UNIVERSITY of NICOSIA

Department of Digital Innovation

MSc in Blockchain and Digital Currency

BLOC 526 – Emerging topics in fintech

Session 11 - Fintech case studies

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Learning objectives and expected learning outcomes

Summary

Session 11 summarises the learnings acquired on emerging topics on fintech by critically discussing case studies of neobanks, peer to peer lenders and peer to peer insurers

Learning objectives

- Neobank product offerings compared to traditional banking institutions
- Benefits and challenges of neobanks business models
- The original peer to peer lending business model and the way it has transformed
- The peer to peer insurance business model and comparisons with the mutual insurance model

Expected learning outcomes

- A critical understanding of the benefits and challenges associated with neobanks
- A critical appreciation of the drivers behind the peer to peer model transformation and prospects for the future
- A critical appreciation of the peer to peer insurance model and its challenges

Agenda

- Neobanks
- Peer to peer lending
- Peer to peer insurance
- Concluding remarks
- Appendices

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- **Neobanks**
- Peer to peer lending
- Peer to peer insurance
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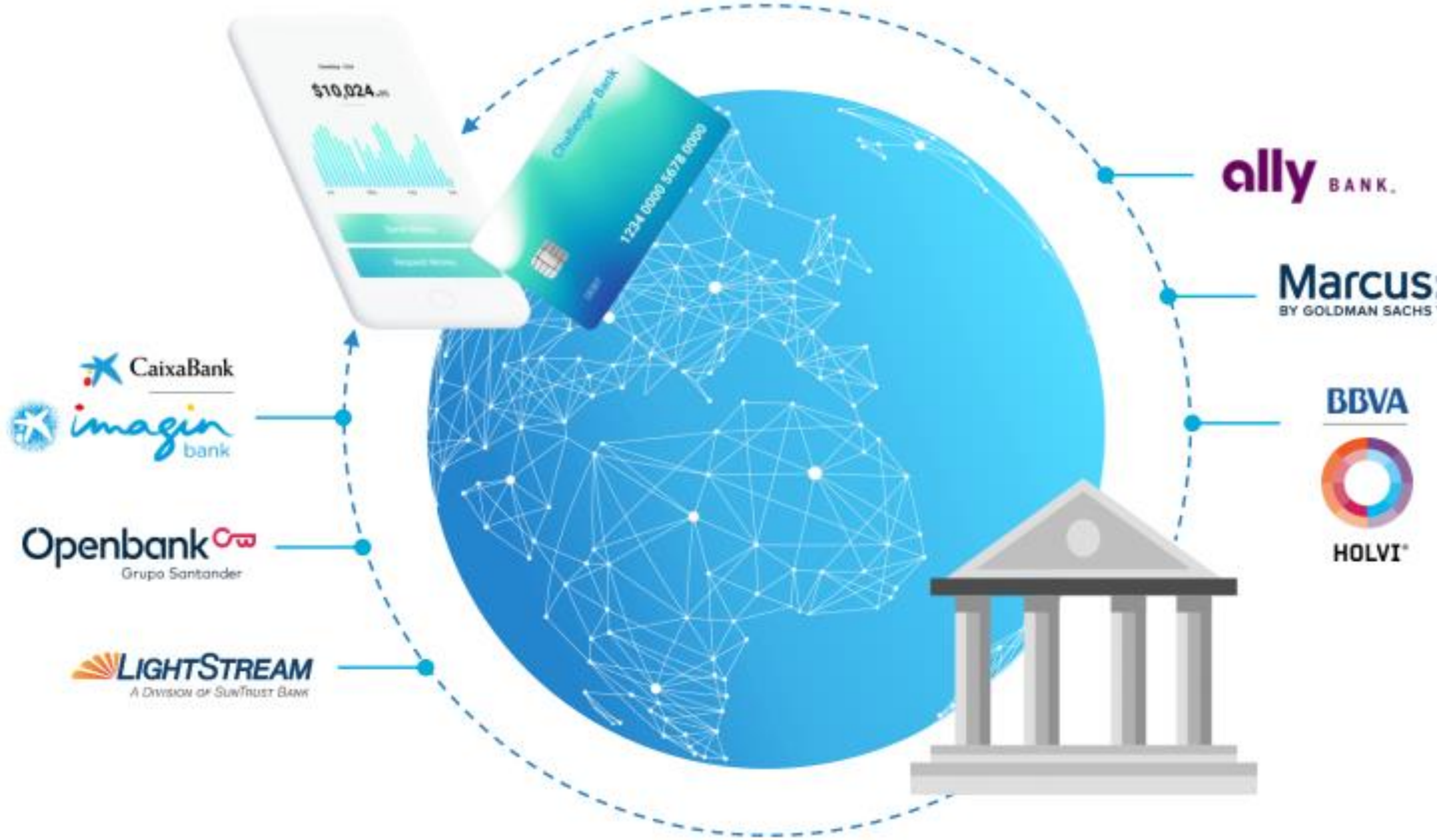
The growth of challenger banks (neobanks) has been rapid

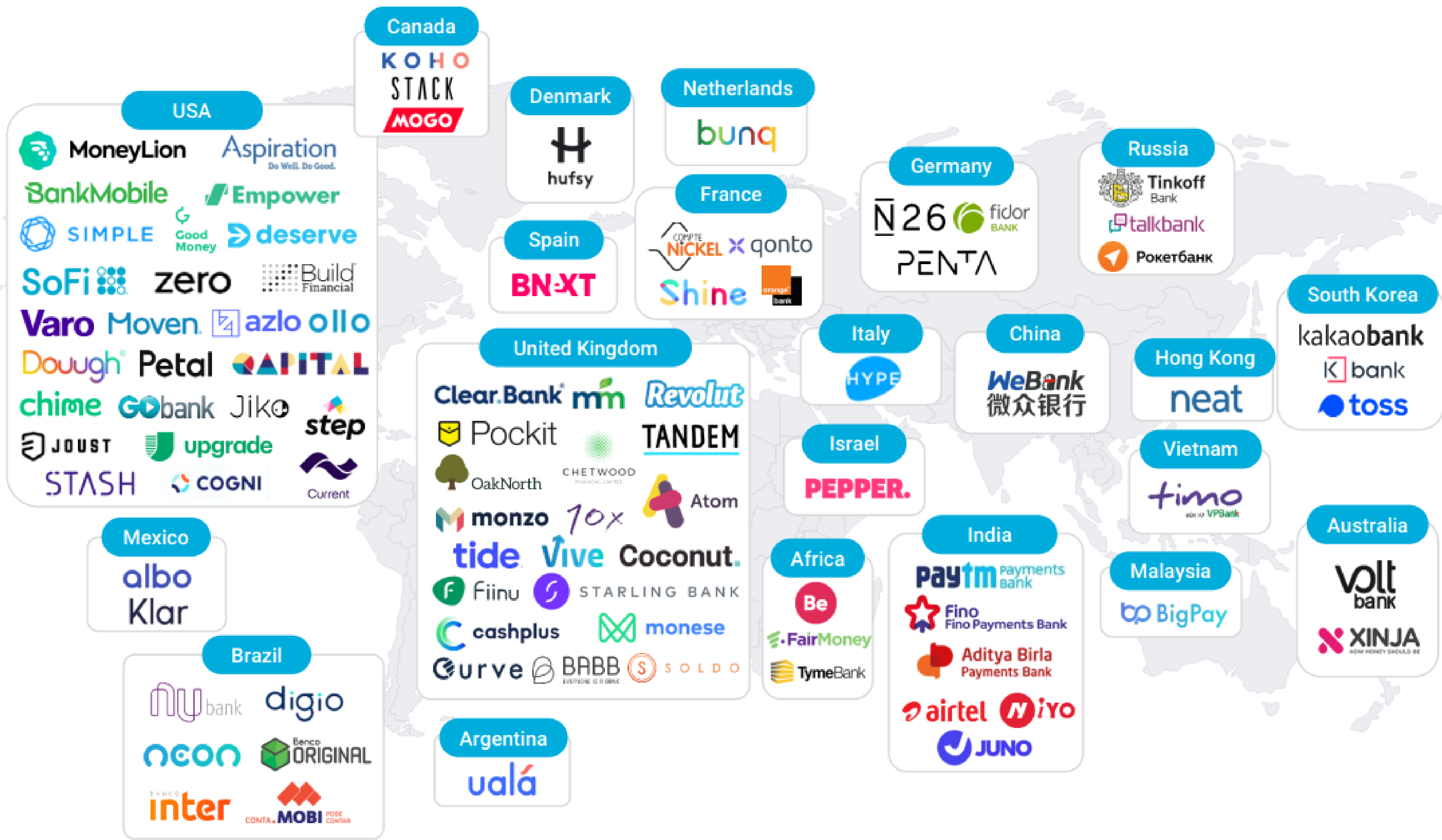
Source: FT Partners Research (https://ftpartners.docsend.com/view/suxcjc4)

