

**Opendoor Technologies Inc**  
**(NASDAQ: OPEN)**

**BUY**

**12-Month Target: \$8.47**

**Current Price: \$5.06**

**Investment Return: 67.5%**

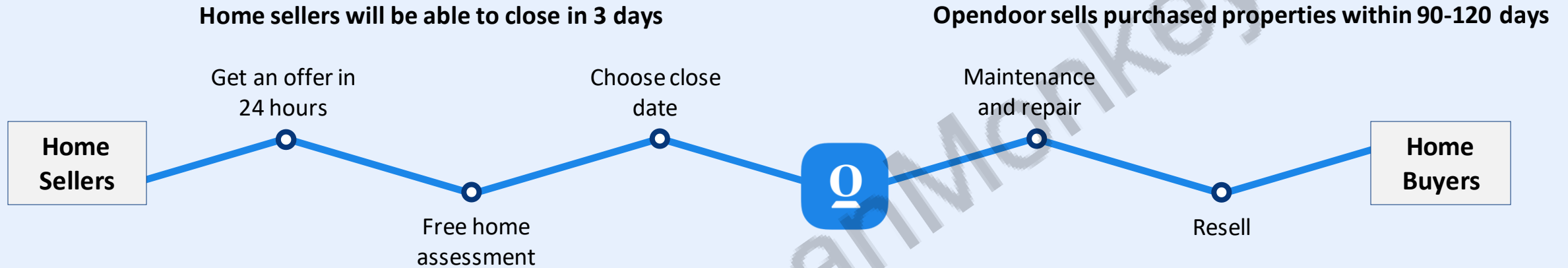


**Opendoor**

Oscar Kwan, King Tai, Chengyi Fan, Megan O

# Company Overview

Listed as Nasdaq: OPEN on 21 December 2020, Opendoor Technologies Inc. ("Opendoor") is an iBuyer (instant buyer) platform that uses algorithm to determine property price, purchase houses from homeowners in quick cash transactions, then makes necessary repairs and resell.



## Main Benefits

### Home Sellers

#### Get an Instant Offer and Get Paid

Cash out quickly and buy their next home without delay

#### Skip Showings and Repairs

Unlike traditional processes, Opendoor handles all showings, repairs and maintenance

### Home Buyers

#### Save on Fees

Pay just 5% in fees – 1% less than the traditional 6% and thousands in savings

#### Test the Market with Expertise

Supported by local experts from setting the right price to closing

## Revenue Model

### Home Sales

Directly Profit from Home Price Appreciation (HPA)

Commission Fee (5%)

### Other Services

Title and Escrow

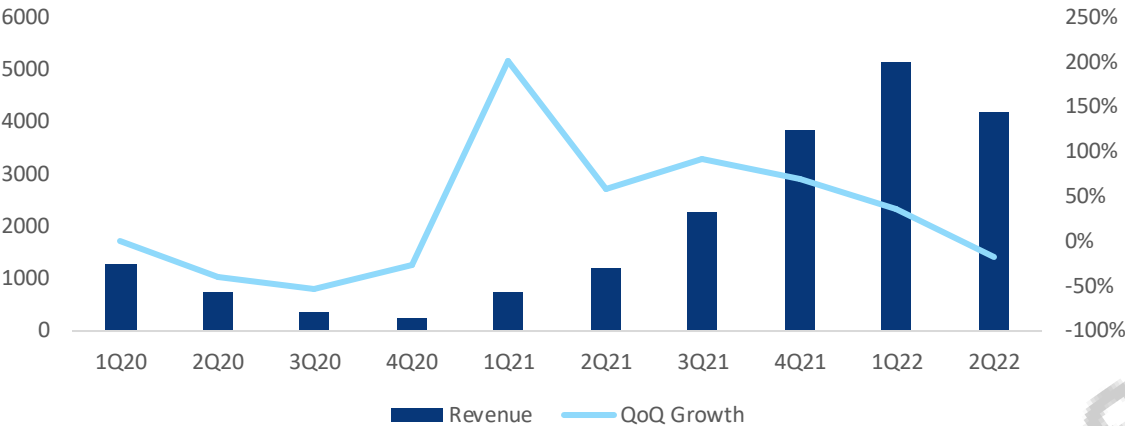
Loan Interest from Financing Services

Source: Opendoor

Financial Overview

(in millions)

Significant revenue growth since FY21, stabilizing at high levels



KPIs

Number of Transactions:

>160K+

since launch, of which 40% are executed in 2021

Real Seller Conversion:

>35%

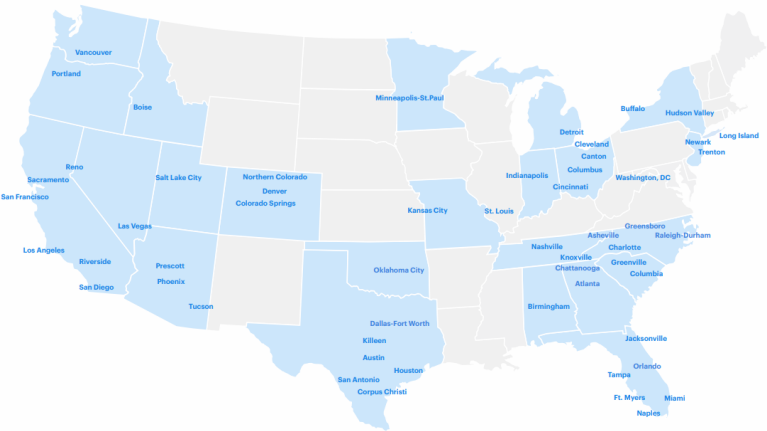
of home sellers who asked for a valuation signs a deal, compared to traditional agents' 5%

Net Promotor Score :

80+

for 5 consecutive quarters, compared to the real estate industry median – 50

Heat Map Across the US



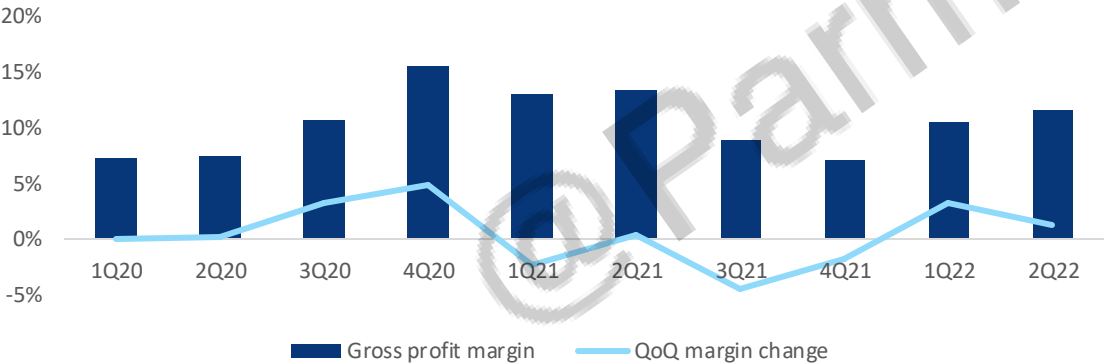
51

Markets (cities)

13.3%

QoQ Increase

Gross profit margin maintained at 5% or above despite COVID

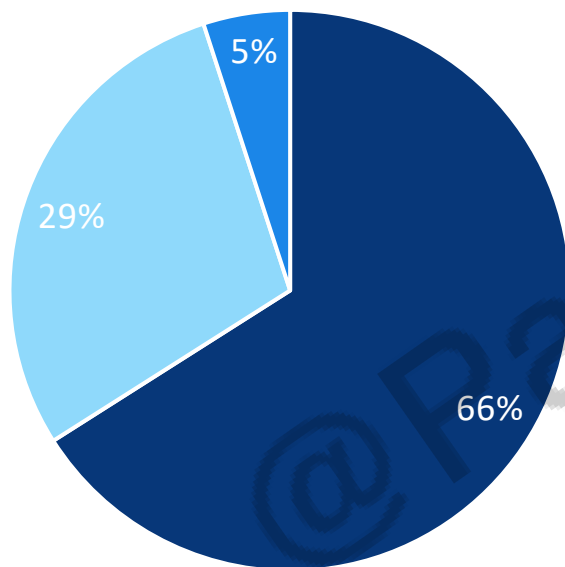


The highly **fragmented** industry

**3M+** Real estate agents in the US

**25%** of agents have another occupation

**<5%** of agents handle more than 50 transactions annually



■ 0-15 ■ 15-50 ■ 50+

Source: Opendoor, Realtor.com

... with a **massive TAM** ...

