

Fintech Lending

MGT 4074 Fintech & Crypto Tokens, Section A, Spring 2025

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Georgia Institute of Technology

April 7, 2025

8 Conclusion

Final Project Scheduling Now Available

- The two final project presentation dates are **Wednesday April 16** and **Monday April 21**
- Follow the link on the Canvas announcement to the Google Sheet to input your preferences
- You can select “strong” or “weak” preferences
- If one day is far preferred to the other, I will switch those with “weak” preferences first
- In exchange, if I do switch anyone’s preferences, those with “weak” preferences, or who prefer the less popular day, will earn +1 power score to compensate
- Please submit preferences by **11:59 PM tonight**

Roadmap

Fintech Lenders Exposed to Business Cycle Risk

Affirm shares plummeted about 30% in two days following President Donald Trump's tariff announcements, on concerns that consumers will pull back on spending.

Rival Klarna delayed its long-anticipated IPO, as did ticket marketplace StubHub.

Analyst say buy now, pay later companies such as Affirm and Klarna are particularly vulnerable to economic shocks because of their exposure to consumer spending and credit.

Roadmap

- 1 Housekeeping
- 2 In the News
- 3 **Retail Lending**
- 4 Crowdfunding
 - Crowdfunding Basics
- 5 Housekeeping
- 6 In the News
- 7 Crowdfunding, Cont.
 - Types: Online Lending, Equity Crowdfunding, Donations & Rewards
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Retail Lending Sector Pain Points

What are the pain points that crowdfunding companies try to solve?

For Fundraisers (Borrowers / Issuers):

- **Access to Capital** – bypasses traditional gatekeepers (banks and VCs are inaccessible for early-stage or non-traditional ventures.)
- **Speed & Simplicity** – fast online application and launch than with traditional banks and VCs.
- **Market Validation** – test product/idea demand from early supporters, not possible with banks or VCs.
- **Lower Fundraising Costs** – fewer legal/admin burdens than banks.
- **Audience Engagement** – build community and future customers, not possible with banks or VCs.

8 Conclusion

Hypotheses

- Georgia Institute of Technology

Crowdfunding Basics

Regarding the five dimensions of financial intermediation, Crowdfunding portals have succeeded in some areas but failed in others:

- Reduced information asymmetry between savers and borrowers/investors by increasing disclosure
- Mixed on transaction costs; lowered the cost and increased the speed to post a campaign, but charge high origination fees and high interest rates.
- Do not solve the liquidity problem; little ability to resell securities purchased on a crowdfunding platform.
- Do not provide risk sharing; investors bear the risks of default. Crowdfunding portal has no skin-in-the-game.
- Have not built trust with episodes of fraud, misrepresentation, and principal-agent problems found in the traditional financial system.

Crowdfunding Basics

Two types of crowdfunding:

- **Investment:** debt or equity investors for return
- **Non-investment:** donate money to charities & people

Table 7.1. Types of Crowdfunding Portals and Investors

Category	Capital Raised In 2020 ¹	Description	Parties To Transaction
Investment Crowdfunding			
1. Debt	\$101 billion (89% share)	Portal issues a loan to an individual or small business. Two types: P2P/ marketplace lending or balance sheet lending.	Lender → Borrower
2. Equity	\$4.4 billion (4% share)	Portal sells ownership stakes in a business, real estate, or stream of cash flows from a business (revenues, profit-sharing, or royalties).	Investor → Issuer
Non-Investment Crowdfunding			
3. Donation-based	\$7.0 billion (6% share)	Portal asks individuals to contribute to a fundraising campaign with no promise of any benefit to the donor.	Donor → Sponsor (or recipient)
4. Rewards-based	\$1.3 billion (1% share)	Portal raises money to finance development of a new product or service.	Backer (or supporter) → Sponsor (or recipient)

1. Cambridge Centre for Alternative Finance.

Please put away your electronics and take out a pen or pencil for Pop Quiz 4

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Final Projects

- Presentation Videos or Slideshows are limited to **Two Minutes** per participant – **be succinct!!**
- Live Q&A will follow each presentation (I am the questioner)

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- If you are doing a **Smart Contract**:
 - I recommend making a demo video rather than demonstrating live
 - Please **include audio** so we can understand what your contract is doing
 - **Showmanship** is valuable! 1/10 of the grade will be based on showmanship.
Marketing is part of your job.

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Moneygram Business Model

Dallas-based MoneyGram International, Inc. (NASDAQ: MGI) is a financial services company that enables consumers to send money, known as remittances. A significant portion of the company's money-transfer transactions are initiated by immigrants or refugees in the United States sending money back to their native countries. The company's reach is broad, operating in more than 200 countries and territories, and serving 47 million customers in 2021. The company is led by Chairman and CEO W. Alex Holmes. In 2021, it had \$1.2 billion in revenue.

