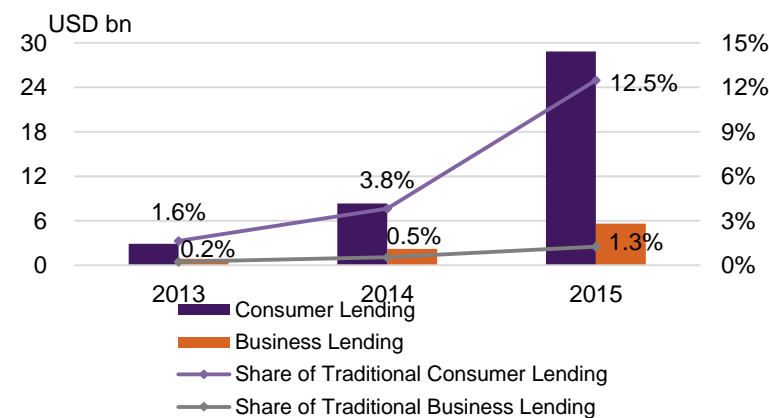
- The US online AFM market grew by 8x during 2013-15 to USD 36bn, driven largely by P2P consumer loans, the bulk of US P2P lending
- US has the world's largest online AFM volume per capita at USD113.4

US P2P Lending Volume



Source: Cambridge Centre for Alternative Finance

US Online Alternative Finance Lending



Source: Cambridge Centre for Alternative Finance

US P2P Lending Market driven by Institutional Investors

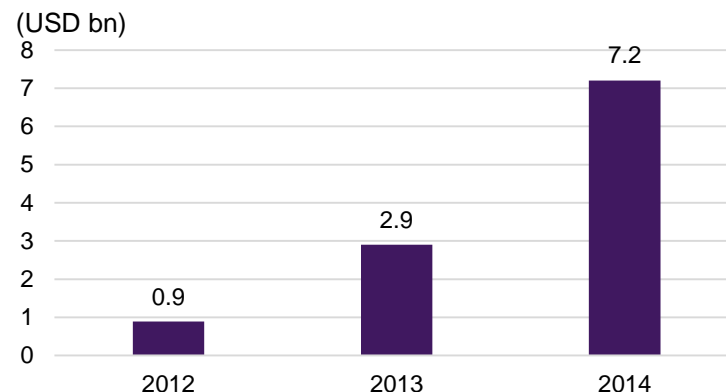
Rising share of P2P consumer lending

- Consumer lending through online alternative finance now constitutes a significant 12.5% of lending through traditional providers, compared to a mere 1.6% in 2013, indicating the rapid adoption of this funding source
- Similarly, share of lending to businesses through online platforms has risen from 0.24% of traditional lending in 2013 to 1.3% (2015)
- Institutional investors funded over 72% of P2P business loans and 53% of P2P consumer loans

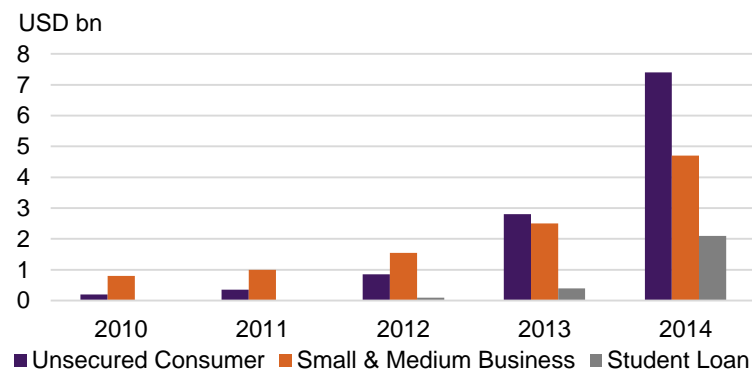
US P2P lending trends

- Although P2P loans are a small component of all unsecured consumer loans, P2P loan originations are growing significantly, multiplying by 8x during 2013-15 to USD 7bn+
- While unsecured consumer loans (52% of total outstanding stock) dominate the P2P lending space, student loans and small-and-medium business loans are emerging rapidly, with outstanding stock of USD 4.7bn (33% of total) and ~USD 2bn (15%) respectively

US P2P Loan Originations



US P2P Outstanding Loan Issuance trend



UK P2P Lending drives AFM Market

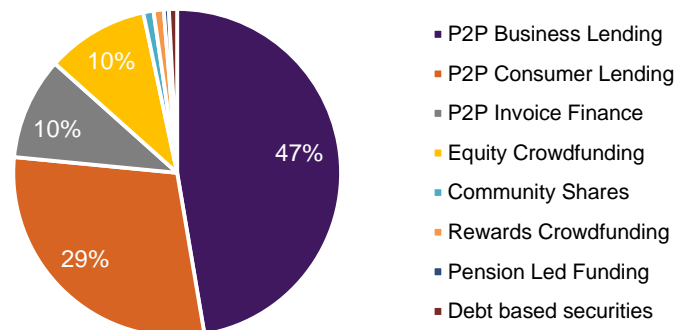
P2P market evolution

- UK witnessed P2P lending for the first time in 2005 with the launch of Zopa. In 2011, the incumbents formed the P2P Finance Association (P2PFA), to promote consumer protection
- The Financial Conduct Authority has been regulating P2P lending since April 2014 after conducting detailed studies since 2005 related to risk and management of the existing P2P players.
- The three largest players in the UK are Zopa, Ratesetter and Funding Circle

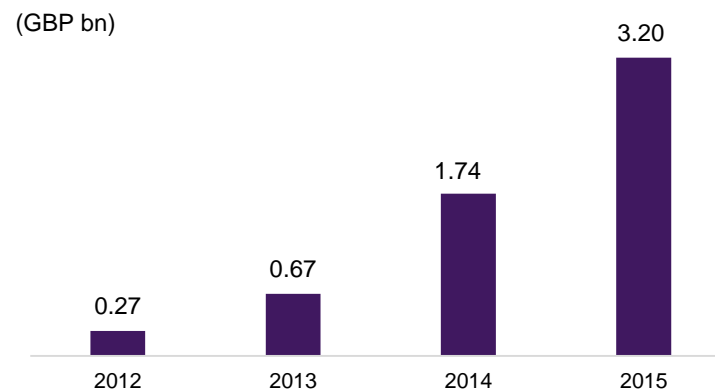
UK AFM & P2P lending

- The AFM market grew at a CAGR of 129% from GBP 267mn in 2012 to GBP 3.2bn in 2015. P2P lending accounted for bulk of the share (86%) of this market, led by business and consumer lending
- P2P loan originations grew by 31% to GBP 2.9bn in 2016, with the 4 largest P2P platforms growing by ~32% and the next 20 medium-sized platforms collectively growing by ~70% in 2016