And traditional banks have been following suit, launching their own digital banks

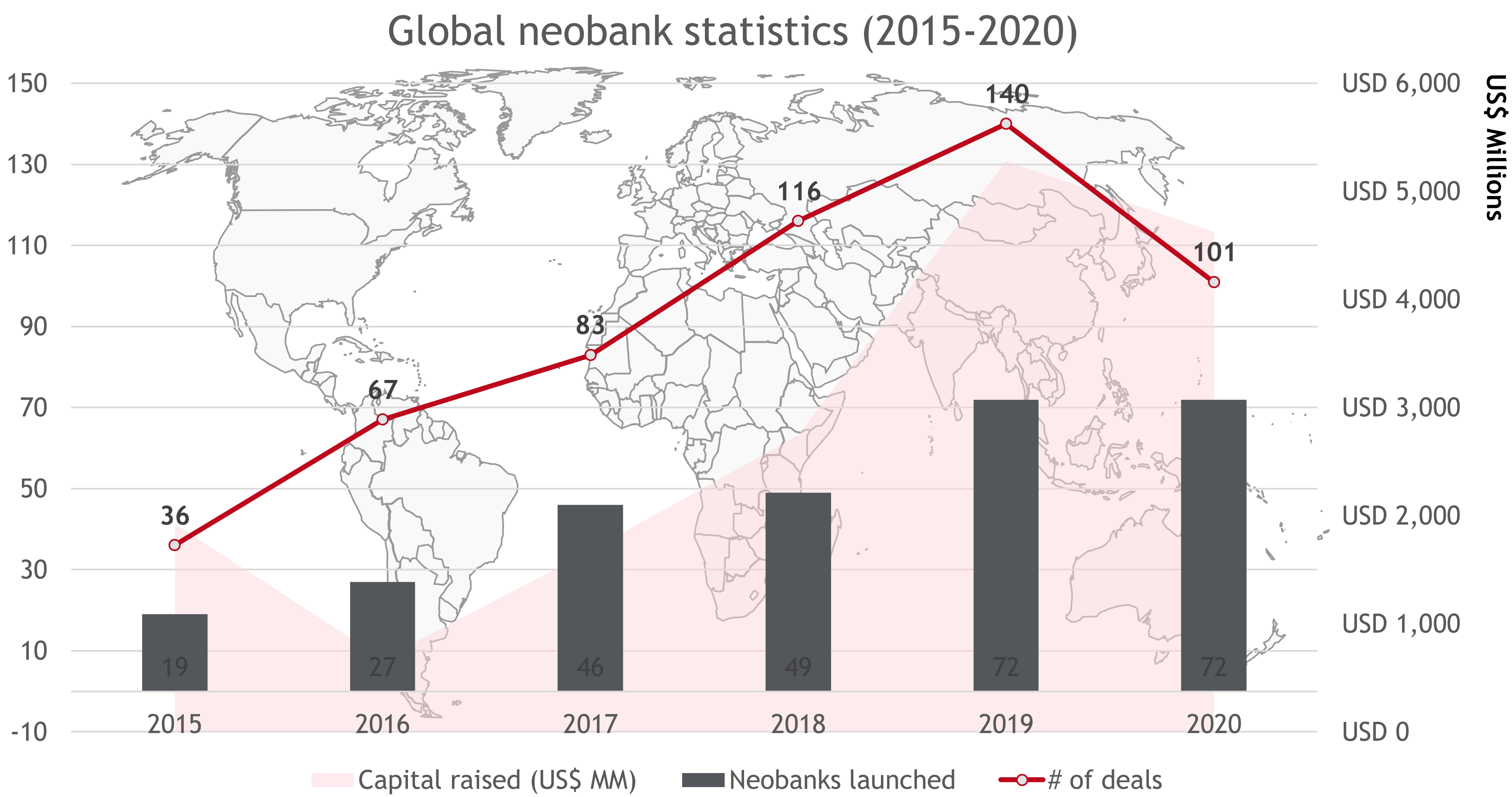


Source: FT Partners Research (https://ftpartners.docsend.com/view/suxcjc4)

Several challenger banks (neobanks) have emerged across the globe



Challenger banks have received significant amounts of funding

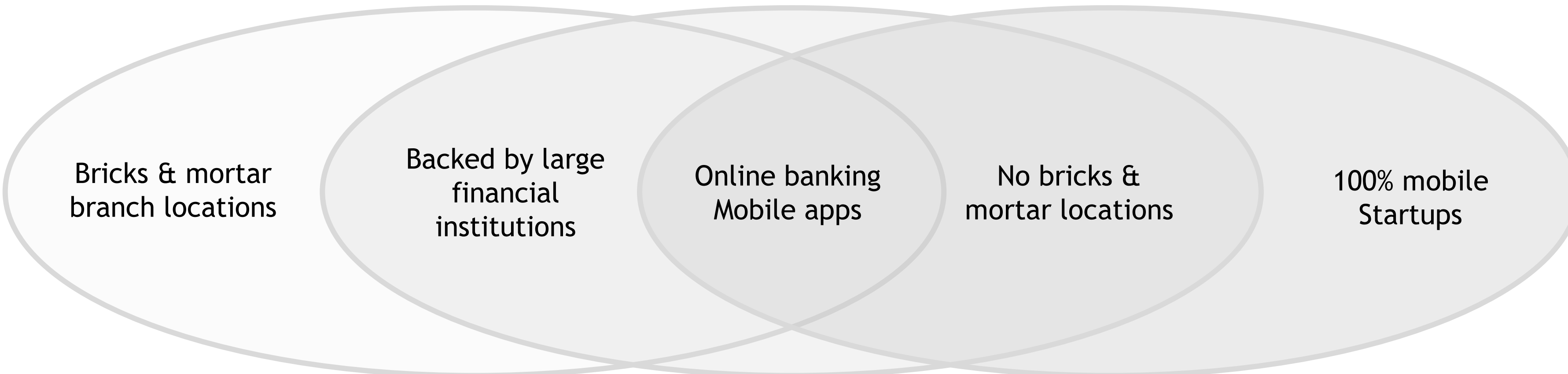


Source: Statista, CB insights, TNP analysis

Question: What is a neobank and why is it different from digital banks?