**66%** of Americans are homeowners

**>6M** homes sold annually



**2.8% inflation + 1% HPA  
= 3.8% YoY Increase**

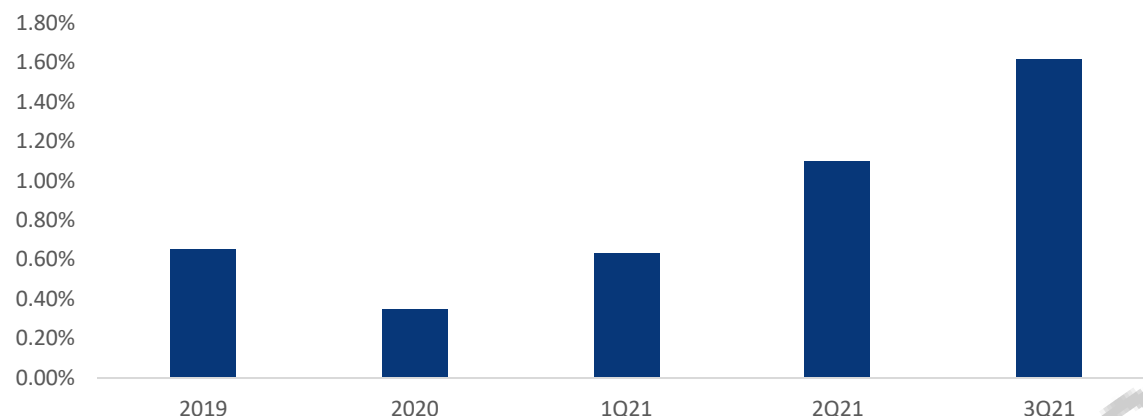
**19,500 Markets: \$2.3T**

**17 Markets: \$2.1B**



... is starting to shift **towards the iBuyer space** ...

% of all iBuyers' market share



~40%

American homeowners say that home-buying and selling is the **most stressful event** in modern life

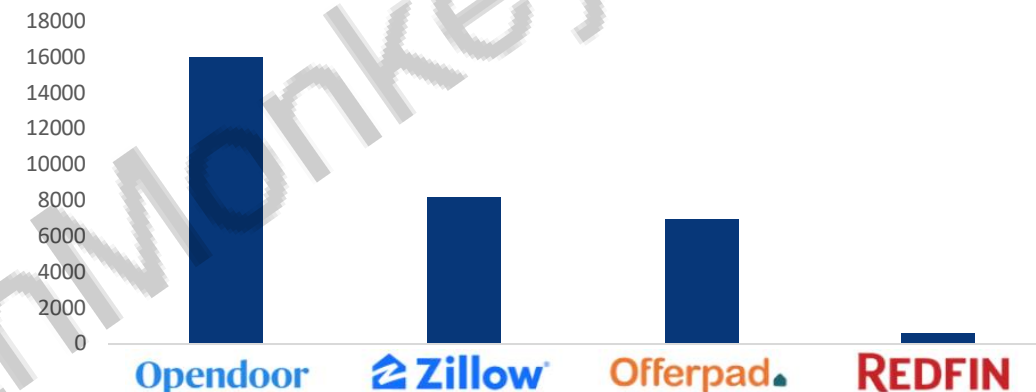
~54%

Homeowners would **accept a less-than-standard-market-rate offer** on their home to choose their closing date and sell instantly, with an average of \$45,400 less

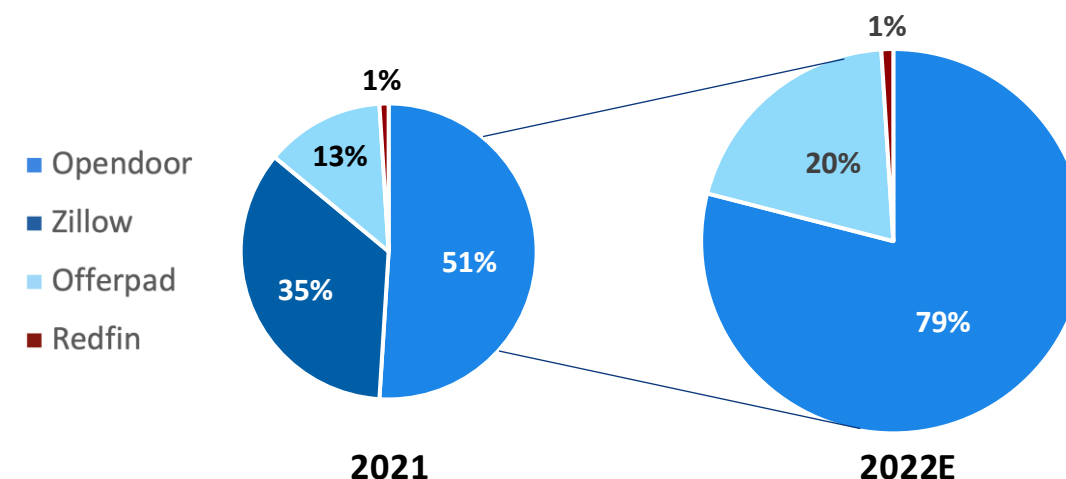
Source: Zillow, Opendoor, RubyHome, Listwithclever.com

... where **Opendoor** has established **market dominance**

Number of transactions made by iBuyers in 2020



Market Share from 2021 – 2022F, when Zillow exited the iBuyer market in 2021 Q4



# Investment Thesis – Summary

We recommend a **BUY** on Opendoor with a 12-month price target of **\$8.47**, representing a **67.5%** upside potential from the closing price of \$5.06 per share as of 18 Aug 2022. Our target price was derived from Opendoor's strong business fundamentals, using DCF model and relative valuation.

## *Investment Thesis*

1

**Opendoor is a Market Leader in the Growing iBuyer Space**

2

**Attractive Unit Economics on Operations and Investment**

3

**Partnership with Zillow Strengthens Opendoor's Dominance**

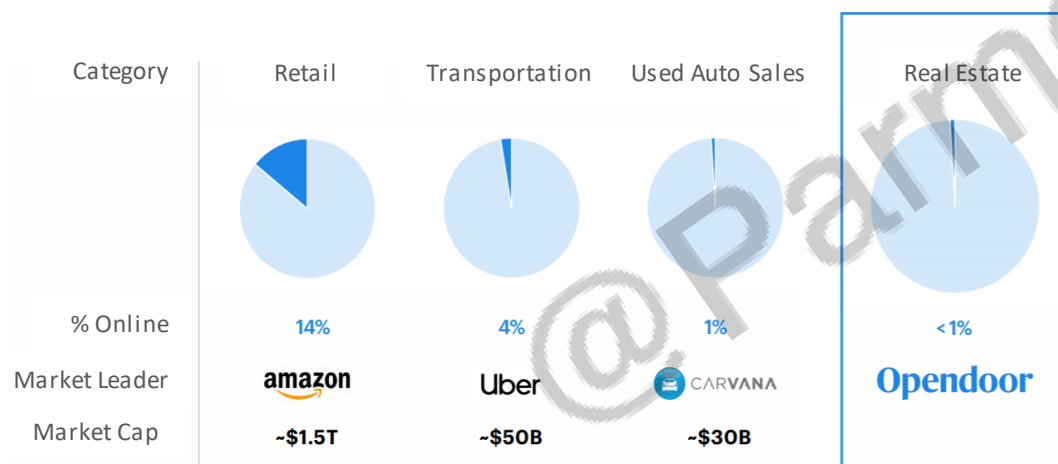
## 1. Opendoor is a Market Leader in the Growing iBuyer Space

The iBuyer space has massive growing potential,

**~65%** of homes in the US are owner-occupied

**~65%** American homeowners are **open to selling their home with an iBuyer** rather than listing with a real estate agent

**Only <1%** of real estate market sales are accounted by iBuyer sales:



Source: Opendoor, RubyHome

where OPEN has the moat to eliminate competition and seize market share

### Opendoor's Robust Pricing System

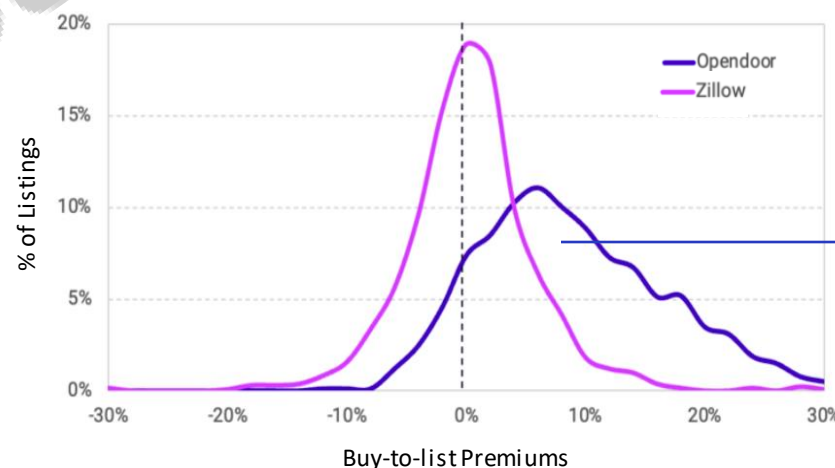
Its instant and accurate price prediction algorithm allows it to make offers that hit the sweet spot between homesellers' and Opendoor's profitability, made possible by:

Machine learning models that are **highly responsive** to changing macro and market conditions

**High quality proprietary data** that is better than typical data used in typical automated valuation models

### The Algorithm and Data Model are Inimitable

Zillow – Opendoor's biggest competitor exited the iBuyer space due to continuous negative buy-to-list premium thus negative contribution margin



Despite a lower median for buy-to-list premium, Opendoor has a wider distribution of premiums that skew higher, hence **higher gross profits**

## 1. Opendoor is a Market Leader in the Growing iBuyer Space

Opendoor continues to create value for customers, taking its brand experience several steps further to ensure it remains top of mind. This is done by combining every step of home-buying and selling process into one simple transaction, creating a convenient and streamlined process, enhancing customer experience, making itself the undisputed iBuyer leader