P2P Lending dominates UK AFM - 2015



UK Alternative Finance Market

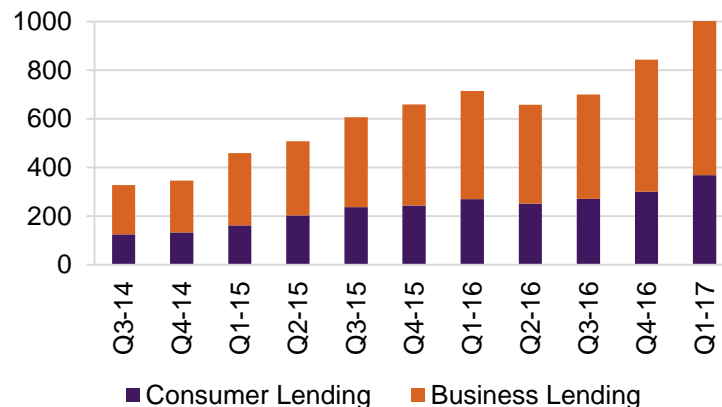


UK P2P Lending Market driven by Retail Investors

UK P2P lending market

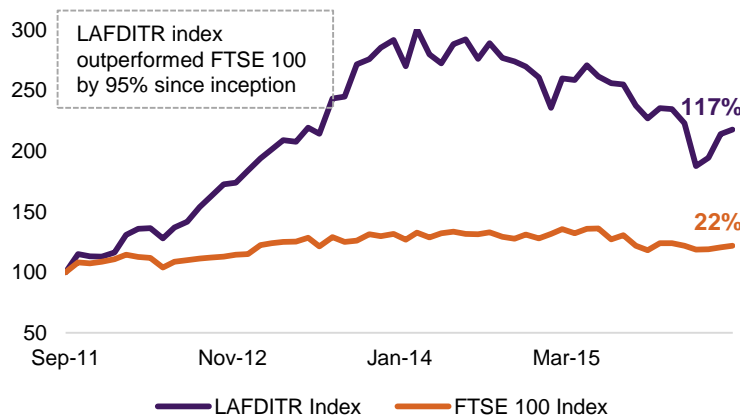
- The number of lenders on the P2P platform have grown over the past 2 years at a significant CAGR of 62% to 0.42mn in Q1-17
- Likewise, the number of borrowers have grown at a CAGR of 28% to 0.18mn
- The LAFDITR* Index (measuring performance of FinTech and alternative finance platforms) doubled in the past 6 years. While it outperformed the FTSE 100 by 95% in this period, its performance in the past year (up to April-16) has been negative, underperforming the FTSE by 9%

UK P2P New Lending (GBP mn)



Source: Bloomberg

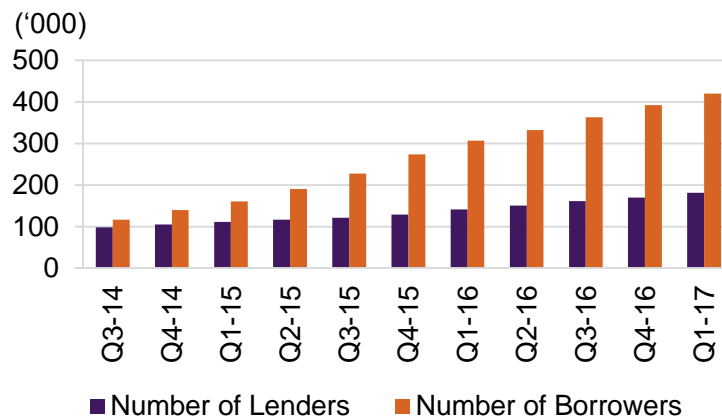
Alternative Finance Index vs FTSE 100 Index



Source: Bloomberg

* Liberum AltFi Financial Disruptors Index includes a mix of UK, US, European and Australian innovative AF firms

UK P2P Lenders and Borrowers



Source: P2P Finance Association p2pfa.info/data

Key Drivers/Trends shaping P2P lending

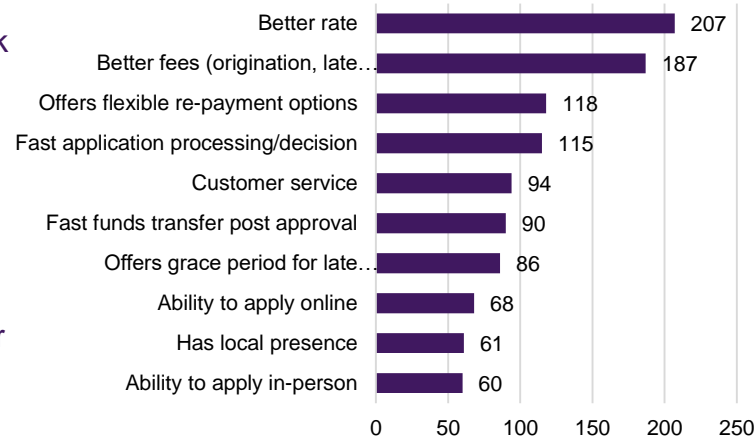
Drivers

- After suffering heavy credit losses post the 2008 global financial crisis , banks have taken a step back from consumer/small business lending
- Strengthening credit controls, capital requirements, increased regulatory oversight have made certain loans (unsecured consumer) unattractive to banks
- Advancement in data analytics technology and the increased availability of data sources has enabled lenders that develop underwriting models with better predictive ability than FICO scores
- Increasing comfort to perform online transactions (especially millennials) through mobile channels

Trends/drivers from the AlphaWise Survey (AWS)

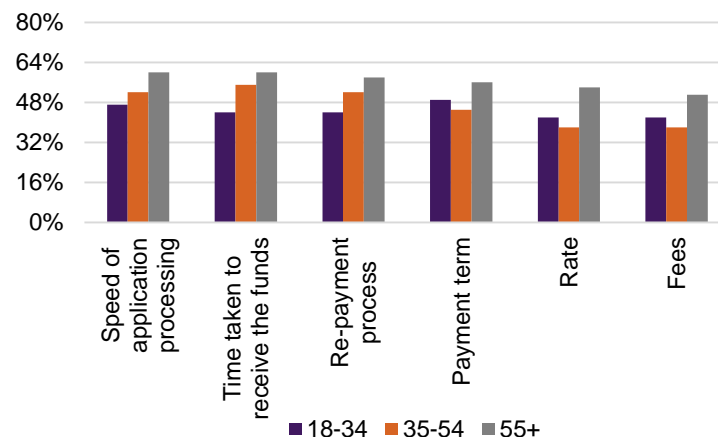
- The AWS surveyed consumer preferences and satisfaction levels in lending: It indicated better rates and fees as top drivers for selecting P2P lenders
- Millennials' loan satisfaction ratings (18-34) are generally lower than the higher age cohorts, due to loan approvals for lower amounts than applied for
- However, Millennials were more satisfied than Gen X (35-54) in terms of rates and fees offered
- Millennials are more interested in innovations in credit scoring (shopping trends, facebook profile, etc.), boding well for higher loan disbursals

Attributes when selecting a P2P lender



Source: AlphaWise Survey

P2P Loan Satisfaction by Age Cohorts



Source: AlphaWise Survey

Key Attributes of P2P Loans

Key loan parameters of P2P lenders in US - Typical values

Attribute	Personal loans (Individuals)	Small business loans
Loan Size	USD 1,000 - 40,000	USD 5,000 - 300,000
Interest Rates	4%-9.3% (Grade A) 5%-31% (Grades B-C) 18%-31% (Grades D and lower)	5.9-25.9% (Term Loans) 6.25-29% (Line of Credit)
Term	3, 5 and 7 yrs	1-5 yrs
Net Annualized Returns	0.5-3% (Grade A) 4-8% (Grades B-C) 11-15% (Grades D and lower)	4-5% (Grade A) 6-8% (Grades B-C) 11-15% (Grades D and lower)
Default Rates	0.5-3% (Grade A) 3-8% (Grades B-C) 9.5-19% (Grades D and lower)	1-3% (Grade A)* 5-7.5% (Grades B-C)* 11-20% (Grades D and lower)*
Credit Scoring	Proprietary scoring model, FICO, other factors - education level, etc.	FICO scores, others
Payments	Monthly amortization	Monthly amortization