Moneygram Complaint

Stranded customers waiting for their money: Customers paid MoneyGram to transmit money as quickly as possible but MoneyGram failed to do so and instead held up funds unnecessarily. Holding the money in limbo resulted in needless delays and harmed people who were relying on that money to pay for necessary living expenses. In addition, the company repeatedly failed to accurately disclose how long it would take to make funds available to the recipients abroad.

MoneyGram likely lost about 10% to 15% of its revenue between 2018 and 2019 with the lower threshold it implemented, said Mike Grondahl, an analyst at Northland Securities Inc. who has followed MoneyGram since 2010. He said while the company has since moved past those challenges, new customers could still balk at providing that level of information.

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Online vs. Storefront Loans

	Online	Storefront
Loan Amount (\$)	316	456
Repayment Amount (\$)	303	490
Loan Maturity (days)	20	19
Default rate	9%	4%
APR	434%	297%
Cost per \$100 (\$)	19.5	12.4
# of Loans	217,596	119,094
# of Unique Borrowers	49,877	17,484

Random Clarity Sample

Comparison of Marketplace Lenders

Table 7.2. Terms for Consumer Loans on US P2P/Marketplace Lenders

Company	Interest Rate (APR)	Minimum FICO Score	Term	Loan Amounts
Prosper	7.0% to 36%	640	3 to 5 years	\$2,000 to \$50,000
Happy Money	10.5% to 30%	640	2 to 5 years	\$5,000 to \$40,000
Peerform	6.0% to 30%	600	3 to 5 years	\$4,000 to \$25,000
Upstart	6.7% to 36%	600	3 to 5 years	\$1,000 to \$50,000

Source: Company websites, as of April 2023.

Crowdfunding Online Debt Lending

Institutional investors have leveraged technology to automate the investment process.

- Connect to portal using API, screen and analyze postings in real-time using proprietary computer algorithms (or robots) that make decision to invest or not.
- A study of LendingClub found that robot investors outperformed less sophisticated investors.

Does marketplace lending increase financial inclusion?

- Some studies find that AI can identify “invisible prime” borrowers who are turned down by traditional lenders due to low FICO scores but are more creditworthy.
- Overall, evidence is mixed, with no clear consensus in the literature on whether AI can meaningfully outperform traditional credit scores.

Case Study: Lendified – Using Artificial Intelligence

Lendified is fully automated balance sheet lender for small and medium enterprises (SMEs)

- Founded in Toronto 2015 by two ex-bankers
- Offers loans up to \$150,000 with terms up to 24 months

Businesses apply online (under 10 minutes), get an instant decision, and receive funding in 48 hours

- Lendified's software, Judi.ai, connects via API to the applicant's bank account and generates a cash flow forecast. This forecast is analyzed by a proprietary credit engine to evaluate the ability to finance the loan.
- Loan may be collateralized by inventory or accounts receivable to reduce the risk and the cost of borrowing.
- Cut loan adjudication costs by 90%, make decision in minutes, not weeks.

Donations and Rewards Crowdfunding

- Donation-based crowdfunding ask individuals to contribute to a fundraising campaign with no promise of any benefit to the donor
 - Artistic projects, civic projects, charities, medical expenses, or disaster relief.
 - GoFundMe is the world's largest with \$5 billion+ raised.
- Rewards-based crowdfunding raises money to finance the development of a new product or service.
 - Entrepreneur pre-sells a future product to backers (or supporters) who are promised a reward when the project is completed.
 - Kickstarter and Indiegogo are biggest in USA.

Case: Kickstarter Brings Creative Projects to Life

Support Art, Comics, Crafts, Dance, Design, Fashion, Film & Video, Food, Games, Journalism, Music, Photography, Publishing, Technology, and Theater.