Unlike digital banks, which are often the online part of a 'bricks and mortar' bank, neobanks are online only and offer no high street services

Traditional banks → Digital banks → Neobanks



Source: The Nielsen Company (US) LLC

Product offering comparison

Neobanks offer a more limited product offering (at least for now)

Traditional banks	Digital banks	Neobanks

Retail & SME product offering

- Current / checking and savings accounts
- Credit and debit cards
- Money transfers and payments
- Foreign exchange
- Loans
- Crypto trading & custody

Wholesale product offering

- Loans
- Investment banking & derivatives
- Private equity
- Structured finance

Notes:

1. Business models not as clear cut
2. Some neobanks offer retail loans (e.g. Atom), but of much more limited scope
3. Some traditional banks have started offering crypto services (e.g. Fidelity)

Benefits and challenges of neobanks

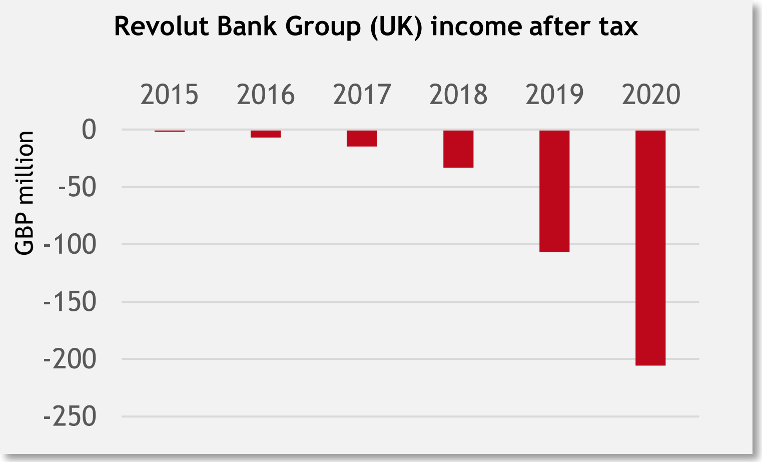
		Benefits	Challenges
Client	Product offering	Simple & easy	Limited
	Client onboarding	Digital	Unable to serve non residents
	Customer service	FAQs, forums	Non existent for complex issues
	Pricing	Simple & transparent	Hard to charge for services
Internal	Cost base	Lower	Will increase as regulations intensify
	Revenue model	Simple	Hard to achieve profitability
	Scalability	Online scalability, subject to regulations	Little differentiation from local competition
	Fraud management	Advanced analytics tools	Poor internal processes

Benefits and challenges of neobanks

Revenue model

Profitability remains poor for neobanks, despite impressive (dot.com like) valuations

RATIO PER CUSTOMER	REVOLUT	MONZO	MONESE	N26	BUNQ	MOGO	LUNAR	NUBANK
Valuation Per Customer ($)	250	799	n/a	1,000	n/a	103	n/a	833
Loans Per Customer ($)	n/a	6	n/a	64	-	72	n/a	130
Deposits Per Customer ($)	n/a	183	n/a	129	6,636	n/a	n/a	49
Income Per Customer ($)	n/a	3.63	-1.02	0.31	19.72	32.38	-19.78	1.59
Cost Per Customer ($)	n/a	-23.76	-10.62	-10.00	-369.12	-35.90	-12.70	-14.68
Net Profit Per Customer ($)	-5.76	-18.71	-10.98	-10.07	-349.40	-18.35	-30.28	-2.01



theguardian

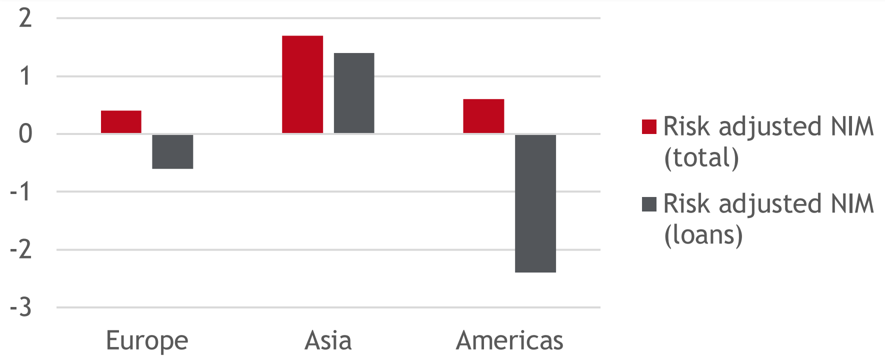
Kalyeena Makortoff
Banking correspondent
@kalyeena
Tue 20 Oct 2020
07.00 BST

Monzo launches £180-a-year premium account despite downturn

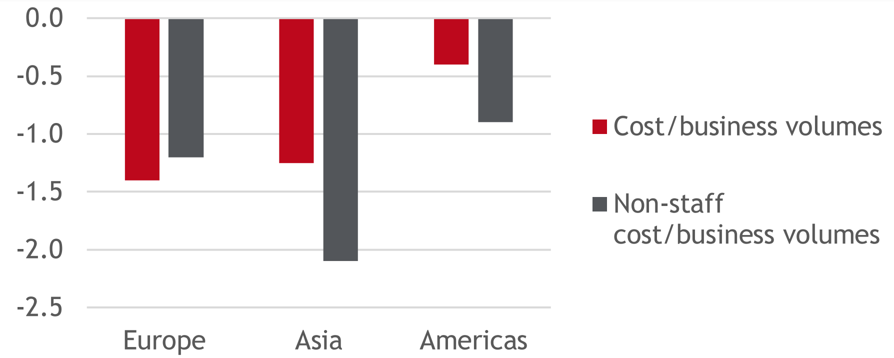
Digital bank says it is confident its mainly younger customers will pay for extra services

Paradoxically, the performance of neobanks is inferior to traditional banks; neobanks in emerging markets fare marginally better