Source: LendingClub, Prosper, Upstart; Garret/Galland Research

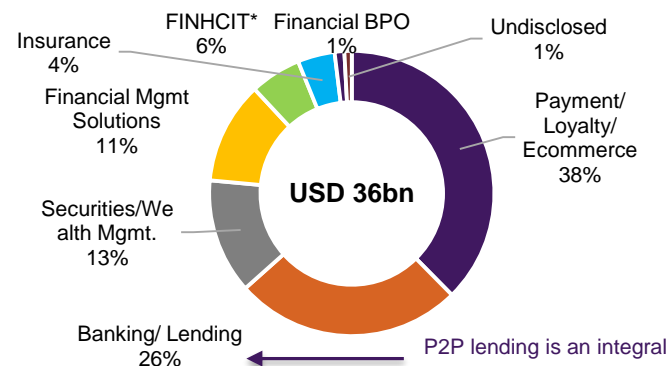
* For Funding Circle

- Lending Club is the largest P2P lending platform in US with a share of 64% of P2P loan originations (2014), followed by Prosper. The combined market share of these top 2 players in this period was 87%
- Typically interest rates charged by P2P lenders are lower than rates offered by commercial banks for higher creditworthy borrowers. For example, for FICO scores of 660-699, LendingClub's best rate is 5.32% vs. Wells Fargo's 14.48% (personal loans)

A Global FinTech Revolution - Strong US P2P Fundraising in 2015

- The relatively nascent FinTech sector is rapidly evolving globally, driven by rising technology adoption in financial services. P2P lending firms are a key part of FinTech cos
- US is the home for FinTech startups with the maximum FinTech companies (4.7mn), while UK had 0.82mn in 2015
- In 2016, globally FinTech companies raised ~USD 36bn across 1500+ funding deals from 1,700+ unique investors. Globally, fundraising in FinTech has grown at a rapid 5-yr CAGR of 70%
- Banking/lending received 26% or USD 9.3bn of the global funds raised by FinTechs in 2016, while the Payment/ Loyalty/ Ecommerce segment received 38% of the total funding
- Investments in US FinTech firms increased from USD 4bn in 2013 to USD 31.6bn in 2016
- The year 2015 was a solid year for fundraising in the P2P lending industry in US, with nearly USD 3bn raised by US based P2P firms, which includes funds raised through a couple of IPOs

Global FinTech Funding mix - 2016



Source: Financial Technology Partners; *FINHCIT = Financial Healthcare Internet Technologies

Fundraising by P2P firms

Period	P2P Firm	Amt. Raised (USD mn)	Valuation (USD mn)
Sep-2015	Sofi	1,000	3,500
Dec-2014	Lending Club	870	9,000
Sep-2015	Avant	325	2,000
Dec-2014	OnDeck	200	1,320
April-2015	Prosper	165	1,900
Jan-2016	LendUp	150	NA
April-2015	Funding Circle	150	1,000
Oct-2015	Kabbage	135	1,000

FinTech – Government Initiatives in US, UK (1/2)

- The US FinTech market has a strong foundation given the nation's established financial market expertise and abundant first-generation entrepreneurs and government support
- Several initiatives by the UK government to promote FinTech companies has supported the growth in the sector

US Fintech – Government Initiatives

1. Opening up the local FinTech sector

- Project Catalyst of the Consumer Finance Protection Bureau, was setup in 2012 to create innovative financial products, provide regulatory advice & collaborate with FinTech start-ups
- Innovation Hub is a Govt. program launched in 2010 to stimulate research parks, technology incubators, universities, and federal laboratories

2. Trade Associations

- California FinTech Network is a non-profit organization (NPO) setup in 2015, for professionals, founders, executives/investors that work and invest in the FinTech sector

UK Fintech - Government Initiatives

1. Opening up the local FinTech sector

- The 'SME Mandatory Referrals' law passed in 2015 requires banks to refer credit-rejected SMEs to alternative finance providers
- The British Business Bank, launched in 2013, provides finance to SMEs including FinTechs
- The Financial Services Trade and Investment Board set up in 2013 is undertaking a project to support trade/investment in the FinTech sector

2. Trade Associations

- FinTech Circle started by the government in 2014 provides funding to FinTech start-ups
- Innovate Finance is membership based NPO set up in 2014 for connecting startups with investors and entrepreneurs in the FinTech community
- Setup in 2014, the UK P2PFA promotes healthy growth and competition among P2P lenders

FinTech – Government Initiatives in US, UK (2/2)

US Fintech – Government Initiatives

3. Tax related initiatives

- Excelsior Jobs Program started in 2010 provides tax credits for businesses in targeted industries including FS and software development
- Qualified Emerging Technology Company Incentives started in 2005 offers employment tax credit; employee training credit and a capital tax credit for investors in technology companies

4. Access to private common infrastructure

- The 'Federal Reserve Strategy' introduced in 2015, enhances the speed, safety and efficiency of US' payment system (incl. online payments)

5. Improving cyber security

- US International Strategy for Cyberspace was setup in 2011 to promote a secure and reliable communication/information infrastructure, an essential requirement for the FinTech sector

UK Fintech - Government Initiatives

3. Tax related initiatives

- Launch of IFISA* in 2016, permits consumers to invest up to GBP 15K in alternative finance platforms and get tax free returns
- P2P bad debt relief (proposed) is a government proposal to offset losses on bad P2P loans against total taxable income from P2P lending

4. Access to private common infrastructure

- Payment Systems Regulator, a subsidiary of the FCA (formed in 2015) to ensure that payment systems operate in the interests of businesses/ consumers, provides security to online platforms
- The 'GOV.UK Verify' program created in 2015, which authenticates identity of consumers online, bodes well for FinTech companies, with an app for FinTech products expected in the near future

5. Improve cyber security

- The National Cyber Security Program's (2015) plan to increase cybersecurity spending to GBP 1.9bn by 2020, is positive for FinTech companies

6. Attract foreign FinTechs to the local market

- UKTI started in 2014 conducts roadshows globally to attract foreign FinTechs & provide relocation & growth support

Proposed Crowdfunding Regulations in US and UK

- Crowdfunding (CF) platforms are types of FinTechs similar to P2P lending platforms, through which companies or individuals could raise funds from investors
- While crowdfunding platforms are not as regulated as the banks in US and UK, regulators in US (SEC) and the UK (FCA) have proposed certain set of rules/regulations regarding their operations and conduct

US Crowdfunding Rules

Registration

- The crowdfunding platform/participant needs to register with SEC* and FINRA* either as a broker-dealer or as a funding portal.