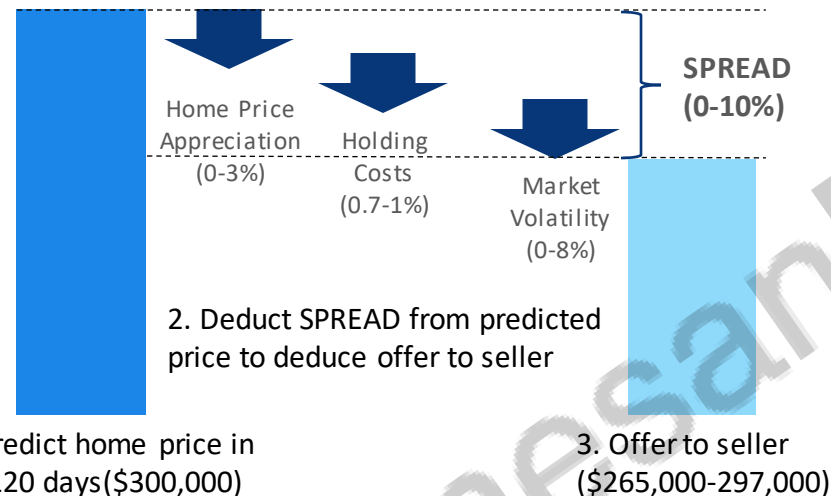
Source: Opendoor, Crunchbase



## 2. Attractive Unit Economics on Operations and Investment

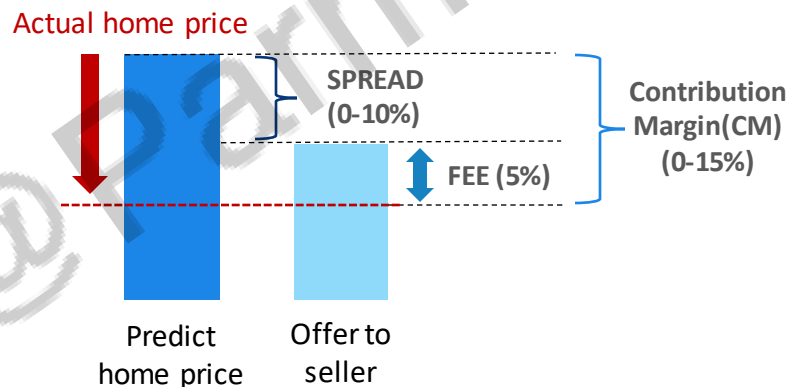
### Pricing and operational system dynamically adjust to changing market conditions

Opendoor adjusts offer downwards with higher spread to avoid holding assets that might undergo *home price depreciation*



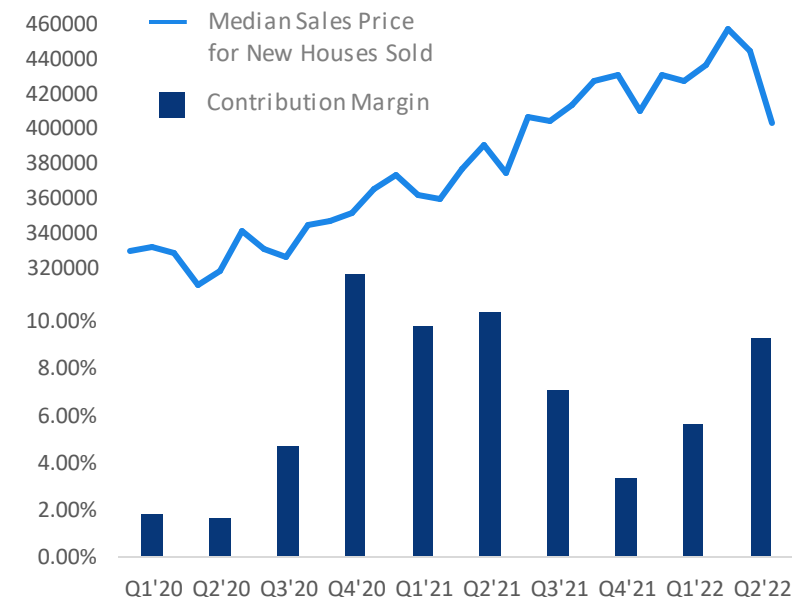
The flexible *spread* safeguards Opendoor under an unfavorable macro environment, allowing Opendoor to maintain a positive CM even when the actual home price drops

(Opendoor achieves positive CM if price doesn't fall below the red line)



### Continuous Positive Contribution Margin

Opendoor has maintained a **positive contribution margin (CM) after interest** for 21 consecutive quarters. Even during COVID, it still maintained positive CMs around 5%. This creates a strong moat for Opendoor, where its peers like Zillow and Redfin struggle to report a positive CM.



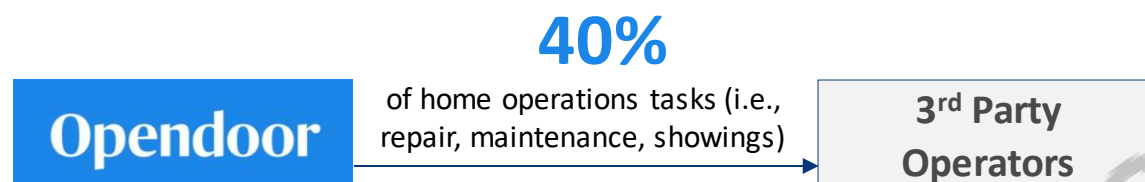
Source: Opendoor, World Bank

## 2. Attractive Unit Economics on Operations and Investment

### Low Cost & Agile Operation System

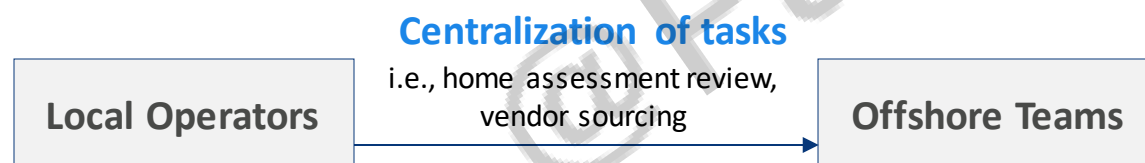
#### Flexible Operating Expenses

With 40% of home operation tasks outsourced, Opendoor can adapt to macro conditions by adjusting their costs commensurate with volume expectations over the balance of the year



#### Centralized Tasks are Shifting Offshore

By shifting an increasing amount of back-office work from local operators to offshore teams, structural cost improvements are encouraged, and it also accelerates turnaround times while maintaining high quality standards



### Leveraged Investment

#### Attractive Returns Using Asset-level Financing

If 85% of home acquisition price is paid by asset-level financing, Opendoor will gain ~120% of incremental return per home after interest expense, compared to only 20% without financing

#### Illustrative unit level returns:

	Unlevered	Levered
Illustrative home acquisition price	\$350,000	\$ 350,000
Equity investment	\$350,000	\$ 52,500
Asset-level financing	-	\$ 297,500
Contribution Profit per home	\$21,000	\$ 21,000
Contribution Margin	6.00%	6.00%
Interest Expense	-	\$ 3,668
Contribution Profit per home after interest expense	\$21,000	\$ 17,332
Contribution Margin After Interest	6.00%	5.00%
Annual Contribution Profit after interest expense	\$76,650	\$ 63,263
Incremental return per home	~20%	~120%

Note: Based on average data from 2021-2022  
Source: Opendoor, ONS, RedFin, Mike DelPrete

## 3. Partnership with Zillow Strengthens Opendoor's Dominance

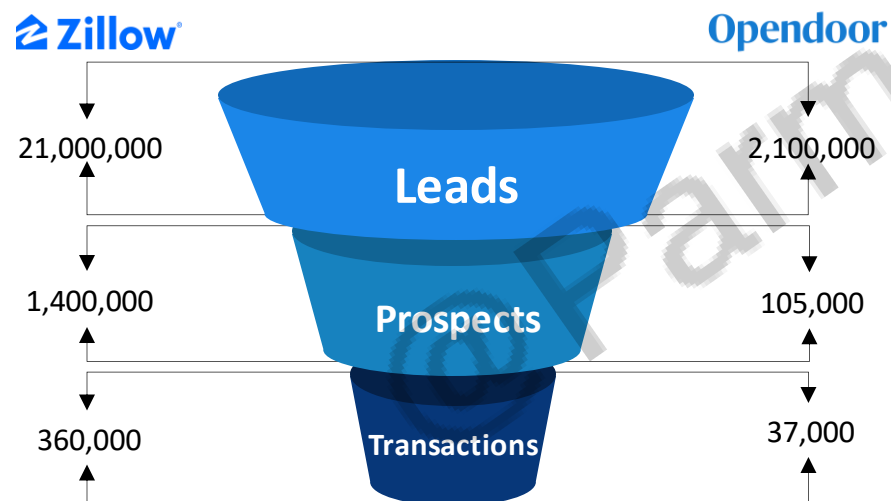
The partnership will allow home sellers on the Zillow platform to seamlessly request Opendoor offers to sell their homes

### Zillow brings in a large source of customer leads

The partnership gives Opendoor access to a customer touch point with:



Monthly Zillow traffic is about 10x what Opendoor sees per month, this leads to huge expansion to the top of their funnel