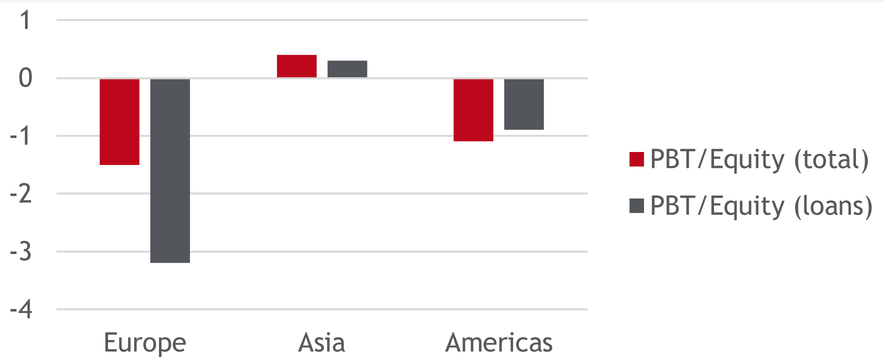
NIM (% of earning assets; StanDev vs banks)
Only Asian banks report better loan NIM than traditional banks. Overall NIM pushed up by riskier securities portfolios



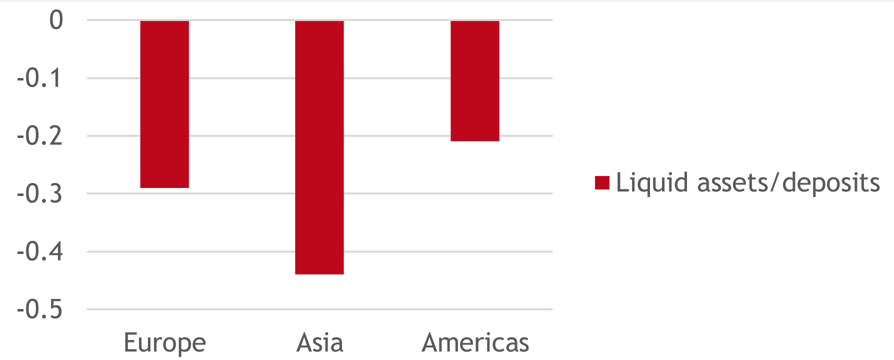
Operating Expenses (% of business volumes; StanDev vs banks)
Lower cost efficiency compared to banks, despite sophisticated technological platforms and absence of branch network



Profit Before Tax/Equity (% of total equity; StanDev vs banks)
Only Asian banks report better returns on equity than traditional banks. American neobanks show better performance for loans



Liquid assets/deposits (% of deposits; StanDev vs banks)
Lower coverage of deposit base in case of run off



Source: IMF 2022 Global Financial Stability Report

The financial performance of neobanks can be understood across the following dimensions

	Observation	Yet…
Business risks (profitability)	▪ Higher operating expenses ▪ Higher non-staff operating expenses ▪ Higher client acquisition costs ▪ Higher compliance costs	▪ Lower potential for fee income generation ▪ Less cross sell options ▪ Shareholder appetite for (short term?) losses may run dry
Credit risks	▪ Riskier credit profiles ▪ Serve younger customers with lower incomes and lower credit scores ▪ Mostly unsecured lending ▪ Sector concentration (e.g. SME loans)	▪ Lower credit risk coverage ▪ Low loan loss reserves as a proportion of overall RWAs ▪ More aggressive credit pricing ▪ Riskier securities portfolio (albeit higher yielding)
Liquidity risks	▪ Less stable liquid assets ▪ Younger, less loyal customer base ▪ High proportion of interbank loans	▪ Lower ratio of liquid assets to total deposits ▪ Online channels, making runs easier ▪ Trend towards longer duration assets (e.g. mortgages)

Neobanks face more challenges than just lack of profitability

Anti-money laundering and other regulations

As neobanks scale, so do regulatory requirements

FINANCIAL CONDUCT AUTHORITY

Home / News / FCA review finds weaknesses in some challenger banks' financial crime controls

FCA review finds weaknesses in some challenger banks' financial crime controls

Press Releases | First published: 22/04/2022 | Last updated: 22/04/2022

A review by the FCA has found that challenger banks need to improve how they assess financial crime risk, with some failing to adequately check their customers' income and occupation. In some instances, challenger banks did not have financial crime risk assessments in place for their customers.

FINANCIAL TIMES

Regulator orders N26 to improve anti-money laundering controls

German bank told by BaFin to fix backlogs and strengthen staffing

FINANCIAL TIMES

Neobanks face more challenges than just lack of profitability

Customer service

Neobanks tried to set themselves up as ‘invisible corporations’, but customer interaction proves critical

DAILY FINTECH ADVISERS

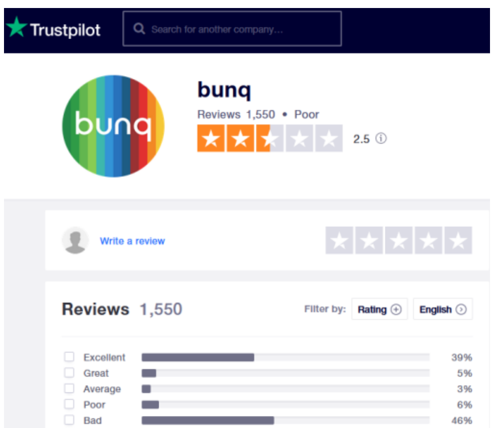
Daily Fintech

Fintech, Crypto and Insurtech trends & analysis

14/06/2019 ARUN KRISHNAKUMAR

Neobanks – Game changers, but do they really care about their customers?

https://dailyfintech.com/2019/06/14/neobanks-game-changers-but-do-they-really-care/

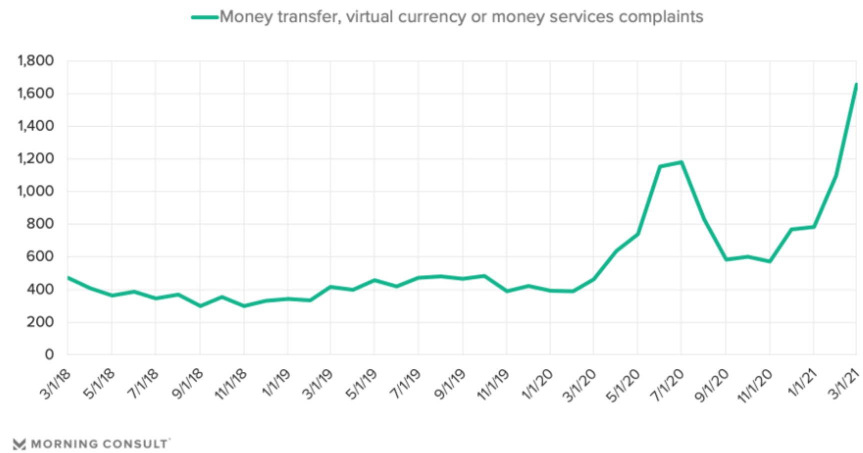


Stop updating UI with a terrible UX changes

Feedback

✕ Bring back the old design!

Feedback & Ideas 44 votes



Morning Consult analysis of Consumer Financial Protection Bureau consumer complaints from March 2018 to March 2021 in the category titled “Money transfer, virtual currency or money services.”