Investment limits for investors

- Individual investors can invest in crowdfunding offerings up to an aggregate amount of USD 107K over a 12-mth period, subject to:
 - If annual income or net worth < USD 107K: Greater of USD 2,200 or 5% of the lesser of their annual income (AI) or net worth (NW)
 - If both annual income or net worth > USD 107K: 10% of the lesser of their AI or NW

Fundraising limit for companies

- A company issuing securities through crowdfunding is permitted to raise a maximum of USD 1.07mn over a 12-mth period

UK Crowdfunding Regulations

Registration and approval

- A crowdfunding platform needs necessary approvals from FCA before conducting business

Requirements for setup of platform

- A minimum capital of GBP 50K is required for operating a loan-based crowdfunding platform
- An investment-based crowdfunding participant, can only promote the platform to HNIs

Requirements for companies raising funds

- Companies seeking investments < € 100K through crowdfunding do not require a prospectus, nor is it required if < € 5mn is sought (having less than 150 non-qualified investors). Prospectus required in all other cases

Payment Systems

- Crowdfunding platforms need to adhere to the Payment Services Regulations requiring them to have a 'money remittance' system for transfer of funds between lender and borrower



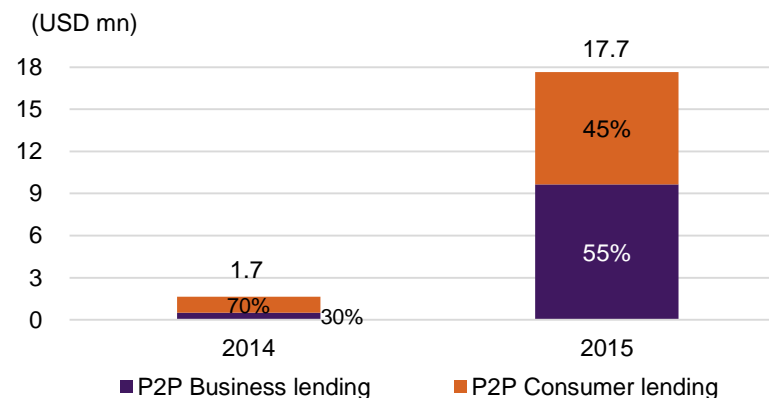
4. Middle East: P2P Lending / FinTech and Crowdfunding

Middle East Online AFM - P2P Lending's Emergence

Online AFM - a nascent market

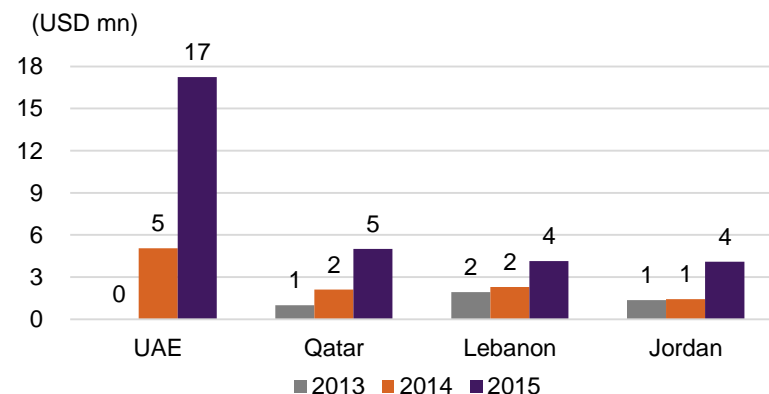
- Middle East's online AFM volume grew at a CAGR of 109% during 2013-15 from USD 36mn in 2013 to USD 159mn (2015), driven largely by equity based crowdfunding
- P2P lending (consumer and business) is a small component (11% share) of Middle East's online AFM sector, with two-thirds of market activity in 2015 dominated by equity-based crowdfunding
- P2P lending volumes in Middle East grew 10x in 2015 to USD 17.7mn, driven by business lending
- UAE is the second largest online AFM in Middle East, growing to USD 17mn in 2015 from USD 5mn in 2014, the first year when these platforms emerged
- In UAE, P2P business lending accounted for 40% of funds raised in online AFM, in contrast to other Middle East markets dominated by crowdfunding (equity or reward based)
- Last year, Liwwa, Jordan's major P2P lender, secured USD 2.3mn funding from an investor consortium led by Silicon Badia along with Bank Al Etihad, DASH Ventures, and MENA Venture Investments

Middle East P2P Lending Volume Mix and Trend



Source: Cambridge Centre for Alternative Finance

Middle East Online AFM Volume – Key Nations*



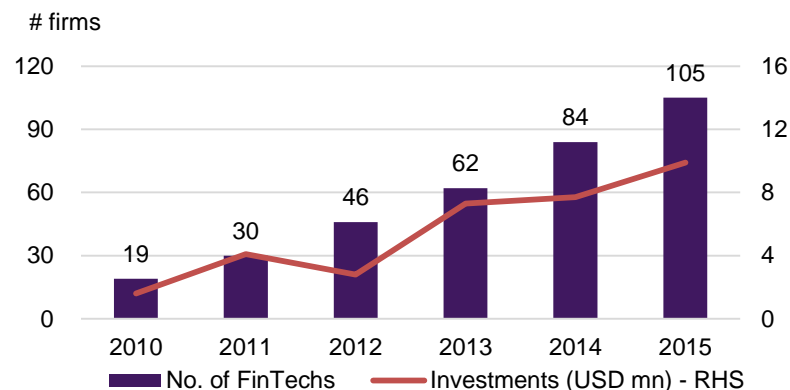
Source: Cambridge Centre for Alternative Finance; * Excl. Israel

FinTech Market Growing Rapidly in MENA

Rising emergence of FinTechs

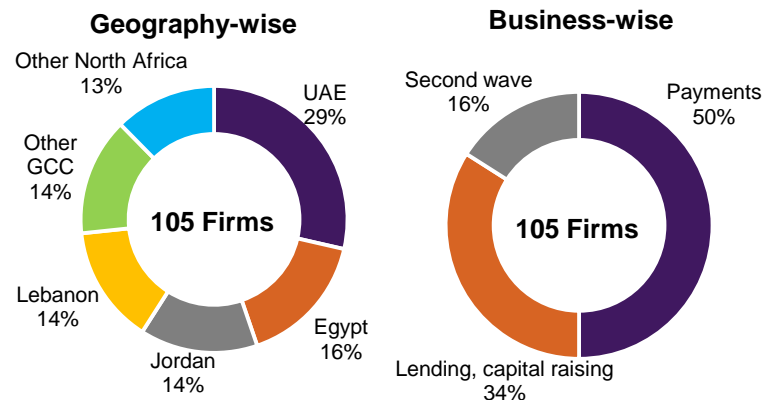
- The number of Fintech companies in MENA have grown rapidly from 6 (2005) to 19 (2010) and over 5x since 2010 to 105 in 2015
- Cumulatively, investments in FinTechs in MENA are estimated to have crossed USD 100mn as of 2016, with investments nearly doubling in 2016 alone to about USD 19mn
- Annual investments have grown at a CAGR of over 50% from 2010-16
- UAE is at the forefront of FinTech startups in MENA with its share rising rapidly from 17% of all FinTechs in 2011 to 29% in 2015
- The top 4 countries account for nearly three-fourth of all FinTech firms in MENA; UAE clearly dominates the region with 30 FinTech firms, with Dubai being MENA's FinTech hub
- While payment firms account for the bulk (50% share) of FinTechs in MENA, lending and capital raising FinTechs (34% share) are gaining popularity with a handful of P2P lending platforms having emerged in MENA over the past 3-4 years