Source: Opendoor, World Bank, Mike DelPrete, RedFin

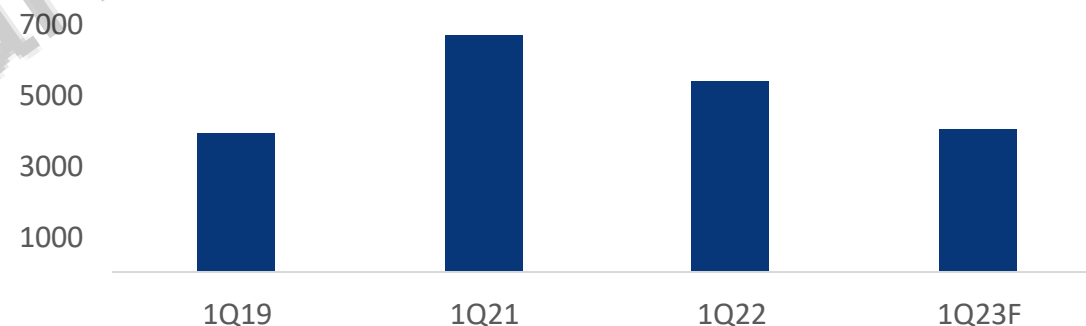
### Lower customer acquisition cost allows more competitive pricing

The customer acquisition cost (CAC) is expected to decrease due to:

Marketing economies of scale

Lower marketing cost through Zillow partnership

Customer Acquisition Cost:



The marketing cost saved could be allocated to the below, which strengthens Opendoor's price attractiveness, luring more customers into the ecosystem

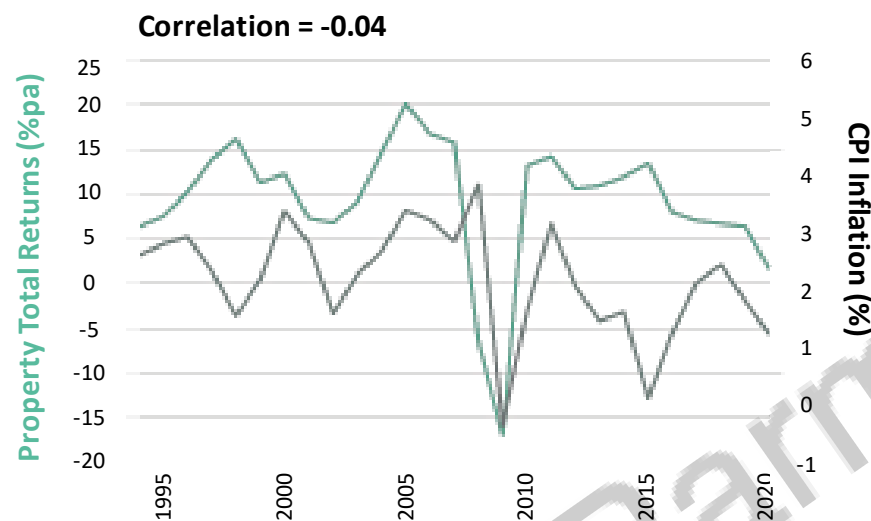
Lower spread and offer a higher price to home sellers

Relist purchased properties at a lower price to acquire home buyers

## I. Post-COVID's High Inflation Rate is a Significant Tailwind

### Real Estate Offers Protection from Inflation

Historically, home price growth was often higher than inflation despite rising interest rates, shown by the figure below



As of today, the US inflation rate rose to 9.1%, with the House Pricing Index sitting at a record high of 358 with YoY growth of 19.4%. Yet, most market participants recognize the REIT space as an easy bet to make

Note: Based on average data from 2021-2022

Source: Opendoor, Avison Young, MSCI

### Opendoor Even Outperforms REITs

With the premise of high inflation rate for 2H22F and FY23F, Opendoor's gross margins will be elevated. Considering positive contribution margins for 21 quarters in a row, Opendoor is likely to beat the market

#### REIT: 11~18% annual return

Rental Income

HPA

6~10%

5~8%

Given that the average holding period of a property is <120 days, Opendoor can generate 33% of return after three holding periods per year with the same amount of capital

#### Opendoor: 25% annual return

Gross Margin (11%)

Gross Margin (11%)

Gross Margin (11%)

8%

Costs

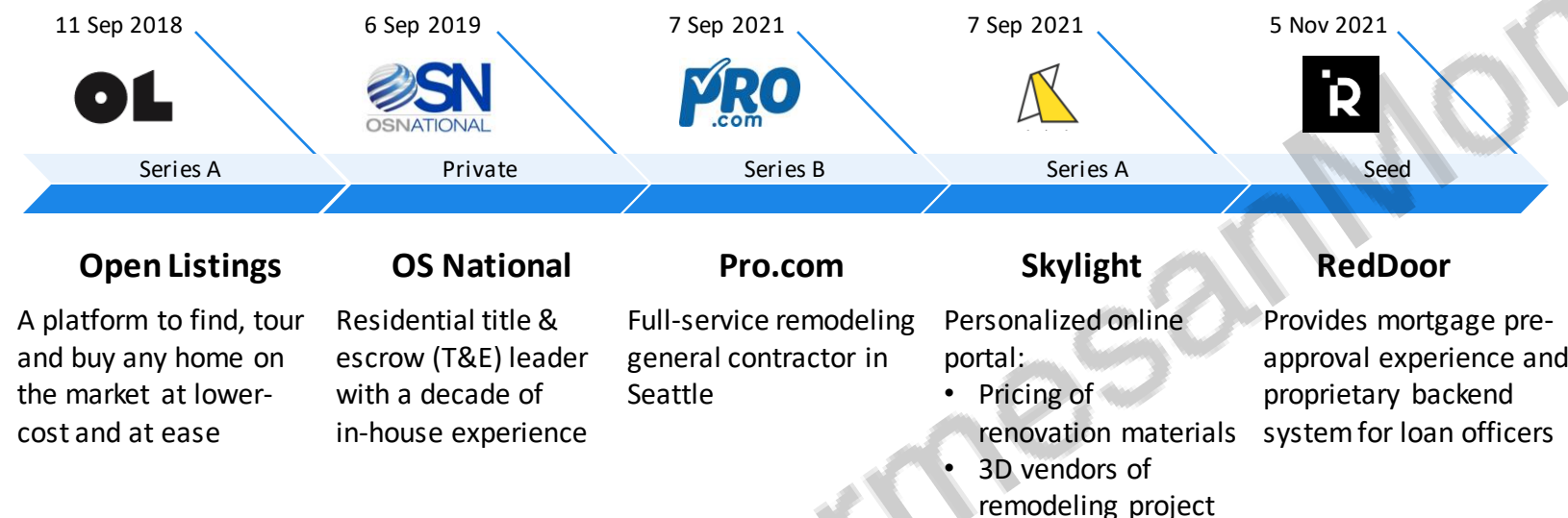
120 days

120 days

120 days

## II. Further M&A Activity to Expand Suite of Services

### Past Acquisitions



#### Enabled Opendoor's:

- |                         |   |   |   |   |
|-------------------------|---|---|---|---|
| ✓ Two-sided marketplace | ✓ Deep integration with T&E services<br>✓ Greater and faster customer reach when tapping into new markets | ✓ Strong synergy between operations and technology<br>✓ Local presence to seize market share from competitors | ✓ Personalized and convenient home-viewing experience<br>✓ Integrate features and database from Skylight's portal | ✓ Pre-approval feature in Opendoor Home Loans app<br>✓ 4x loan officer efficiency than industry average |
|-------------------------|---|---|---|---|

### Future Acquisitions

Based on Opendoor's acquisition frequency and by comparing to other real estate PaaS leaders, Opendoor will be able to perform 1-2 acquisitions per year

#### Number of acquisitions per year

Zillow	1	REALPAGE	2
DocuSign	1	YARDI	2

#### Impact

- **Create new product/ service offering**  
Acquire mature businesses that would make a great attachment to Opendoor's core business
- **Strengthen current product offering**  
Improve its core system: pricing algorithm, operation system, moving & financing options
- **Spike in stock price**  
M&A activities bring higher awareness and boost stockholder confidence

Source: Opendoor, Crunchbase, Re:Venture Consulting



# Valuation – DCF Assumptions

Key DCF Assumptions based on either consistent or conservative measure on stock-based compensation, Capex, D&A, NWC, and terminal growth rate. Sensitivity Analysis produces a range of \$6.35 to \$11.63 per share target price.