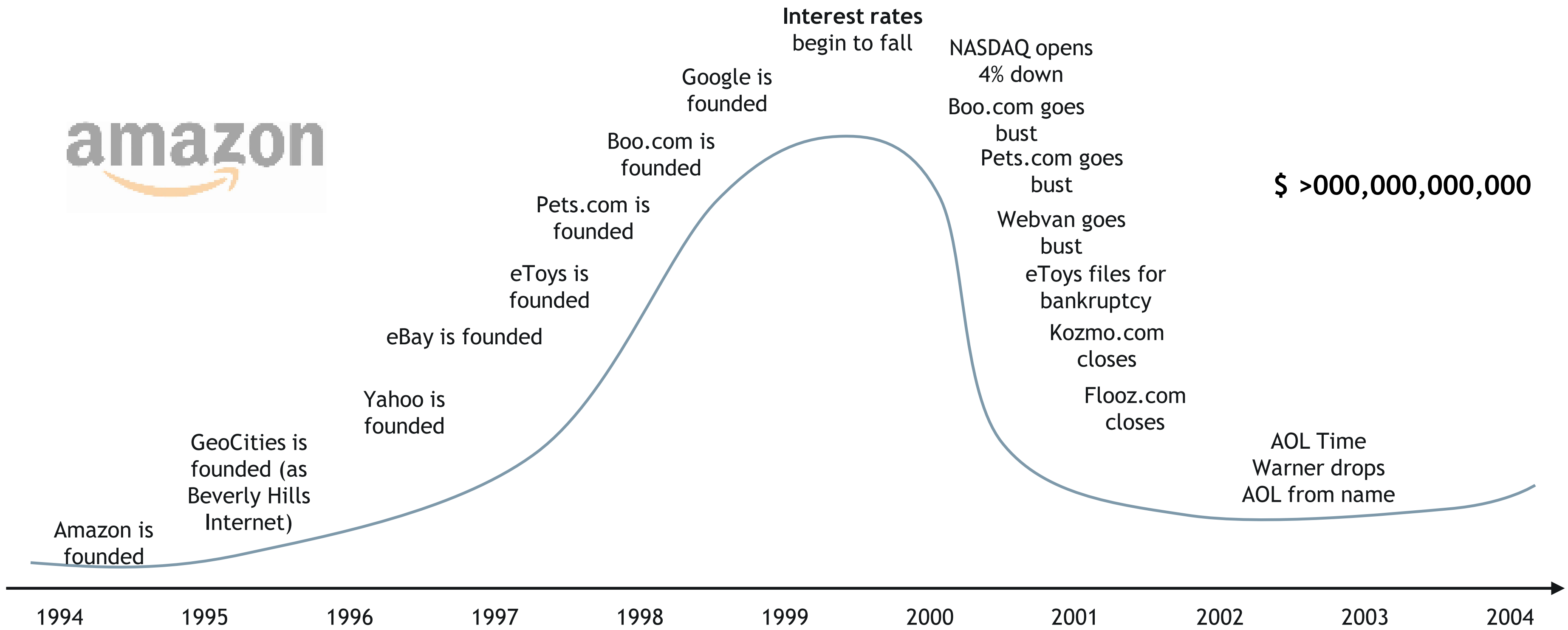
https://morningconsult.com/2021/04/27/cfpb-database-fintech-complaints/

Supervisory challenges

The neobank landscape requires a careful balancing act

Protect consumers	Protect financial system stability
Foster innovation	Foster level playing field
Increase customer choice	Prevent excess build up of credit (e.g. BNPL)
Expand banking reach (inclusion)	Prevent opportunistic initiatives
Protect against fraud	Protect against AML / terrorism financing activities

Ultimately, most neobanks will fail



Only a handful of survivors can totally change the financial services landscape

Digital failures
Finn by JP Morgan

- **Launched:** June 2018
- **Shut down:** August 2019
- **Number of customers at closure:** 47,000
- **Reasons for failure:**
  - No difference between Finn and Chase’s conventional mobile banking app: same back-end infrastructure
  - Chase’s online-only account opening process deemed Finn irrelevant for some customers
  - Cannibalisation: Instead of focusing on expanding Finn, Chase opened 400 branches in new cities in 2018 and diminished need for its digital-only brand in those locations
  - Competition: Ally offered wider suite of functionality; Marcus (Goldman Sachs) offered high interest rates. Finn could not compete with market leading features offered by other challenger brands

Digital failures
Bó by RBS (Royal Bank of Scotland)

- **Launched:** November 2019
- **Shut down:** May 2020
- **Number of customers at closure:** 11,000
- **Reasons for failure:**
  - Features offered trailed those of Monzo and Revolut (e.g. Apple Pay / Google Pay support, fingerprint login, etc.)
  - Competition with own sister brand, Mettle (SME focused digital bank by NatWest)
  - Parent’s conservative corporate culture
  - Inability to retain top talent
  - Bó was designed by consultants…

Digital failures
Xinja

- **Launched:** May 2017
- **Shut down:** December 2020
- **Number of customers at closure:** 49,000
- **Reasons for failure:**
  - Unbalanced funding profile, relying heavily on shareholder equity for high saving rates
  - Limited product offering and absence of lending products
  - Expensive headquarters, drying up cash and attracting bad publicity

Takeaways

1. Neobanks are on the rise across the world, but will they survive?	▪ Employing a digital only client interface, neobanks enjoy material cost benefits ▪ However, we can expect challenges to increase as regulation tightens up

"Banking is no longer monogamous"