MENA FinTech Trends



Source: Wamda Research

MENA FinTech Mix - 2015



Source: Wamda Research

Key Drivers for FinTech in MENA

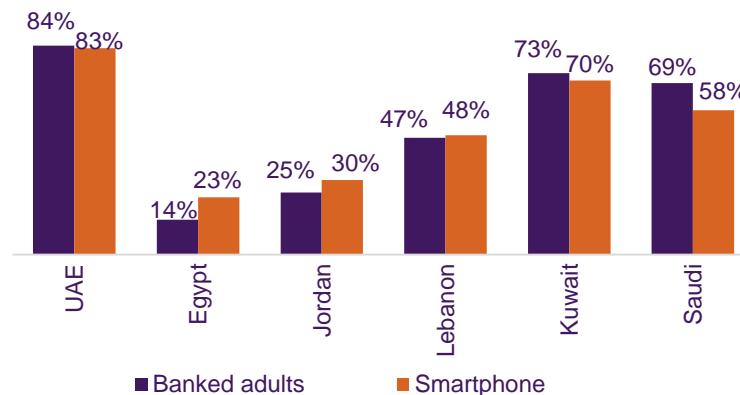
Key drivers for FinTech

- Rising penetration of internet and smartphones (a proxy to the internet) is expected to augur well for FinTechs and online lending in MENA. Smartphone penetration is expected to increase from 64% (2015) to 78% (2020) in GCC
- Large unbanked population with 86% of adults not having a bank account in MENA offers plenty of opportunity for FinTechs to offer financial products
- Bank lending to SMEs in MENA is significantly lower (GCC avg. of 2%, non-GCC MENA avg. of 15%) compared to an average 25% in developed nations and 20% (emerging economies)
- The significant credit gap in MENA, estimated at USD 260-320bn, provides ample opportunities for P2P platforms to lend

A variety of investors interested in FinTechs

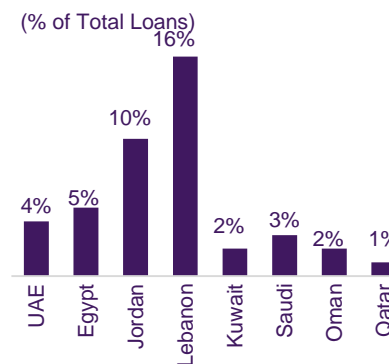
- The rapid growth of the FinTech sector has driven more and more investors, with the base significantly widening over the past 5-6 yrs
- Banks, companies are also now investing in FinTechs, who have refrained doing so in the past

Banking / Smartphone Penetration in MENA



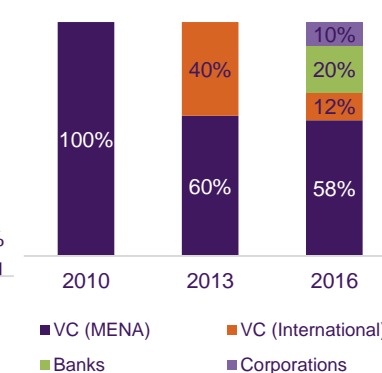
Source: Wamda Research

Avg. SME lending - 2014



Source: World Bank

FinTech Investor mix



Source: Wamda Research

Emergence of P2P and Crowdfunding Platforms in Middle East

UAE is emerging as the FinTech hub of Middle East

- The Middle East's first P2P lending site, Liwwa, was launched in Jordan in 2013, a Shariah compliant platform, which was followed by the Beehive P2P platform in UAE
- The launch of Fintech Hive (FH) in Jan 2017 by the Dubai International Financial Centre (DIFC), is aimed at transforming DIFC into a global FinTech innovation hub linking US, Europe, MENA and Asian markets
- FH is the region's first accelerator program, providing mentoring/support to entrepreneurial startups, that acts as a platform to connect firms to develop customer experience with improvement solutions

MENA's Top Lending FinTechs

Founded	FinTech Firm	Country	Type	Logo
2014	Durise	UAE	Equity crowdfunding	
2014	Beehive	UAE	P2P lending	
2014	Moneyfellows	Egypt	Money circle	
2013	Liwwa	Jordan	P2P lending	
2013	Eureeca	UAE, UK	Equity crowdfunding	
2013	PiSlice	UAE	Microfinance crowdfunding	
2012	Zoomal	Lebanon	Crowdfunding	
2012	Yomken.com	Egypt	Crowdfunding	
2011	Compareit4me.com	UAE	Loan comparison	

Regulatory Environment in the UAE (1/2)

- The Central Bank of UAE, Abu Dhabi Global Market (ADGM) and Dubai Financial Services Authority (DFSA) are the key regulators for FinTechs
- Specific regulations exist for Payment Service Providers (PSPs), the predominant FinTechs, which facilitate payments between businesses and market participants such as banks/credit card companies
- Overall, regulations for FinTech firms are in an evolutionary phase with several areas yet to be touched upon such as investment limits for investors, fundraising limits, credit appraisal norms, etc.
- However, regulations for crowdfunding or P2P firms are gradually being introduced in Dubai by the DFSA, while crowdfunding proposals are yet to emerge in other regions of UAE.
- Existence of multiple regulators such as DFSA and ADGM (although having different jurisdictions) may pose issues such as inconsistent assessment of FinTechs, during the concept testing phase

Dubai Crowdfunding Regulations

- Loan-based crowdfunding operators are prohibited from advising or using their own discretion in managing the funds of the lenders
- The platform needs to make key appointments such as a Sr. Executive Officer, Compliance and Money Laundering Reporting Officers
- Retail lenders can invest up to USD 5,000 per loan with a lending limit of USD 50,000 per calendar year in an individual platform
- Fundraising through crowdfunding platforms is capped at USD 5mn
- The operator needs to disclose actual and expected default rates of loans on its website

DFSA Regulations for FinTechs

- DFSA introduced a financial service license, the **'Innovation Testing License'** in May-2017, that FinTech firms need to apply for, to develop and test concepts within the DIFC - a key regulation
- Fintech firms operating under this license would not require to adhere to all of DFSA's rules when the concept is in the testing phase

Regulatory Environment in the UAE (2/2)

UAE Central Bank Regulations for PSPs

- PSPs are required to have a license from the central bank to offer services to the public
- Retail PSPs are the most popular type of PSPs among the four categories of PSPs - Retail, Micropayment, Government and Non-issuing
- PSPs need to ensure that minimum capital requirements are fully secured by a bank guarantee, while having adequate cash at all times to fully service redemption obligations
- More than 50% of the total outstanding shares of Retail PSPs need to be owned by a commercial bank or consortium of such banks

Transaction limit, Fee structure - Retail PSPs

- Under a retail PSP, a user can't fund or spend more than AED 25,000 per month, while there exists a limit of AED 10,000 per transaction
- Transaction processing fees charged by Retail PSPs can include a maximum fixed fee of AED 1 and max floating fee of 0.5% of transaction amount, subject to a max fee of AED 10

ADGM Regulations for FinTechs

- ADGM launched a 'regulatory sandbox' - the Regulatory Laboratory (RegLab) in Nov-2016, a regulatory framework to provide a temporary license to FinTechs to develop, test and launch products without being subject to all regulatory requirements for a fully licensed firm
- Financial Services Regulatory Authority (FSRA) of the ADGM has proposed a "Blank-Sheet" approach to RegLab for the new participants:
 - New FinTechs can remain in a RegLab environment for up to **2** years, and need to comply with a customized set of rules depending on their business model, technology and risk profile
 - Participants with feasible business models, who meet the required criteria would be able to migrate to a full financial services license within the ADGM