## Key DCF Assumptions

Stock-based Compensation	<ul style="list-style-type: none"> <li>Included stock-based compensation in DCF</li> <li>Modelled as a function of the percentage of revenue</li> <li>Forecasted as a 4-year average of revenue percentage to avoid volatility</li> <li>SBC of 2% adopted as a conservative estimate</li> </ul>
Capital Expenditure	<ul style="list-style-type: none"> <li>Modelled as a function of the percentage of revenue</li> <li>Forecasted as a 4-year average of revenue percentage due to consistency</li> <li>CAPEX of 0.69% adopted as a consistent estimate</li> </ul>
Depreciation & Amortization	<ul style="list-style-type: none"> <li>Modelled as a function of the percentage of PP&amp;E</li> <li>Forecasted as a 4-year average of PP&amp;E percentage due to its consistency</li> <li>D&amp;A of 59.5% adopted as a consistent estimate</li> </ul>
Net Working Capital	<ul style="list-style-type: none"> <li>Modelled as a function of the percentage of revenue</li> <li>Forecasted as a decreasing revenue percentage to align with recession effect</li> <li>NWC forecasted in a decreasing trend, driven by the expected decrease of inventory, mentioned by the management</li> <li>We expect the company to maintain flat performance during the recession period, with its business booming from 2024</li> </ul>
Terminal Growth Rate	<ul style="list-style-type: none"> <li>US real estate market recorded 3-year CAGR of 6.4%</li> <li>US median housing price increased 15% YoY to US\$440,300 in 2Q22</li> <li>US mortgage rate increased 179% YoY to 5.1% as at 18 Aug 2022</li> <li>Terminal Value of 2.0% adopted as a conservative estimate</li> </ul>

## WACC Assumptions

Cost of Debt	1.40%	FROM ValueInvesting website
Tax Rate	0.00%	Company's Annual report
After-tax cost of debt	1.40%	Formula
Risk-free rate	2.89%	10-year US Treasury Yield Bond
Equity Risk Premium	6.50%	CAPM Formula
Beta	1.83	Bloomberg estimate
Cost of Equity	14.80%	FROM ValueInvesting website
(in mil of USD)		
Market Capitalisation	9,000	Calculation on Company's Annual Report
ST Debt	4,247	Current Portion of LT Debt
LT Debt	2,858	Total Long-term liability
Debt Weight	44.12%	Calculation on Company's Annual Report
Equity Weight	55.88%	Calculation on Company's Annual Report

$$\text{WACC} = 1.40\% \times 44.12\% + 14.80\% \times 55.88\% = 8.89\%$$

## Sensitivity Analysis

	WACC					
Terminal Growth Rate		8.50%	8.70%	8.90%	9.10%	9.30%
	3.00%	11.63	11.00	10.45	9.87	9.36
	2.80%	11.12	10.53	10.00	9.46	8.98
	2.60%	10.63	10.08	9.58	9.07	8.61
	2.40%	10.18	9.66	9.19	8.71	8.27
	2.20%	9.76	9.26	8.82	8.36	7.95
	2.00%	9.36	8.89	8.47	8.04	7.65
	1.80%	8.99	8.55	8.15	7.73	7.36
	1.60%	8.64	8.22	7.84	7.44	7.09
	1.40%	8.31	7.91	7.54	7.17	6.83
	1.20%	7.99	7.61	7.27	6.91	6.58
1.00%	7.70	7.33	7.00	6.66	6.35	

# Valuation – DCF Overview

Through DCF model, OPEN's implied share price resulted at **\$8.47** over 12-month investment horizon, representing a **67% upside** from the closing price of \$5.06 as of 18 Aug 2022

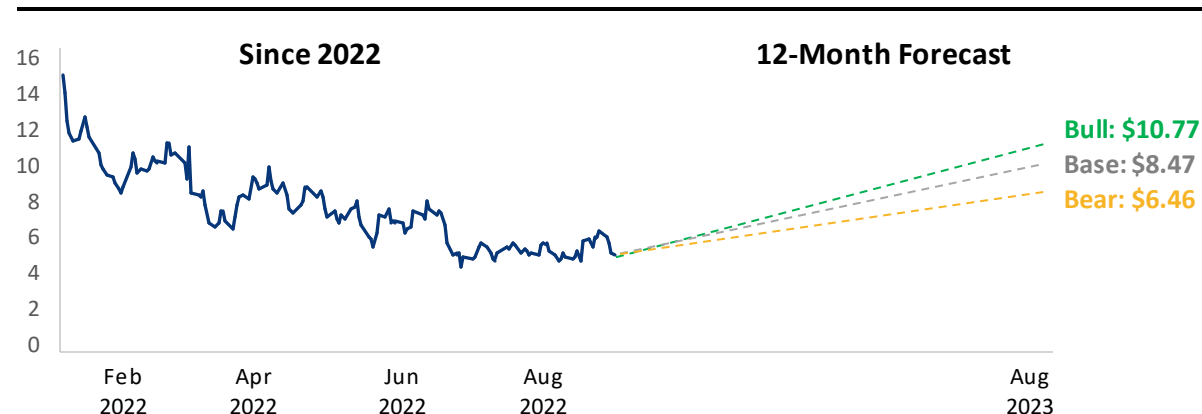
## DCF Summary

Bull Case		Base Case		Bear Case	
\$10.77 +112.9%		\$8.47 +67.5%		\$6.46 +27.7%	

## Scenario Summary

Bull Case	Base Case	Bear Case
<ul style="list-style-type: none"> <li>Revenue growth sales at 45% 5Y CAGR</li> <li>3 M&amp;As per year</li> <li>Recession effect lasts less than year until 2023</li> <li>Opendoor can withstand the recession by maintaining +5% growth in revenue in 2023</li> <li>GPM scales slightly to 12% by FY25F</li> </ul>	<ul style="list-style-type: none"> <li>Revenue growth sales at 35% 5Y CAGR</li> <li>2 M&amp;As per year</li> <li>Recession effect lasts for a year until 2023</li> <li>Opendoor can withstand the recession by maintaining +3% growth in revenue in 2023</li> <li>GPM scales slightly to 11% by FY25F</li> </ul>	<ul style="list-style-type: none"> <li>Revenue growth sales at 26% 5Y CAGR</li> <li>1 M&amp;A per year</li> <li>Recession effect lasts for two years until 2024</li> <li>Opendoor is reluctant to withstand the recession, recording a negative revenue growth of 5% in 2023</li> <li>GPM scales slightly to 10% by FY25F</li> </ul>

## Share Price Projection



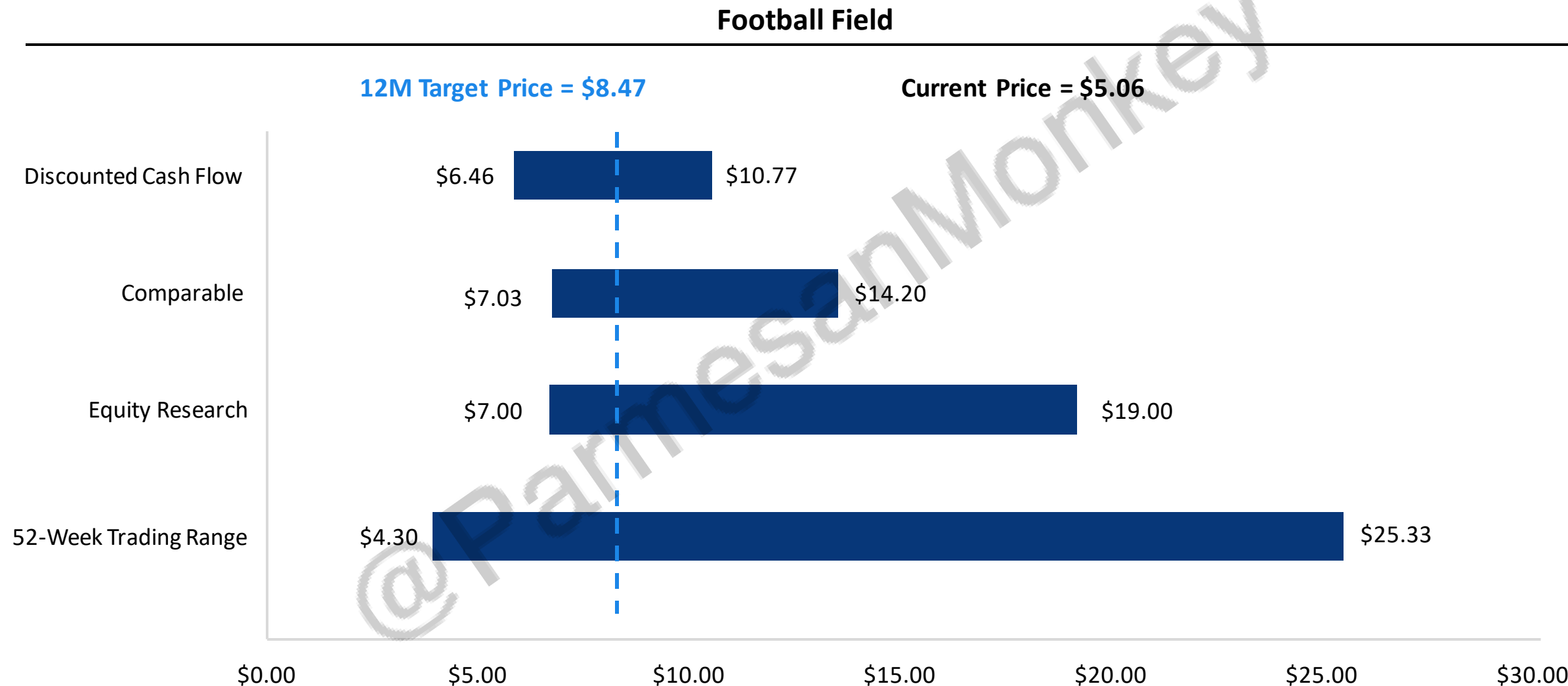
# Valuation – Relative Valuation

Comparable companies were screened based on factors such as industry (iBuyer) and geographical operations (US). The only metric that we were able to use in our analysis is *EV/Revenue*, as most peers' *EBITDA* and *Net Income* are negative. The implied value per share using the average benchmark is \$8.02.

