What’s the deal with DeFi?
“If you live in the US, crypto isn’t for you [or something like that].” -Andreas Antonopoulos
Hierarchy of Money (Perry Mehrling)

Money
  - Gold
  - Currency
  - Deposits
  - Securities

Credit
Overview

Intro to DeFi
- What is DeFi?
- Different types of projects
- Why blockchains?

Deeper dive
- Maker’s credit system
- Interactions with other DeFi projects
- Who holds CDPs? Why?

Where we’re going
- Are CDPs repos?
- Is Maker a central bank?
- Towards a hybrid system
- Compliance vs. subversiveness
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INTRO TO DEFI
What is DeFi

- Sometimes mimics traditional financial products/institutions
- Sometimes leverages blockchain for novel products/institutions
- What’s decentralized, exactly?
- Kyle Kistner, “How Decentralized is DeFi?”
What DeFi gets from blockchains (part 1)

Permissionlessness
- DeFi protocols are automated
- Anyone can use them
- The rules are the same for everyone
- Onboarding is...easier?

Transparency
- Balance sheets
- Volume
- Users

Trustlessness
- No (human) counterparty to trust with collateral (usually)
- No hidden fees (or features)

Novelty
- Different market structure
- Different types of risk
- Different constraints on borrowers and lenders
2 DEEPER DIVE

Maker and Compound
How Maker works: the credit system

Lock an asset in smart contracts and receive a loan against them, according to risk parameters
  ◦ Ratio of collateral to debt
  ◦ Variable stability fee
  ◦ Debt ceiling

All kinds of assets could be allowed as collateral under the right circumstances
How Maker works: the stablecoin

Loans are issued in Dai

- Dai is created when issued as a loan
- Dai is burned when repaid
- Dai is always $1 when ‘drawing’ and ‘wiping’
- All Dai on the market is directly backed by collateral in a CDP

Risk parameters help maintain a soft USD peg
Some use it for normal loans, but most use it for margin

- CDPs are a great vehicle for funding long ETH positions
- Dai as digital cash or Dai as a medium for crypto financial products?
Total Dai Supply

80,412,229

0x89d2...0359
Contract Address

23,615
Dai Holders

Total ETH Locked

1,810,128

1.0411
P/W Ratio

$441MM
USD WETH

1.7061%
% ETH Supply

+ -170,013.22
1W Change (WETH)
Dai as the foundation of a new ecosystem: Compound

- Algorithmically-derived interest rates for borrowers and lenders
- Earn interest on Dai (or other ERC20 tokens)

<table>
<thead>
<tr>
<th>Asset</th>
<th>Supply</th>
<th>Outstanding debt</th>
<th>Total lent</th>
<th>Percent lent</th>
<th># of loans</th>
<th># of lenders</th>
<th># of borrowers</th>
</tr>
</thead>
<tbody>
<tr>
<td>REP</td>
<td>810,130.10</td>
<td>2,659.73</td>
<td>34,061.17</td>
<td>4.20%</td>
<td>308</td>
<td>133</td>
<td>110</td>
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<tr>
<td>DAI</td>
<td>7,049,245.00</td>
<td>4,185,259.00</td>
<td>5,706,581.14</td>
<td>80.95%</td>
<td>650</td>
<td>1,877</td>
<td>123</td>
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<tr>
<td>BAT</td>
<td>5,498,124.00</td>
<td>155,124.18</td>
<td>1,344,394.16</td>
<td>24.45%</td>
<td>354</td>
<td>387</td>
<td>117</td>
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<tr>
<td>ZRX</td>
<td>2,820,719.00</td>
<td>323,002.77</td>
<td>1,087,439.42</td>
<td>38.55%</td>
<td>261</td>
<td>470</td>
<td>125</td>
</tr>
<tr>
<td>WETH</td>
<td>53,975.19</td>
<td>1,336.12</td>
<td>38,453.50</td>
<td>71.24%</td>
<td>825</td>
<td>1,368</td>
<td>193</td>
</tr>
</tbody>
</table>
WHERE WE’RE GOING
DeFi in the context of traditional finance and banking
What’s familiar here?

- DeFi markets kinda look like money markets
- Similar people doing similar things
  - Liquidity provided by dealers
  - People using assets as collateral to acquire funding for loans (repo)
- Monetary policy, derivatives, balance sheets, etc. heavily influenced by traditional system
What’s different?

- **Maker is not a central bank**
  - It doesn’t act as a dealer of last resort for the entire system (don’t expect Maker QE)
- **Daily settlement constraint doesn’t exist**
  - Loan rates far less dependent on terms...for now?
Towards a hybrid system

- 1970ish-present demonstrates the global economy’s appetite for novel products
- With regulatory clarity will come adoption on a much larger scale
  - Rise of shadow banking == funding from mature euro dollar markets for lending in v novel ways (CDS + RMBS)
  - What will crypto-hybrid institutions look like?
A note about regulation

- Subversiveness is a spectrum!
- Financial inclusion matters here, too
- Mass adoption means the tension between anarchists and rule-followers could become more pronounced in crypto communities, but we really need both.
The ground all crypto people share

› None of us want monetary policy controlled by Mark Zuckerberg
  ▫ That means we should all support open source, decentralized, transparent projects (in crypto and beyond)
› All of us want it to be easier for average people to be a part of the global economy
What to take from this

- Crypto will probably collide with traditional finance and banking
  - Soon™
- DeFi can bring transparency and fairness to an often opaque and unfair system
- 23 slides may have been pushing it
Get started/contact

- Try opening a CDP at cdp.makerdao.com
- Try lending/borrowing on compound.finance, Uniswap, or DyDx
- Ask questions at chat.makerdao.com or reddit.com/r/makerdao
- ethan@makerdao.com