Comparison of Crowdfunding Regulations across Markets

Regulations	Developed Markets	Emerging Markets	Middle East^
Registration	Required	Required	Required to obtain temporary license
Compliance for Startups	Full compliance	Full compliance	Partial compliance up to 2 years
Minimum Capital Requirements	Exists	Exists	Does not exist
Investor limits	Exists (for individual investors)	Partially exists (for individual investors)	Exists (for individual investors)
Fundraising/ Borrowing limits	Exists	Does not exist	Exists (for individual investors)
Remittance system for international transfers	Exists*	Does not exist	Does not exist
Disclosure of risks, default rates for loans	Exists	Does not exist	Exists
Investment-based CF platforms	Limited to HNIs	Not defined yet	Not defined yet

Source: SEC, FCA, Securities Commission Malaysia, Financial Services Authority (Indonesia), DFSA, ADGM; ^ UAE; * in UK

Note: Developed Markets include US, UK; Emerging Markets include Malaysia and Indonesia (P2P platforms)

- Developed markets have robust crowdfunding regulations, while regulatory frameworks are still evolving in emerging markets
- However, UAE is witnessing adoption of many of the developed world regulations with DFSA's recent regulations introduced in August 2017

Promising Prospects for FinTechs in Saudi Arabia (1/2)

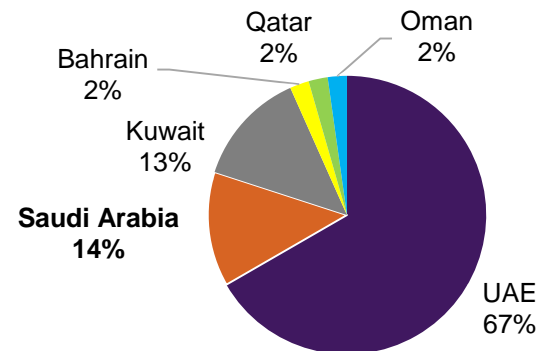
Governmental Support

- FinTech is a core component of the Saudi government's Vision 2030, with the government highlighting the need for developing FinTechs in the King Abdullah Financial District
- The Public Investment Fund in association with SoftBank has launched a USD 100bn technology fund in October 2016 to fuel growth in FinTechs

Saudi FinTechs – Recent Developments

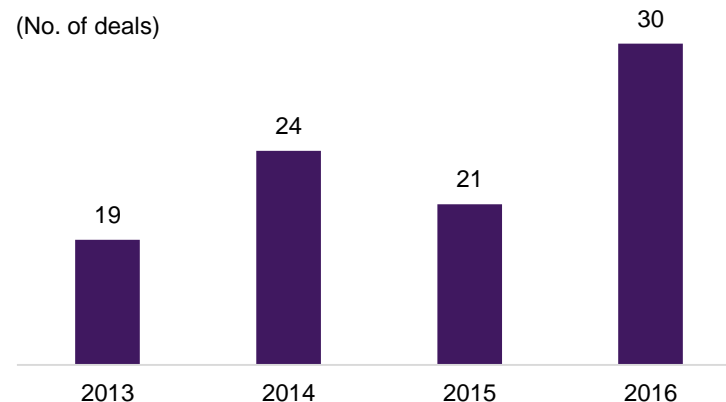
- Technology start-ups (including FinTechs) raised USD 31mn through 19 deals in 2013. Although fundraising dropped in 2016 to just about USD 5mn, the number of such transactions during this period increased at a CAGR of 16.4% to 30
- Further, PayTabs, a local FinTech company, has set the momentum for 2017 by raising USD 20mn in August for global expansion
- PayFort, a UAE based FinTech with operations in Saudi Arabia, integrated the SADAD (Saudi Arabia's national Electronic Bill Presentment and Payment service provider) with its platform in 2016, enabling enterprises to offer online payment options to its customers

FinTech Startups in GCC - 2015



Source: Wamda, Payfort

Fundraising Deals by Tech Startups in Saudi



Source: St. Louis Fed, CITIC, * - Per 1,000 adults

Promising Prospects for FinTechs in Saudi Arabia (2/2)

Demand for P2P Lending

- There is significant demand for funds from both small businesses and individuals in Saudi Arabia:
 - Bank lending to SMEs remains miniscule (3% of all loans), creating opportunities for P2P lending
 - Growth in consumer loans from banks slowed down considerably in Saudi Arabia from 20%+ (2011) to sub-5% in 2016

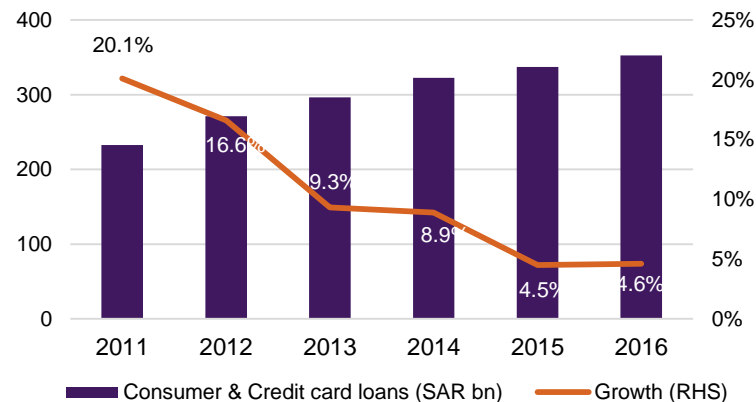
Conducive Environment for P2P Lending

- Internet users grew at a 11% CAGR from 2012-15 to 24mn, while banking penetration in Saudi Arabia rose from 70% (2010) to 96.2% (2015)
- Other supporting factors include favorable demographics and government support

Need for P2P regulations

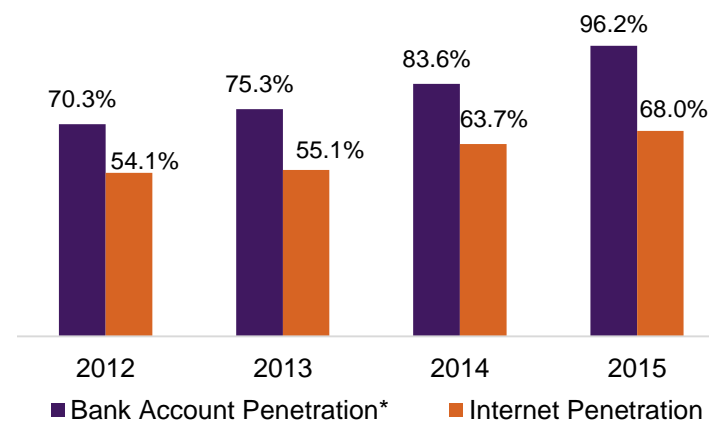
- Setup of a organization to create a regulatory framework for P2P lending/crowdfunding and registration of P2P lending firms, would lay the foundation for P2P lending in Saudi Arabia
- Regulations on the lines of those followed in developed markets or the DFSA, could be introduced with respect to the following areas:
 - Limits on fundraising (SMEs) and borrowing (individuals); Investment limits for investors
 - Minimum capital requirements for P2P platforms