Comparable					
Company Name	EV/Revenue	Benchmark	Multiple		
Offerpad	0.35x	Average	0.63x		
Redfin	0.87x	Median	0.67x		
Zillow	1.06x	75 <sup>th</sup> Percentile	0.39x		
Compass	0.39x	High	1.06x		
• • •		Opendoor Valuation	Median	Average	75 <sup>th</sup> Percentile
		Implied Enterprise Value	9,725	10,343	14,202
		Implied Market Value	4,393	5,011	8,870
		Implied Value per Share	\$7.03	\$8.02	\$14.20
Opendoor	0.58x				

# Valuation – Football Field Analysis

Our intrinsic share value from our DCF and relative valuation is **\$8.47**, representing a **67% upside** from the closing price of USD\$5.06 per share as of 18 Aug 22



## A. Liquidity Risk

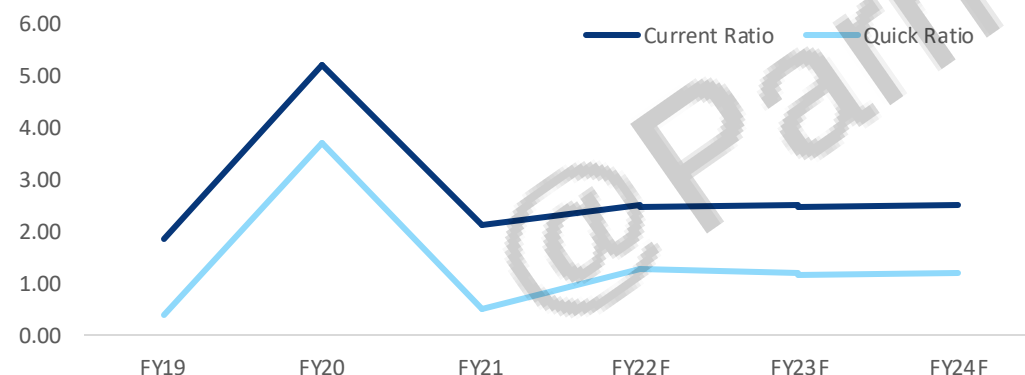
**Likelihood: medium; Impact: medium**

Opendoor's market expansions rely heavily on purchasing real estate assets, thus increasing its inventory exposure to structural market risks

### Illustrative Case – Opendoor Under Housing Bubble Burst

**Minimal Impact on Opendoor:** Opendoor's average holding period is less than 120 days so owning a market-maker stock has a larger safety net over other real estate businesses in the bear market

Moreover, current and quick ratio moves towards the same direction despite market conditions, proving **inventory's low proportional impact on liquidity**



Source: Opendoor, Yahoo Finance

## B. Poor Reputation due to \$62M SFC Fine

**Likelihood: low; Impact: low**

The FTC fined Opendoor \$62M for misleading customers with its marketing content, promising that they would make more selling to Opendoor, when Opendoor on average paid below market values for homes

### Minimal impact on stockholder confidence

Opendoor explained that “the allegations raised by the FTC were related to activity that occurred between 2017 and 2019 and targeted marketing messages the company **modified years ago**”

After the allegation, there was only a slight drop in stock price, which then soared after the announcement of the partnership with Zillow





## C. Credit Risk

Likelihood: medium; Impact: high

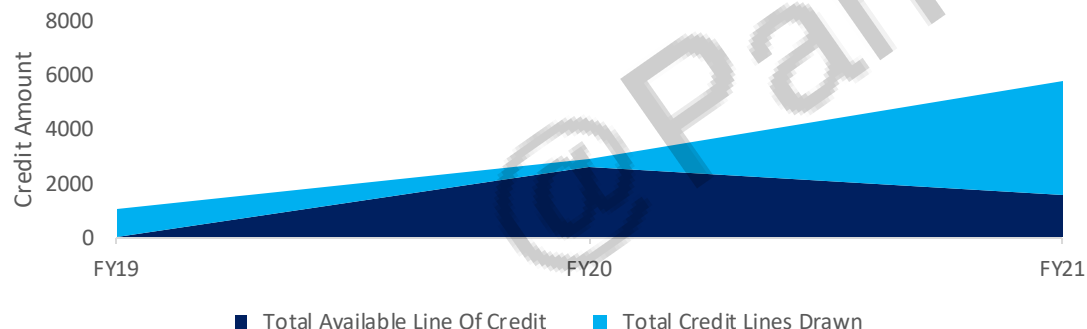
Default behavior can occur due to cash flow shortfalls, and exposure to credit events will increase as Opendoor offers wider range of products

**Mitigation 1: Limit exposure to borrower defaults within a short period**

**Liquid secondary market:** Opendoor's credit risk on mortgage loans held for sale is mitigated by selling mortgages on the secondary market within a relatively short period of time

Having a large customer base allows credit risk exposure to be limited within the initial few months of the mortgage, where borrowers are more likely to have sufficient net operating income for repayment

**Mitigation 2: Increasing credit limit supports the need for leverage**



Source: Opendoor, datadoor.io

## D. Bear Market

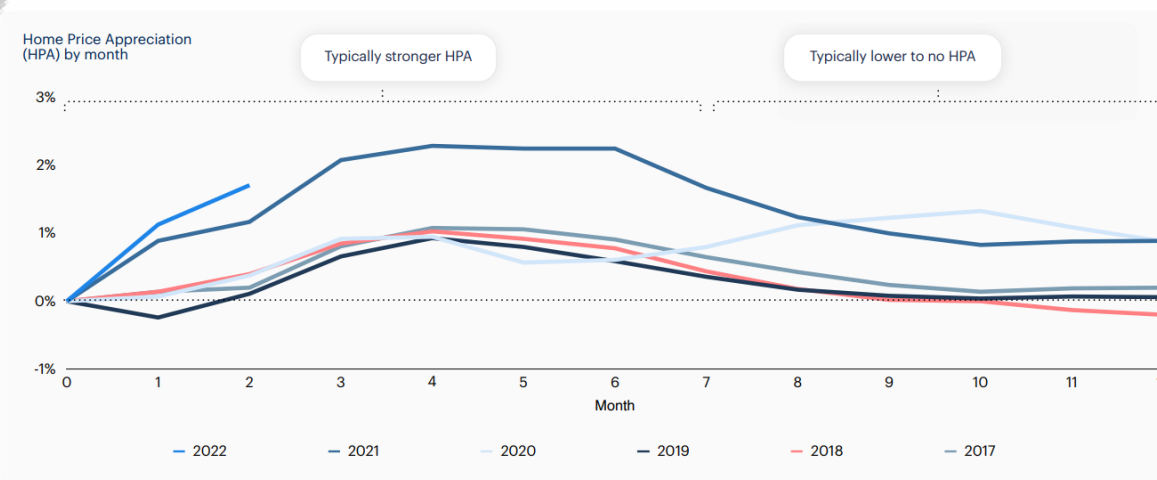
Likelihood: high; Impact: medium

In a bear market, homes are falling in value and velocity of transactions also plummets, putting Opendoor at the risk of selling houses at a loss

**Strong track record managing through low HPA environments**

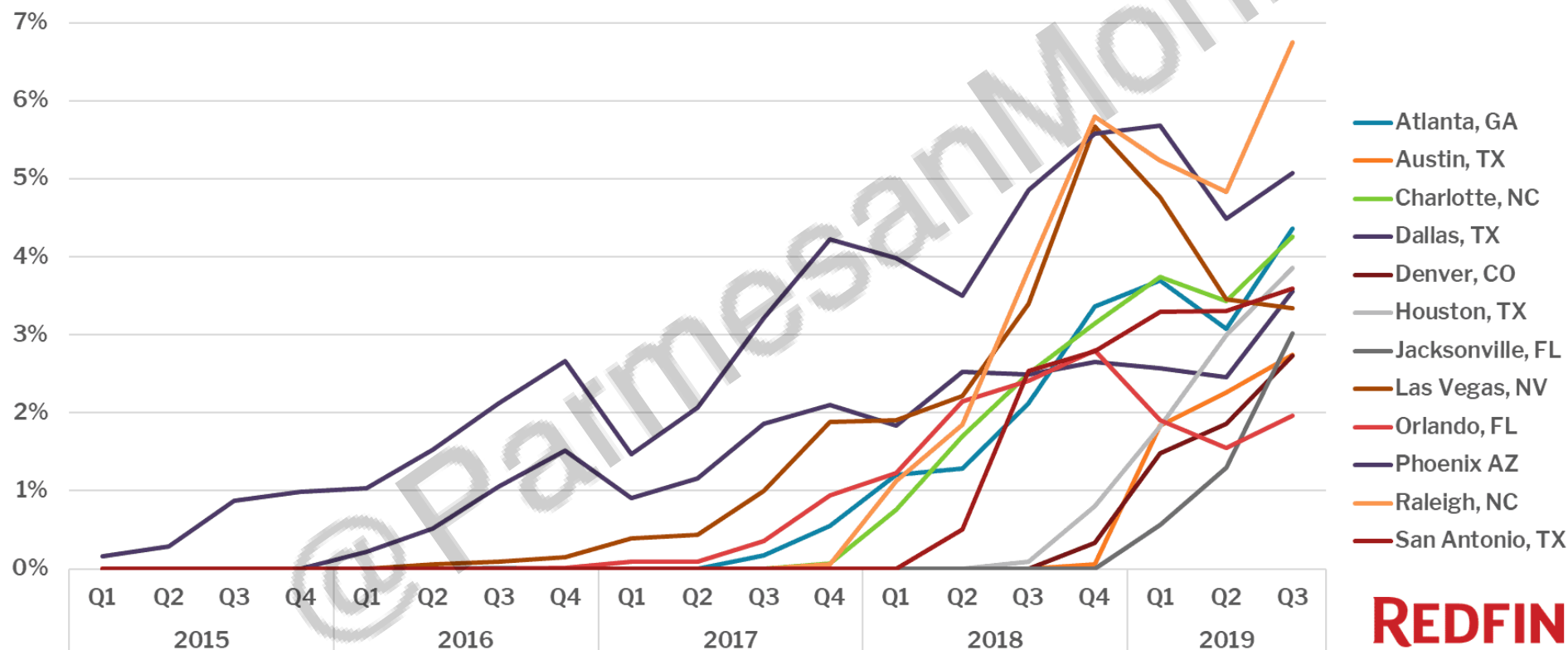
Due to Opendoor's exceptional business model that does not solely derive revenue from HPA growth, as a market maker it can control its spread; capitalize on its inventories and lower operating expenses