- Since launch in 2009, 23 million people pledged \$7.75 billion of which 250,000+ projects funded (41% success)
- Most successful projects raise less than \$10,000, but close to 800 have raised \$1 million+
 - Pebble Time smartwatch (\$20 million), Veronica Mars movie project (\$6 million), Reading Rainbow project (\$5 million).
- Creator sets goal and raises funding up to 60 days.
- Set up a project page with video and description that explains story behind creative project. Outline the rewards backers will receive when completed.
- Monetization: platform (underwriting) fee of 5% of total funds raised, plus payment processing fee of 3% + \$0.20 per pledge.
- <https://www.kickstarter.com/>

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The Rise and Fall of Crowdfunding Globally

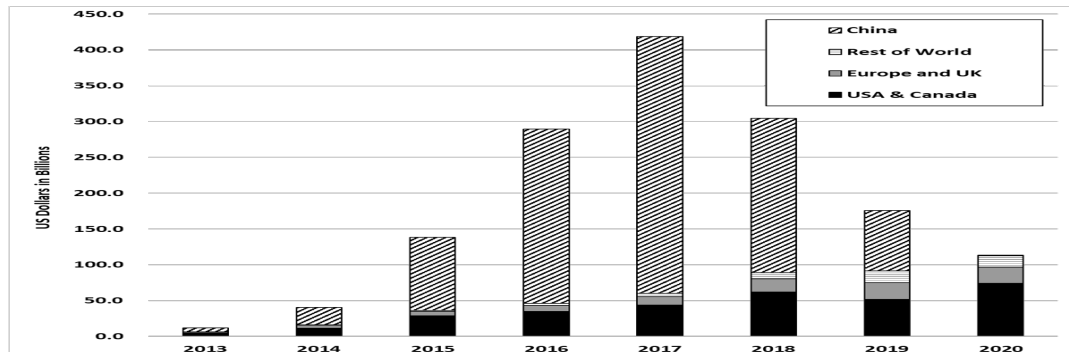
Alternative finance grew rapidly over 15 years, reaching US\$419 billion in 2017, with China reaching **86% of the global market!**

- Widespread fraud, bankruptcies and a regulatory crackdown saw of hundreds of Chinese portals close. Millions of investors lost their life savings.
- Fraud case: Ezubao
 - founded 2014, became one of China's largest P2P platforms, raising \$8 billion within 2 years.
 - In early 2016, news outlets reported that 20 people associated with the platform had been arrested for fraud.
 - Chinese retail investors staged protests in front of police stations, publicly blaming the platform operators and lax regulators for their losses.

The Rise and Fall of Crowdfunding Globally

By 2020, \$114 billion was raised globally: USA 65%, Europe 20%, and China 1%.

- Alternative finance has raised close to \$1.5 trillion over 2013-2020.
- Alternative finance was summarily banned entirely in China.
- Ex-China growth continues.



Regulations and Logistics

Regulation is a high barrier to entry

- U.S. crowdfunding platforms are covered by federal and state licensing requirements, consumer protection laws, securities laws, anti-money laundering laws, and national securities association (FINRA) rules.
- They must register with the U.S. Securities and Exchange Commission (SEC), become a FINRA member, and meet ongoing reporting and disclosure requirements.

In 2016, the Office of the Comptroller of the Currency (OCC) announced plans to issue a special fintech charter that would allow online portals to be supervised federally and not by states.

- Square **applied in 2017** and **received its charter in 2020**.
- SoFi **applied in 2017** and **received its charter in 2022**.
- Many fintechs have not applied, preferring to use banking-as-a-service

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How Crowdfunding Portals Make Money

They charge fees to users on various sides of their multi-sided platforms: (1) Issuers or borrowers on one side; (2) Investors or lenders on the other

- Sign-up fee: may charge a listing fee regardless of success or failure of campaign
- Subscription fee: or charge a monthly or annual fee that allows issuers to run campaigns over a fixed period
- Underwriting fee: 1% to 5% of any capital raised
- Carry percentage / warrants: platform may invest in the campaign and share upside if successful
- Payment processing fee: 3% on payments plus an amount per pledge paid (similar to a credit card issuer)
- Management fee: a percentage of assets under management (AUM)

How Crowdfunding Portals Make Money

Online lending portals charge fees to both the borrower and the lender:

- Loan interest rate: 6% to 30% APR, or more
- Origination fee: 3.0% to 6.5% of amount raised
- Late or missed payment fee: specified in the loan contract (called an indenture);
 - Example: overdue payment fee equal to 15% of missing loan payments
- Servicing fee: 1% to 3% of each payment
- Marketing (or Transaction) fee: charge a bank, a hedge fund, or a high net-worth individual a fee to cover the expense of acquiring customers. LendingClub charges banks 1% to 6% of the face amount of the loan.

How Crowdfunding Portals Make Money

Crowdfunding portals have same expenses as a traditional financial intermediary:

- Sales and marketing expenses (cost of customer acquisition)
- Technology costs
- Research and development
- Salaries, benefits, and employee compensation
- General and administrative expenses (e.g., overhead)
- Distribution, processing, and servicing costs
- Corporate taxes
- Funding costs for balance sheet lenders
- Write-downs on non-performing loans for balance sheet lenders

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Crowdfunding Research Findings: Mixed Evidence

Competition and Financial Inclusion

- Entered markets with fewer bank branches, lower incomes, more minority households, underbanked rural communities, industries with fewer banking relationships,
- Entered markets where complaints about bank misconduct are higher, and where banks have pulled back during past economic downturns (including 2008 global financial crisis).