Consumer and Credit Card Loans in Saudi



Source: Wamda, Payfort

Banking and Internet Penetration in Saudi



Source: St. Louis Fed, CITIC, * - Per 1,000 adults

5. Company Profiles

- **LendingClub (US)**
- **Beehive (UAE)**

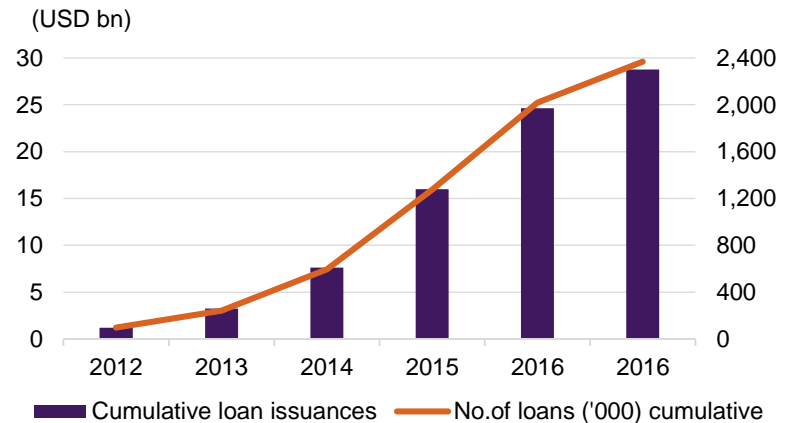
Introduction

- LendingClub is the world’s largest P2P lending marketplace connecting borrowers and investors through its proprietary online platform
- It specializes in personal loans, but has diversified into other categories such as loans for small businesses, education and patient treatments, home improvement and auto loans
- Its technology platform is highly automated using an Automated Clearing House (ACH) electronic payment network to receive funds from investors, collect borrower loan repayments and disburse payments to investors
- The company raised USD 870mn through an IPO in Dec-2014 and has a market cap of USD 2.5bn
- The outstanding loan balances on the platform grew rapidly from USD 707mn in Q2-12 to USD 28.7bn in Q2-17, while number of loans growing significantly from 61,000 to 2.37mn in this period
- LendingClub’s business is well diversified in US, with California, Texas and New York being the largest states in terms of loan originations in 2016, contributing 14%, 9% and 8%, respectively

Key Facts

Incorporated	2006
Headcount (2016)	1,530
Revenue (2016)	USD 500.8mn
Loans and Customers till date	USD 28bn borrowed by over 1.5mn customers
Operations across	All 50 states of US

Loan Issuance Trends



LendingClub Loan Types and Attributes



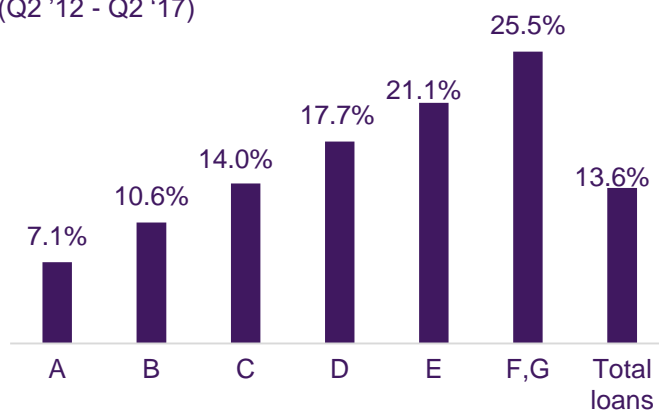
Nature of Loan	Loan Size	Annual Interest Rates	Term	Loan Types
Personal loans (Individuals)				
Super Prime	USD 1,000 - 50,000	3.99-9.34%	2, 3, 7 yrs	New large purchases
Prime (FICO 660+)	USD 1,000 - 40,000	5.32-30.99%	3, 5 yrs	Refinancing, New large purchases
Near Prime (FICO < 660)	USD 1,000 - 20,000	19.99-30.99%	3, 5 yrs	Refinancing
Small Business loans				
Term Loans	USD 5,000 - 300,000	5.9-25.9%	1, 2, 3, 5 yrs	Capex funding, Working capital, Acquisitions
Line of Credit	USD 5,000 - 300,000	6.25-29%	25 months	Inventory financing, Working capital
Patient Solutions	USD 2,000 - 50,000	3.99-24.99%	2-7 yrs	Medical loans, Tuition fees (K-12), Tutoring

Source: Company

LendingClub's Key Attributes

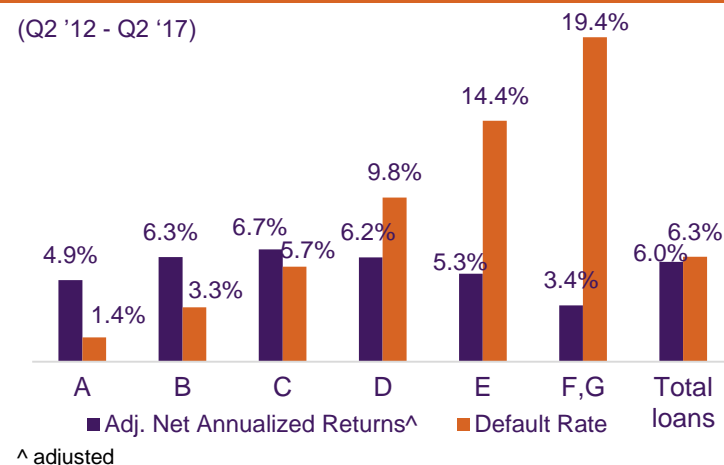
Average Interest Rates by Grades

(Q2 '12 - Q2 '17)



Annualized Returns, Default Rates by Grades

(Q2 '12 - Q2 '17)



Average borrower attributes of LendingClub*

Attributes	Value
FICO score	699
Debt-income ratio	18.3%
Credit history	16.5 years
Personal income	USD 77,900 p.a.
Avg. loan size	USD 14,736

* For LendingClub's Standard Loan Program

- Average interest rates for superior grade loans (A and B or C) charged on LendingClub's platform are lower than its US peers, Prosper and Upstart
- The average Lending Club borrower's creditworthiness is quite decent for its flagship Standard Loan Program
- A FICO score of over 660 (Prime and above) and annual income of over USD 75,000 (top 10% of US population) depict the healthy credentials of the company's borrowers

GCC P2P Lending Example - Beehive



Introduction

- Beehive is one of MENA's first online regulated marketplaces for P2P lending, facilitating financing between investors and registered SMEs in UAE.
- It is predominantly a business lending platform with over 5,000 registered investors, and has raised finance worth over AED 110mn for more than 200 businesses
- The platform performs an internal risk and return assessment for each request, and designates bands ranging from A+ (most secured) to D (high risk). Investors can bid for rates from 6-22% pa
- The competitive bidding among investors drives down the lending rate, benefiting SMEs who save up to 30% on the cost of finance

Beehive's lending statistics

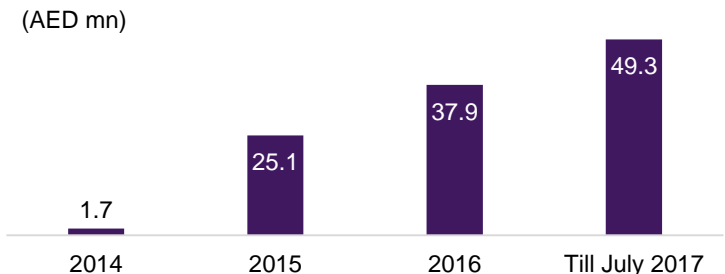
- Business lending has been robust so far, with 51% growth in 2016 to AED 38mn and AED 49mn lent in the first 7 months of 2017
- Non-performing loans have dropped to nil in 2016, indicating the superior quality of lending