**Therefore, despite periods of positive, flat and negative HPA, Opendoor has delivered 21 consecutive quarters of positive contribution margin**



## 6.8% of Homes Sold in Raleigh Were Purchased by iBuyers in Q3

iBuyer Sales as a Percentage of Total Sales, by Market  
\*preliminary Q3 figures



REDFIN

Source: RedFin

Company

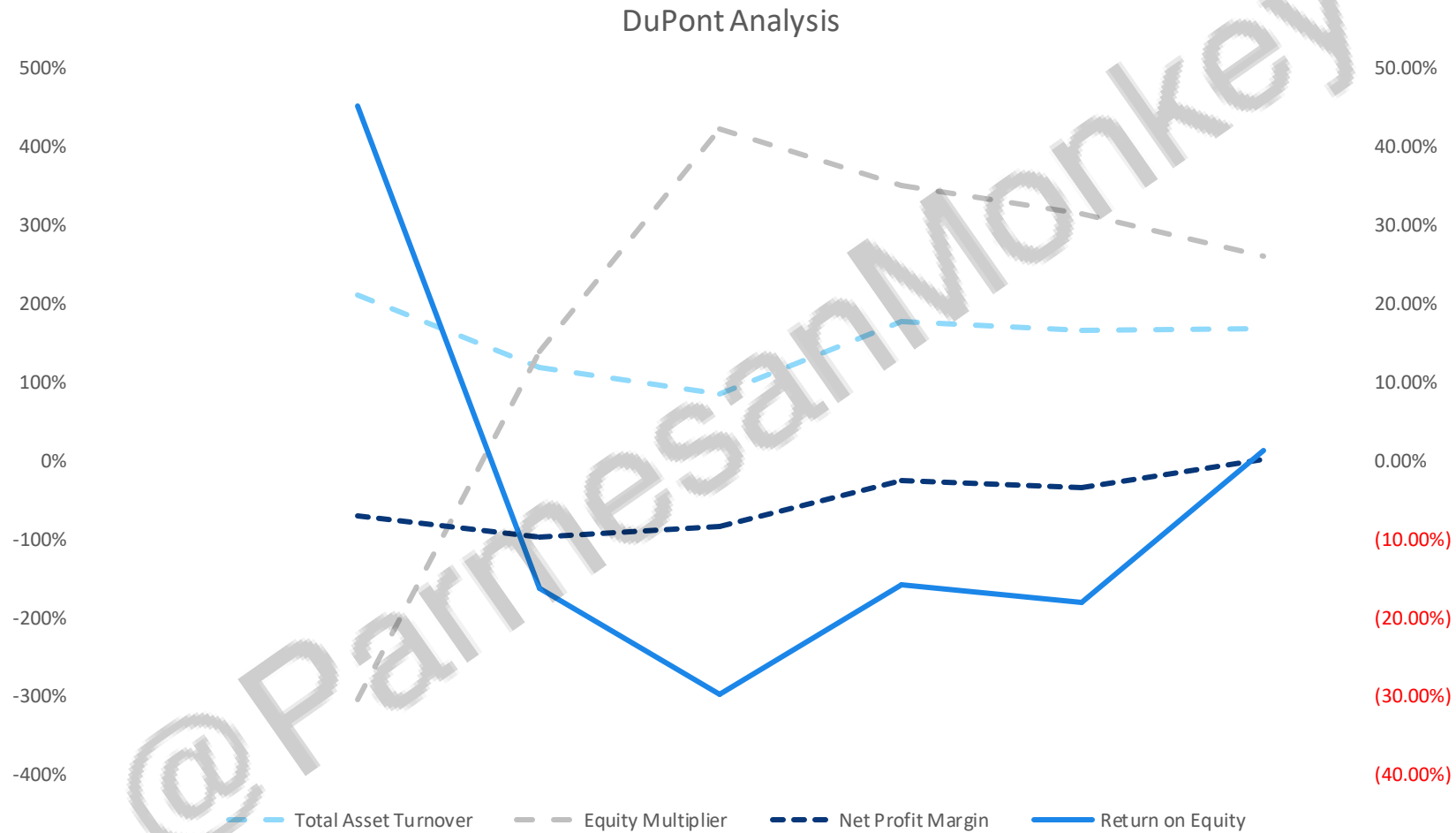
Industry

Investment Thesis

Valuation

Risks

20



Source: Opendoor

# Appendix – DCF Model

DCF Modelling: FCF		FY19	FY20	FY21	FY22F	FY23F	FY24F	FY25F	FY26F
FCF = Adj. EBITDA - Tax - Net Capex - Increase in Working Capital									
Total Operating Profit (Loss)					(156)	(201)	272	691	1,168
(+) Depreciation & Amortization					52	54	70	92	120
(+) Stock-based compensation					347	358	465	614	798
<b>Adj. EBITDA</b>		<b>(220)</b>	<b>(126)</b>	<b>(5)</b>	<b>243</b>	<b>210</b>	<b>807</b>	<b>1,397</b>	<b>2,086</b>
(-) Tax		(0)	(0)	(1)	(0)	(0)	0	(1)	(1)
(-) Capex		(28)	(17)	(33)	(108)	(111)	(145)	(191)	(248)
(-) Change in NWC			(453)	(5,672)	807	(321)	(644)	(628)	(1,139)
<b>Unlevered FCF</b>		<b>(248)</b>	<b>(596)</b>	<b>(5,711)</b>	<b>942</b>	<b>(222)</b>	<b>18</b>	<b>577</b>	<b>698</b>
<b>Terminal Value</b>									<b>10,325</b>
<b>FCF to DCF</b>		<b>(248)</b>	<b>(596)</b>	<b>(5,711)</b>	<b>942</b>	<b>(222)</b>	<b>18</b>	<b>577</b>	<b>11,023</b>
Discount Rate		8.89%							
Perpetuity Growth Rate		2.00%							
<b>Enterprise Value</b>		<b>8,302</b>							
(-) Debt		(6,109)							
(+) Cash		3,062							
<b>Equity Value</b>		<b>5,255</b>							
Shares Outstanding		620							
<b>Fair Value of Stock</b>		<b>\$8.47</b>							
Closing Price (as at 18-Aug-22)		\$5.06							
Upside/ Downside potential		67.5%							