Other studies disagree, saying they target borrowers with higher credit scores and education

- Online lenders do not target risky or marginal borrowers who have low access to finance, but instead provide credit to borrowers who already have access via banks.
- Fintech mortgage lenders process mortgage applications 20% faster than other lenders but charge a premium interest rate and serve more educated and older borrowers with good access to finance.

Crowdfunding Research Findings: Mixed Evidence

Discrimination and Bias in Alternative Finance

- Female entrepreneurs represented only 35% of Kickstarter campaigns but had higher funding success.
- Experienced male and female investors show no gender bias when investing in projects. But inexperienced female investors favored female founders.
- African American men are significantly less likely than similar white founders to receive equity crowdfunding.
- Latinx (Latin American origin) and African American borrowers were charged significantly higher interest rates on online mortgages.
- Algorithmic decision-making tools such as machine learning may incorporate bias. When trained on data that itself incorporates human biases based on gender, race, income levels, and other factors.

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Case: LendingClub's Marketplace Lending Platform



LendingClub is a U.S.-based financial technology company known for launching one of the first major peer-to-peer (P2P) lending platforms in the world.

- Founded in 2006, it began as a marketplace where individual borrowers could access personal loans funded by individual or institutional investors.
- 2007: Becomes the first P2P lender to register its offerings with the SEC
- 2014: Went public on the NYSE, raising \$870 million — one of the largest fintech IPOs
- 2021: Acquired Radius Bank, becoming a fully chartered digital bank — a major pivot from marketplace lending to traditional banking

Case: LendingClub's Marketplace Lending Platform

Year	Billion	Key Events
2007	0.002	Launched as Facebook app
2008	0.01	Early P2P lending model
2009	0.03	Shift to direct lending
2010	0.2	Secures major funding
2011	0.5	Institutional investors join
2012	1.0	Expands loan categories
2013	2.1	Prepares for IPO
2014	4.3	Goes public (NYSE: LC)
2015	8.4	Record growth post-IPO

Year	Billion	Key Events
2016	8.8	CEO resignation scandal
2017	7.9	Regulatory crackdown
2018	10.9	Acquires Radius Bank
2019	12.2	Peak origination volume
2020	4.3	COVID-19 shutdowns
2021	10.4	Rebound; digital banking push
2022	13.1	steady growth
2023	7.4	Rate hikes slow lending

LendingClub was listed on the NYSE in 2014 at \$15.00 per share

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Case: SoFi's Evolution from Online Lender to Full-Service Bank

Despite the success and media attention, SoFi has lost money in its last three fiscal years

- Operating expenses exceed revenues by a large margin

Table 7.7. SoFi Selected Financial Statements, 2020–2022

	2020	2021	2022		2020	2021	2022
INCOME STATEMENT	US\$ millions				% of Revenues		
Net interest income	178	252	584		31	26	37
Noninterest income	388	733	989		69	74	63
Revenues	566	985	1,574		100	100	100
Less: Provision for credit losses	0	8	54		0	1	3
Less: Noninterest expense	894	1,458	1,838		158	148	117
Less: Income tax	–104	3	2		–18	0	0
Net income (loss)	–224	–484	–320		–40	–49	–20
BALANCE SHEET	US\$ millions				% of Assets		
Cash and securities	873	495	1,422	10	5	7	10
Loans and other assets	7,691	8,682	17,586	90	95	93	90
Assets	8,563	9,176	19,008	100	100	100	100
Liabilities	5,510	4,479	13,479	64	49	71	64
Equity	3,054	4,698	5,528	36	51	29	36

Conclusion

Crowdfunding provides a new business model for fundraising that directly matches borrowers and lenders online, outside of traditional finance.

Crowdfunding is more successful for equity, donations, and rewards for good products (like pepwatch) and art projects that are not served well by traditional finance.

Crowdfunding continues to grow but very slowly recently.

However, crowdfunding struggles to compete with traditional finance in customers that have already been served because crowdfunding does not offer a much better method:

- reducing (information asymmetry-induced) adverse selection problem
 - Credit bureau data is somewhat mature. Alternative data does not provide comprehensive advantages.
- reducing (information asymmetry-induced) moral hazard problem
 - Traditional finance institutions are still good at monitoring