Business Finance rates based on risk bands

Risk band	Profit rates (APR*)
A+	6-12%
A	6-14%
B	8-16%
C	10-18%
C-	12-20%
D	14-22%

Source: Company; * Annual Percentage Rate

Loan originations through Beehive



% of Amount lent	2014	2015	2016
Non-performing loans^	0.0%	1.5%	0.0%
Defaulted loans	0.0%	3.9%	0.0%

Source: Company; ^ A credit line overdue for > 60 days

Beehive



- Investors can open a Beehive account with minimum AED 1,000, with the flexibility to invest any amount per business (minimum of AED 100)
- Beehive's offerings are of two types: i) Business Finance (BF) and ii) Invoice Finance (IF)
- Beehive also offers Islamic investments through an Islamic window, Beehive Sharia Processing

Revenue Model

- Beehive charges both businesses seeking finance and investors seeking returns, with a different fee structure for both its business segments, BF and IF

Beehive's fee (revenue) structure

Year	Business Finance	Invoice Finance
Business	2% of principal (Yr 1), 3% (Yr 2), 4% (Yr 3)	1% fee per invoice written
Investor	2% annual fee,	20% fee on profit

Business Finance segment

- The BF segment offers SMEs quick unsecured finance worth over AED 100K repayable over 6-36 months
- BF investors make a return between 6-22% APR depending on the business' risk profile

Criteria for SMEs seeking finance

Parameter	Criteria
Operational track record	A UAE registered SME, operational for at least 24 months
Revenue	AED 2.5mn p.a. (minimum)
Profitability	Currently profitable
Management track record	At least 24 months
Banking requirements	<ul style="list-style-type: none"> • No cheque return in 12 months • Bank statement showing revenue receipts of at least 80%

Business Finance and Invoice Finance returns

Year	BF Gross Yields	BF Net Yield	IF Gross Yield	IF Net Yield
2014	12.6%	11.7%	NA	NA
2015	12.5%	10.4%	11.3%	9.0%
2016	11.8%	10.9%	12.4%	9.9%

Beehive

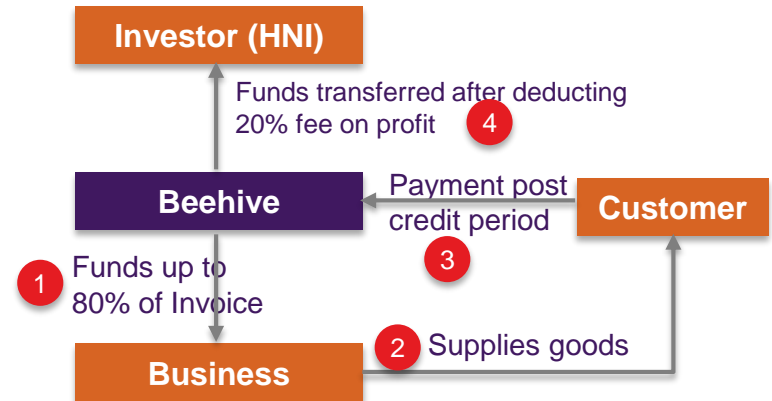


Invoice Finance segment

- Once invoice details are entered seeking funds, Beehive matches the lowest cost of lending available, based on the investors' parameters, enabling loan disbursement within 24 hrs
- SMEs secure up to 80% finance of their outstanding receivables (invoices due within 60-120 days)
- The customer receives the goods and makes the payment after the credit period it enjoys, which is transferred to the investor after Beehive's fees
- Customers need to be blue chip firms (minimum 1 year old), with sound payment history
- IF investors make returns between 0.75-1.25% per month, less Beehive's fees of 20%

Source: Company

Invoice Financing Flow



Source: Company

SMEs funded by Beehive



Source: Company



6. Conclusion and Outlook

Positive Long-term Prospects for P2P Lending in Saudi Arabia (1/2)

Wide Acceptance of P2P Lending Concept

- P2P lending's technology-driven business model has gained popularity worldwide amongst borrowers (lower interest rates, quick application process) and investors (higher returns, automated loan selection criteria), without assuming lending risk
- P2P lending benefits even those borrowers rejected by the traditional bank credit appraisal, who stand a chance to obtain finance through innovations in credit modeling incorporated in the P2P platform, using data sets (beyond credit scores) - A key strength of this online platform
- Rates charged by P2P lenders are typically lower than those of commercial banks for higher creditworthy borrowers

Globally, P2P Lending is a Success

- Online alternative finance is a rapidly growing market globally, which has grown 3-8x in the past 3-4 years in US and UK, driven by the predominant P2P lending segment (over 75%)
- Restrained bank lending due to stricter credit standards, advancement in data analytics, and government initiatives have led the success of FinTechs and P2P lending in US

Dubai to remain the Regional FinTech Leader

- UAE is at the center of the FinTech revolution in MENA with the largest share of FinTechs
- Though in a nascent stage compared to the developed markets, Dubai has made a headway in FinTech adoption in MENA, and has emerged as the FinTech hub led by healthy investments, robust judicial system, lower entry barriers and entrepreneurial culture
- Ample opportunities for P2P business lending exist in UAE with SMEs (~3mn) accounting for 60% of national GDP and nearly 50-70% of SME loan applications rejected by banks

Positive Long-term Prospects for P2P Lending in Saudi Arabia (2/2)

Middle East is Picking up the P2P Bandwagon

- The nascent FinTech sector in MENA is steadily picking up the growth momentum with the number of firms and investments growing over 5x over the past 5 years
- While investments in MENA FinTechs have totaled USD 100mn in 10 years with significant widening of the investor base, it is a fraction (<0.1%) of global investments, indicating the large growth potential
- Rising penetration of internet/smartphones, large unbanked population (86% adults without bank accts) and meagre bank lending to SMEs with a USD 300bn credit gap, bode well for P2P lending in MENA
- Hence, the long-term outlook for P2P lending remains positive despite the regulatory environment yet to evolve in the region similar to US or UK; Dubai is an exception with recently introduced regulations
- While very few P2P lending firms exist in MENA, the early success of Beehive, UAE's P2P lender, sets an example for others to follow

Saudi has a Strong Case for P2P Lending

- Saudi possesses most of MENA's structural growth drivers for introduction of P2P lending with a mere 3% of bank lending to SMEs, rising internet penetration and significant tech-savvy youth population, supported by the government's Vision 2030 providing an impetus for FinTechs
- Fundraising in the nascent FinTech sector has picked up in 2017, with PayTabs' USD 20mn fundraise

Shariah Compliant Platforms to Gain Popularity

- MENA's prominent P2P lending platforms Beehive (UAE) and Liwwa (Jordan), both are shariah compliant platforms, which have witnessed a rising trend of loans underwritten since inception in 2013-14, with total USD 37mn loans underwritten collectively till date
- Islamic lending (~40% of total lending in major GCC nations) is expected to increase going forward, given its growing popularity and loyal customer base, boding well for Shariah compliant platforms