Alan McIntyre, Accenture

Agenda

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- **Peer to peer lending**
- Peer to peer insurance
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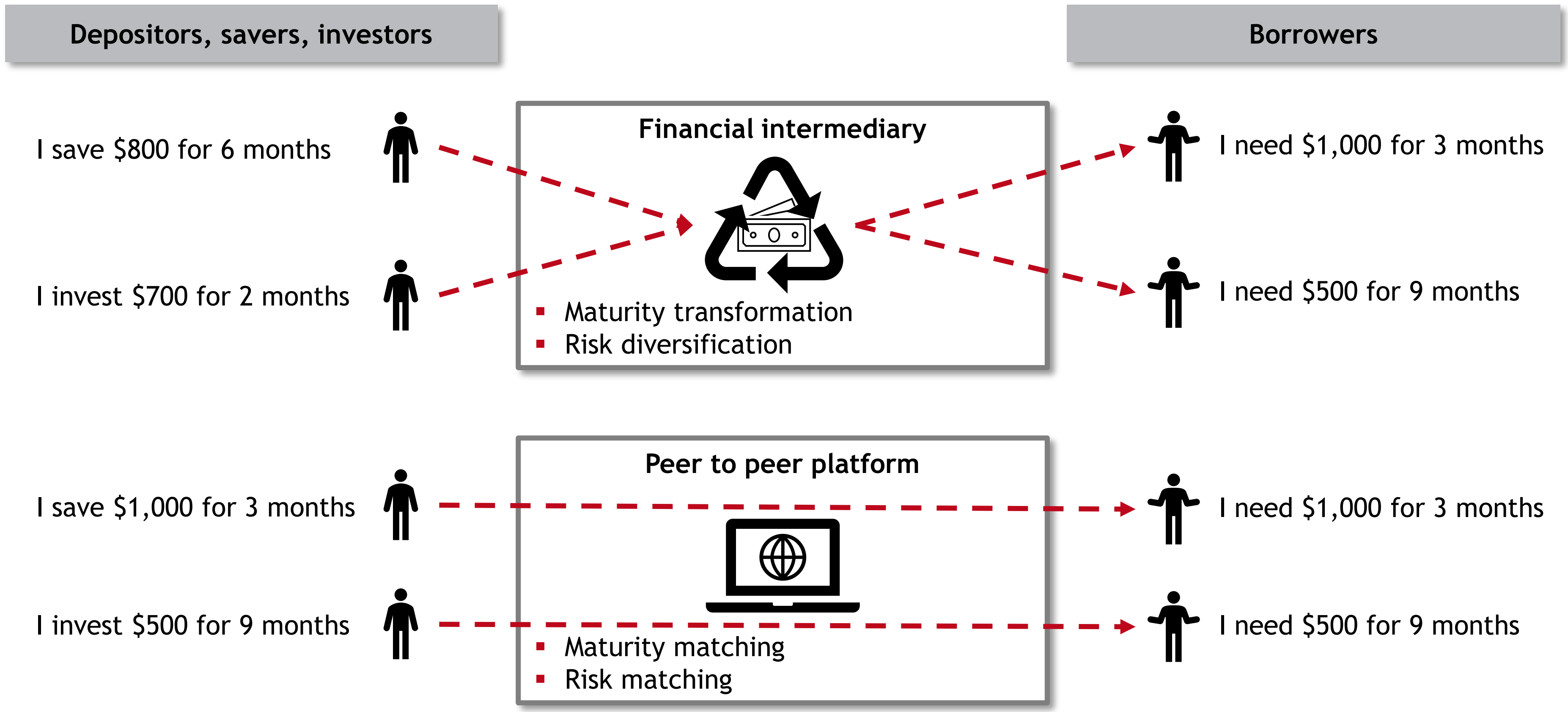
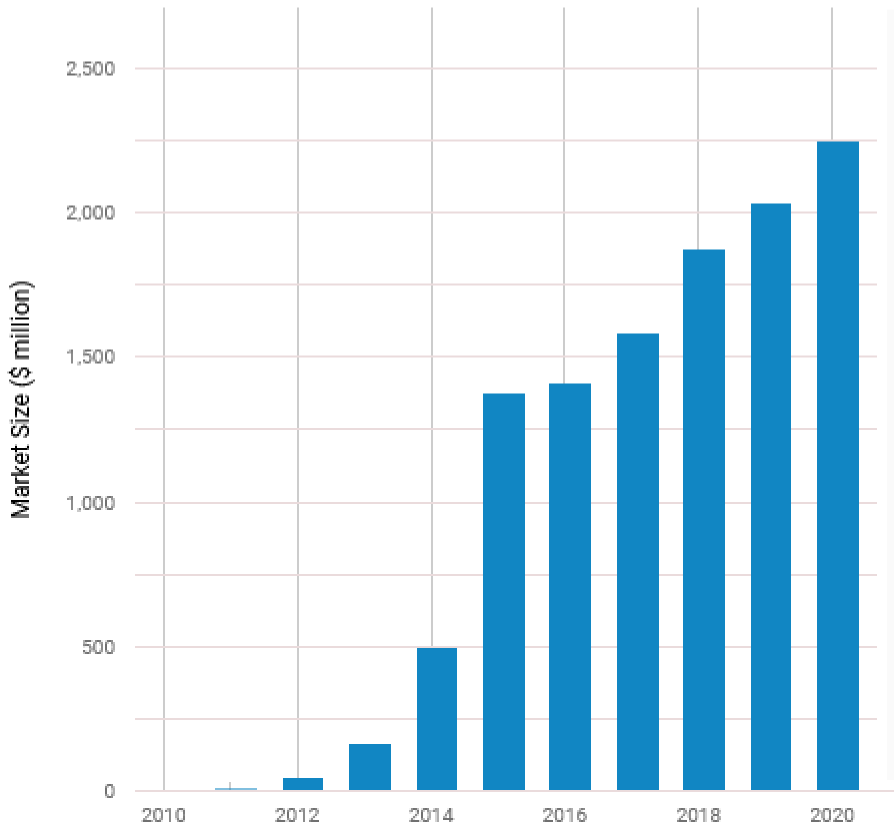
Peer to peer lending

The original peer to peer lending model was developed on the basis of electronic social networking technologies, offering direct matching of lenders and borrowers



And, ‘peer to peer’ lending has grown dramatically

P2P lending platforms growth, United States



P2P lending platforms

https://www.ibisworld.com/industry-statistics/market-size/peer-to-lending-platforms-united-states/

Yet, the peer to peer lending model is now rather different than what was intended

Risk.net
Financial Risk Management News and Analysis

Hedge funds, securitisation and leverage change P2P game

FINANCIAL TIMES

Opinion **Inside Business**

Peer-to-peer lenders are blurring into mainstream banks

Idea behind P2P model was to bypass the mainstream, not become part of it

JONATHAN FORD + Add to myFT

What is the main challenge?

The need for growth…

- As peer to peer lenders started growing and attracting investors (Lending Club went public in 2014), pressure to grow increased
- Yet, the 'pure' peer to peer lending model is by definition constrained
  - Loan tenors have to be matched
  - Loan values have to be matched
  - Risk profiles and appetites have to be matched
- Institutional money and financial engineering came to the rescue
  - Instead of individual investors, large institutional investors offer funding for loans
  - Financial engineering allows the slicing and dicing of funding sources in order to achieve loans that match the tenor, exposure value and risk profile requested by borrowers

And failures are only to be expected

FINANCIAL TIMES

UK property finance company Lendy collapses

Failure raises prospect of multimillion-pound losses for investors who lent to developers

Nicholas Megaw in London MAY 24 2019

CHINA ECONOMIC WATCH

Massive P2P Failures in China: Underground Banks Going Under

Martin Chorzempa (PIIE)
August 21, 2018 12:30 PM

theguardian

Quakle collapse serves as warning to peer-to-peer investors

The collapse of one peer-to-peer website a couple of years ago is a salutory reminder that the industry is exposed

Question: Will peer to peer lending survive?

We have already discussed the challenges of predicting the future…

But, as always, we can study what we already know

- There is little (if any) true peer to peer lending taking place any more
- Peer to peer platforms will continue to grow, as they target a market niche (high risk, low value lending) that banks are unwilling or unable to serve profitably
- Proper governance and regulations will be the main factors determining the continuing success of the model
- Yet, it seems that –yet another- innovation that was supposed to uproot the financial system, has only managed to touch a few branches

Can we draw any lessons for DeFi?

Takeaways

2. Peer to peer lending was made possible with technology	▪ Technology enabled business model innovation gave rise to peer to peer lending ▪ While the business model is expected to grow (in its mutated form), it is not expected to substitute for mainstream banking

"If you lend your money, you either lose the money or gain an enemy"

Albanian proverb

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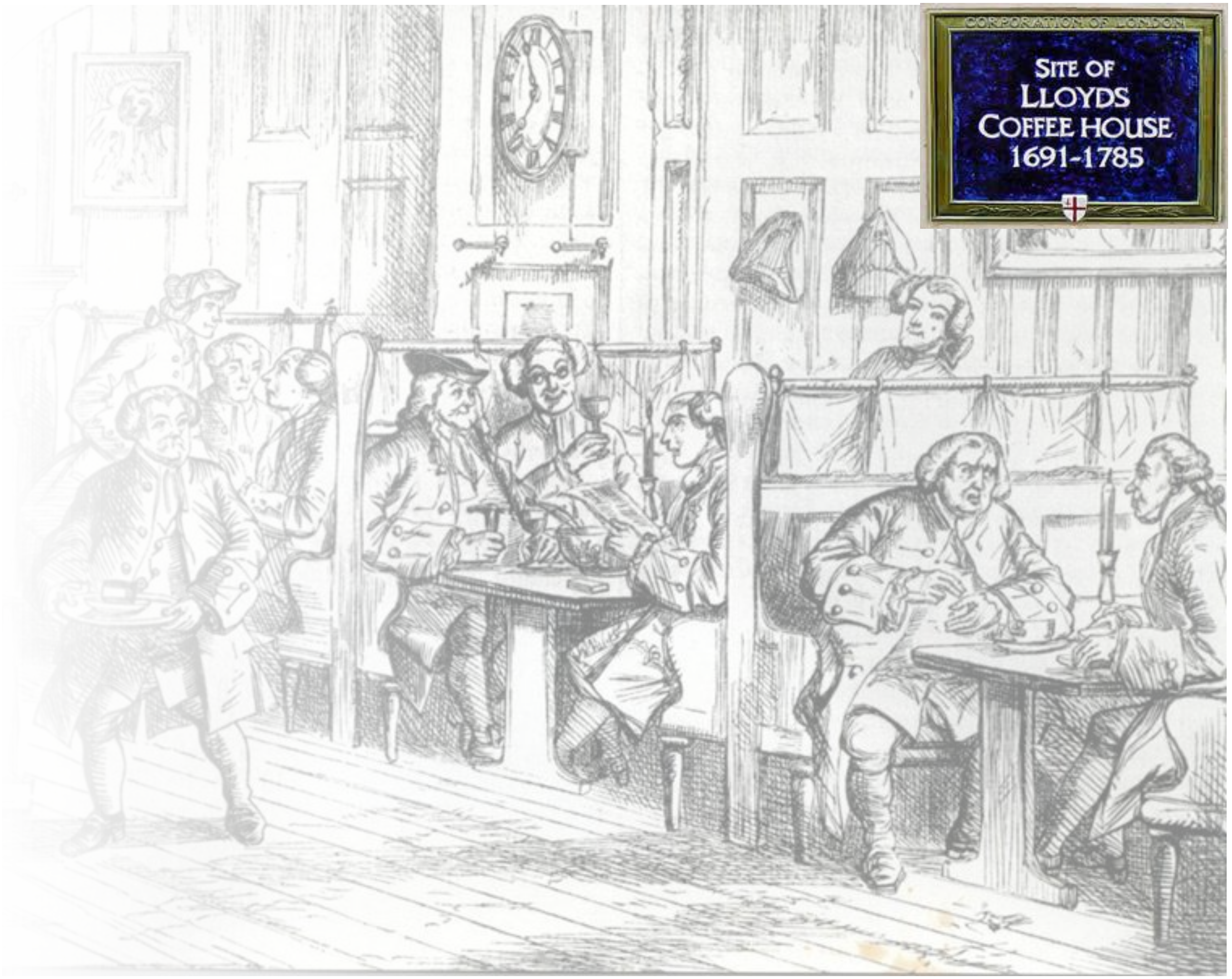
Question: What was the most popular risk discussed in the Lloyds Coffee House?

1. Lapse risk?
2. Mortality risk?
3. Moral Hazard?



What was the most popular risk discussed in the Lloyds Coffee House?

1. Lapse risk?

2. Mortality risk?

3. Moral Hazard?

"*Moral hazard* occurs when one person takes more risks because someone else bears the cost of those risks."

Wikipedia

Image source: www.lifetonic.co.uk

How does peer to peer insurance work?

- At the core of peer-to-peer is the idea of grouping together friends/family, or more commonly, people who have common interests or are interested in the same type of cover, e.g. health insurance
- The group pools their premiums to insure against a risk, and because everyone knows their fellow members they're taken to be assuming responsibility for their group's risk profile. When claims exceed premiums paid, a reinsurer covers the excess of available premium funds
- In most peer-to peer examples, any excess left over in the pool after the policy period ends is refunded to group members or credited towards the next policy year, or in some cases donated to a charity
- So unlike the traditional insurance model where the insurance company retains all excess funds and adds them to their profits, P2P doesn't create that incentive to refuse claims.
- Behaviourally, the idea is that if customers team up with like-minded peers in a transparent claims environment, they're less likely to make fraudulent or exaggerated claims because they'd in effect be defrauding their peer group

friendsurance

Lemonade

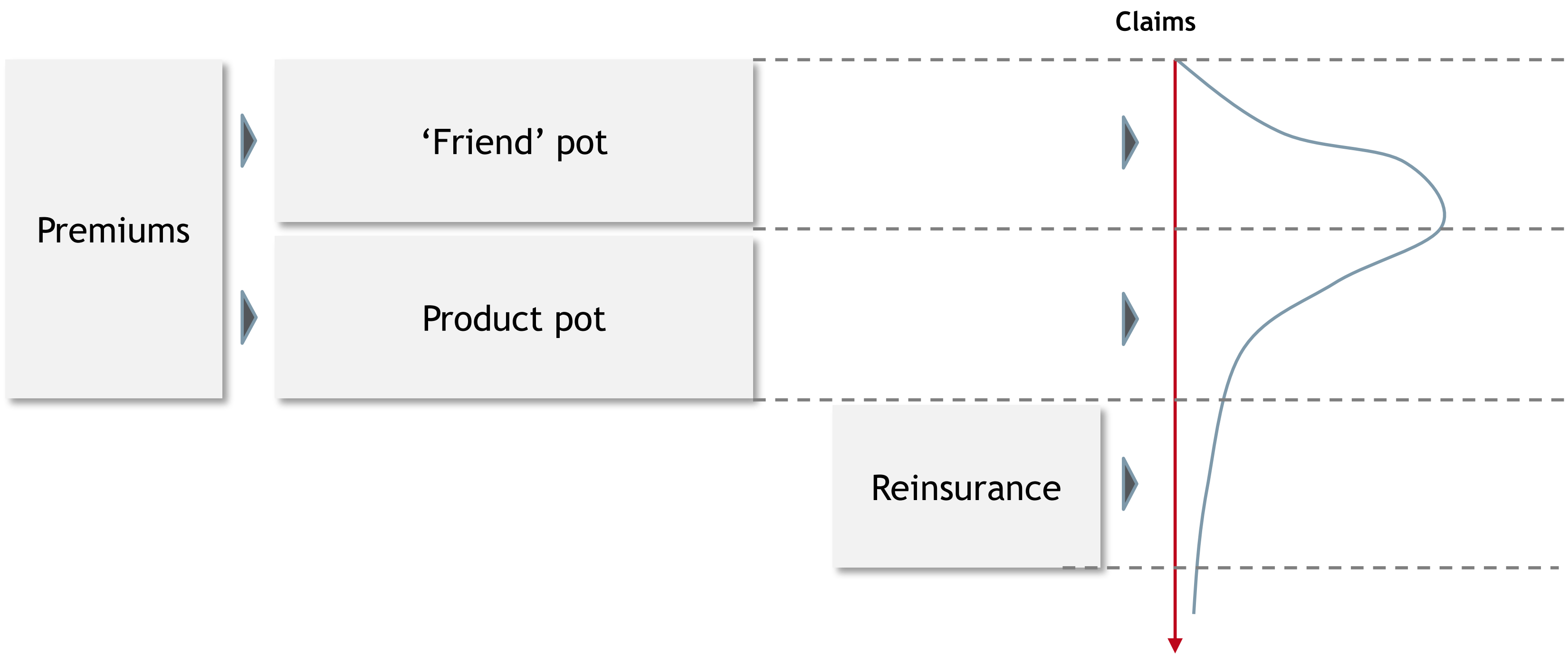
insPeer

同聚保 TongJuBao

https://www.thedubs.com/which-peer-to-peer-insurance-models-will-survive/

Let’s dig deeper into the risk mechanics

Premiums | Claims



But does this really work?

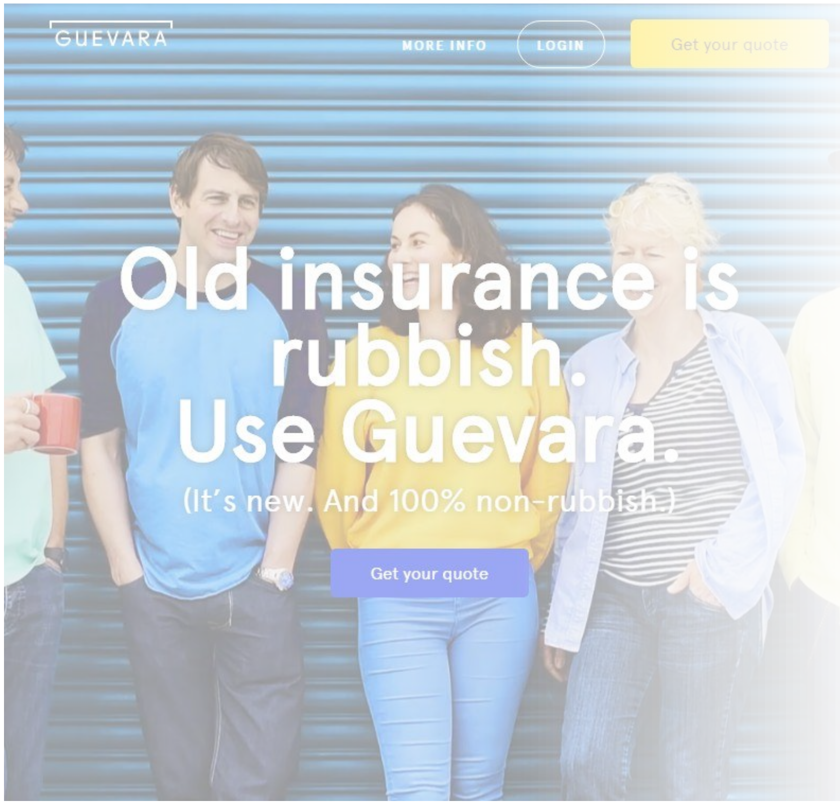
Is peer to peer insurance any different from the Mutual Insurance Company business model?

The Mutual Insurance Company business model

- A mutual insurance company is an insurance company that is owned by policyholders
- The sole purpose of a mutual insurance company is to provide insurance coverage for its members and policyholders, and its members are given the right to select management
- It (is supposed to) provide insurance coverage to its members and policyholders at or near cost
- Any profits from premiums and investments are distributed to its members via dividends or a reduction in premiums
- Mutual insurance companies are not listed on stock exchanges, but if they eventually decide to be, they are "demutualised"

Will peer to peer insurance survive? The case of Guevara in the UK

GUEVARA



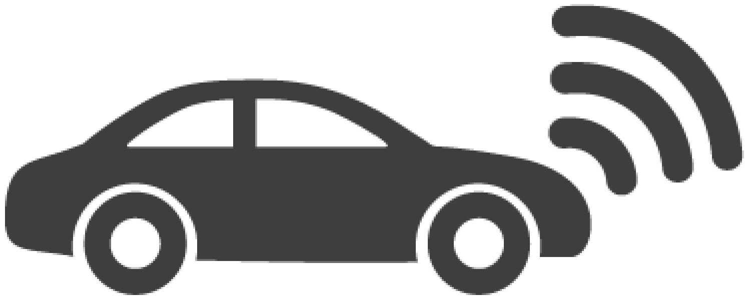
Guevara launched in 2013 as a broker, allowing its customers to pool their premiums in order to get a lower price on their motor insurance premium

In September 2017 Guevara shut down, saying they had "failed to establish a fully capitalised underwriting vehicle"

- Was the timing wrong?
- Is the product too niche?
- Is there a scale barrier for new entrants?
- Does the technological innovation make plain business sense?

A great idea and technology are still not enough for fintech success…

Question: Do we have more examples of technological innovations that failed to really change the insurance world?



- Telematics are a useful add on, but cannot claim to dominate the core insurance model
- Issues pertaining to who is driving etc. further hamper widespread adoptions – but these are challenges that technology may ultimately address
- What technology may not be able to change are humans: some time after the telematics device has been installed, drivers revert back to their usual driving patters

- Fintech is not only about business model disruption
- Business model enablement may be the preferred strategy

Takeaways

3. Peer to peer insurance revived the mutual model using technology	▪ Technology can assist with addressing several business and behavioural problems in financial services ▪ However, technology alone is not enough for a business to succeed

"Before borrowing money from a friend, decide which you need most"

American proverb

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Summary of takeaways

1. Neobanks are on the rise across the world, but will they survive?	▪ Employing a digital only client interface, neobanks enjoy material cost benefits ▪ However, we can expect challenges to increase as regulation tightens up
2. Peer to peer lending was made possible with technology	▪ Technology enabled business model innovation gave rise to peer to peer lending ▪ While the business model is expected to grow (in its mutated form), it is not expected to substitute for mainstream banking
3. Peer to peer insurance revived the mutual model using technology	▪ Technology can assist with addressing several business and behavioural problems in financial services ▪ However, technology alone is not enough for a business to succeed

Studying historical case studies is the best way to avoid learning from the same mistakes.
There are still million other (new) mistakes we can learn from…

Any questions?

Questions?

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