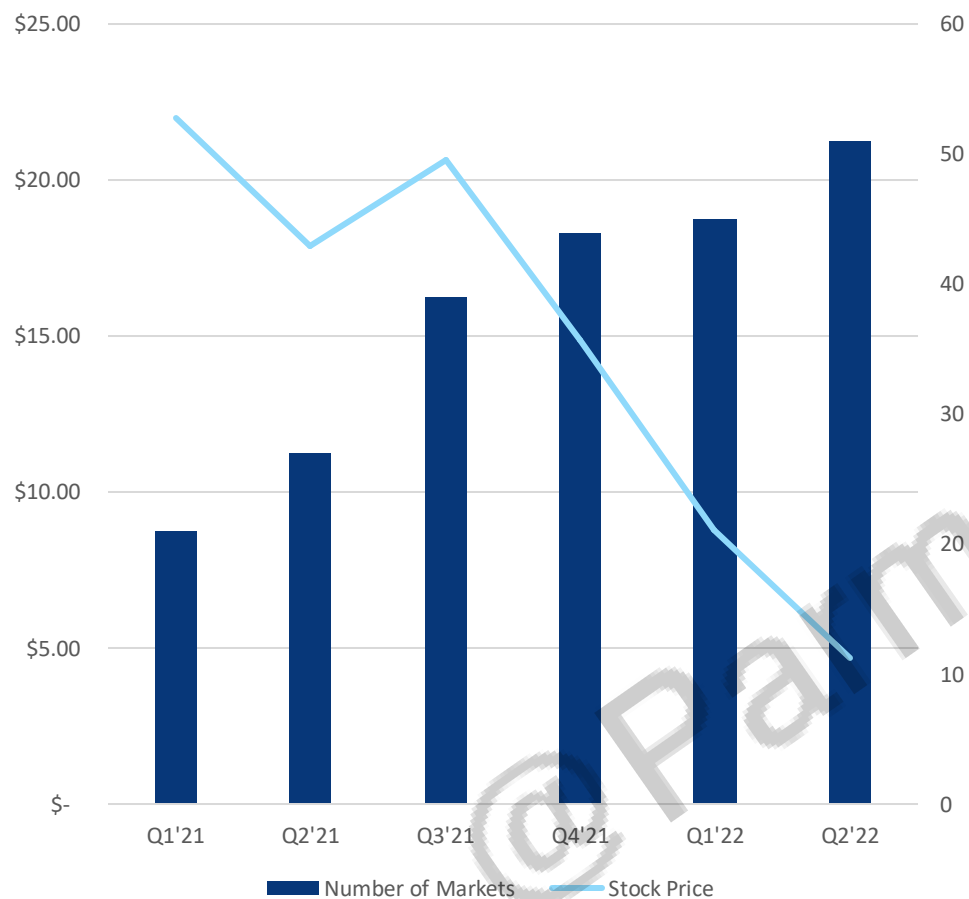
## Appendix – Comparables

Company	Ticker	Market Data		Financials (in \$ million)						Valuation EV/Revenue
		Share	Shares Outstanding	Equity Value	Net Debt	Enterprise	Revenue	EBITDA	Net Income	
Opendoor	OPEN	\$5.99	625	3,594	5,332	8,926	15,437	74	(274)	0.58x
Offerpad	OPAD	\$1.69	232	506	856	1,363	3,861	81	50	0.35x
Redfin	RDFN	\$11.96	107	1,209	879	2,088	2,387	(141)	(219)	0.87x
Zillow	ZG	\$38.66	60	9,300	2,228	11,528	10,885	(232)	(566)	1.06x
Compass	COMP	\$4.65	429	2,007	581	2,588	6,704	(396)	(470)	0.39x
High										1.06x
75th Percentile										0.92x
Average										0.67x
Median										0.63x
25th Percentile										0.38x
Low										0.35x

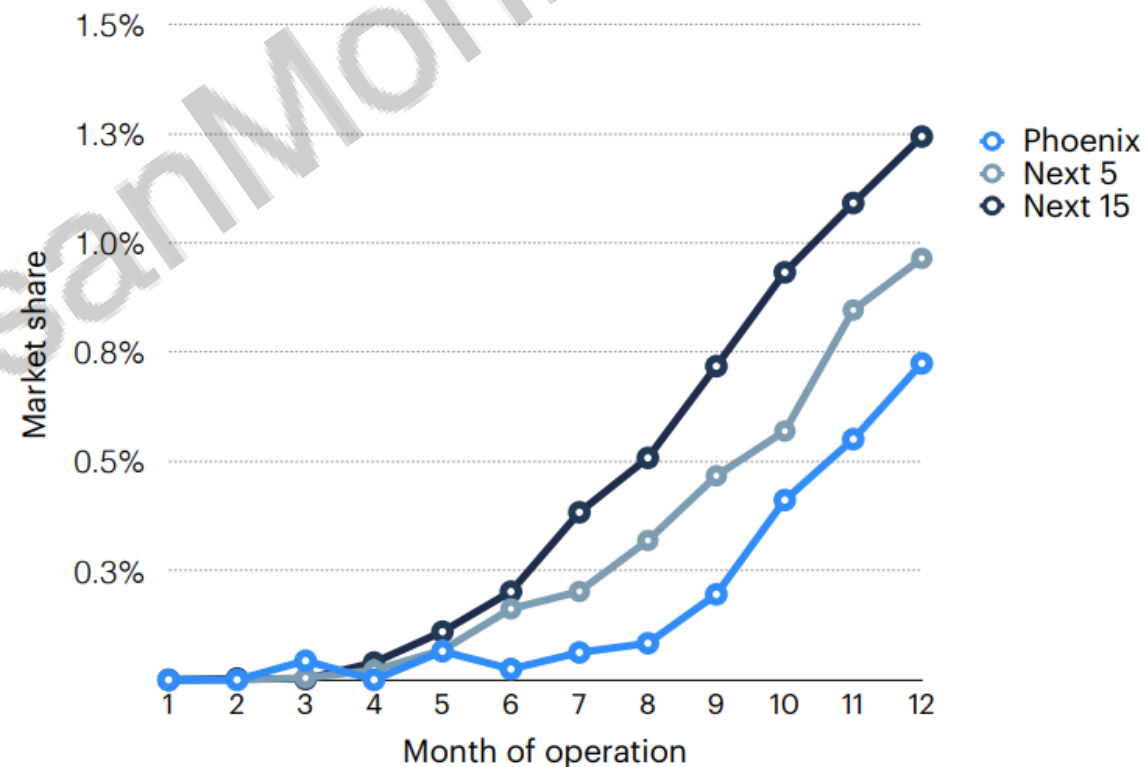
Opendoor Valuation (in million)				Median	Average	75th Percentile
Implied Enterprise Value				9,725	10,343	14,202
Net Debt				5,332	5,332	5,332
Implied Market Value				4,393	5,011	8,870
Shares Outstanding				625	625	625
Implied Value Per Share				\$7.03	\$8.02	\$14.20



## Appendix – How do Expansion Plans Affect Stock Price

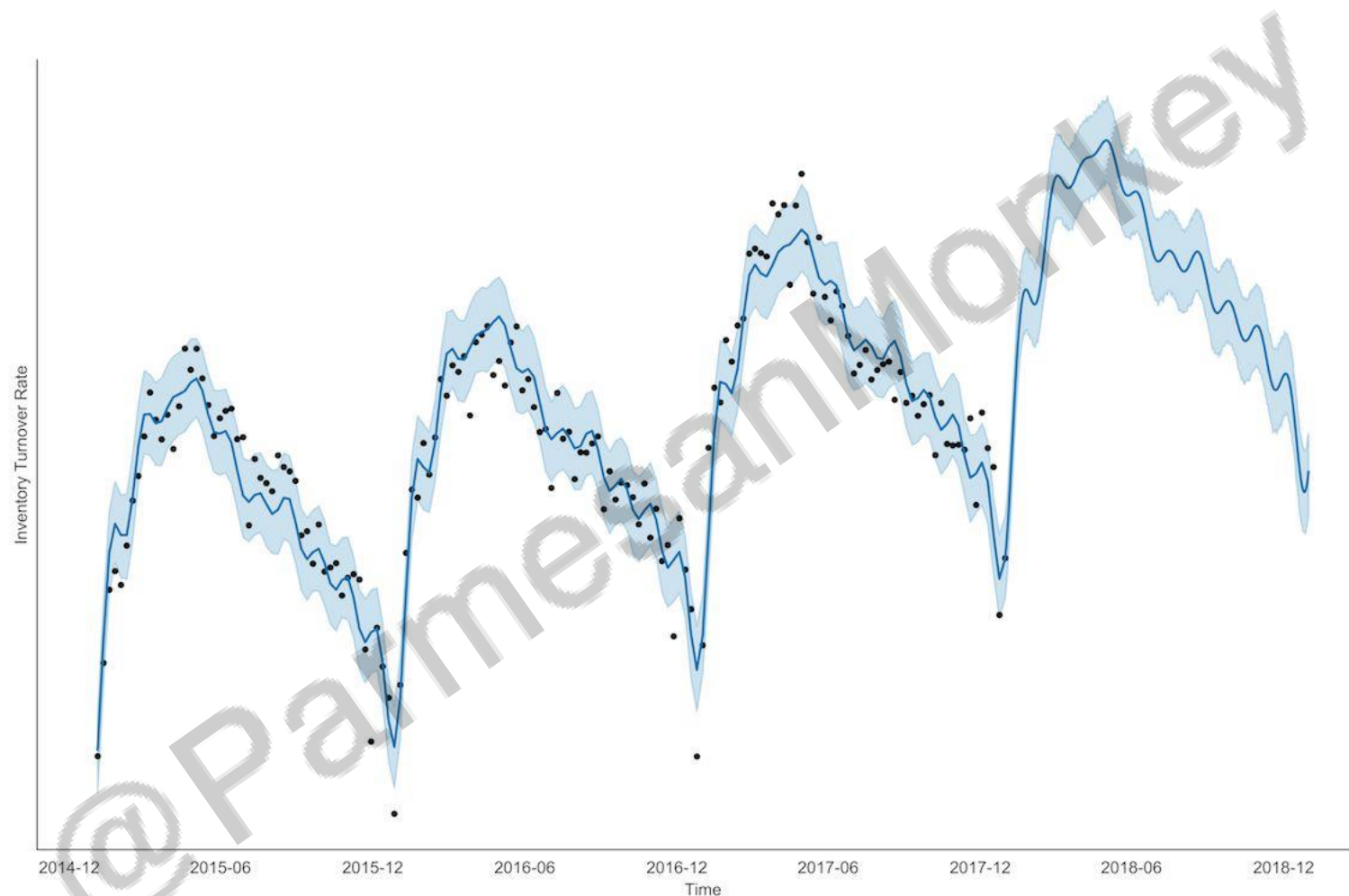


Market share by market maturity

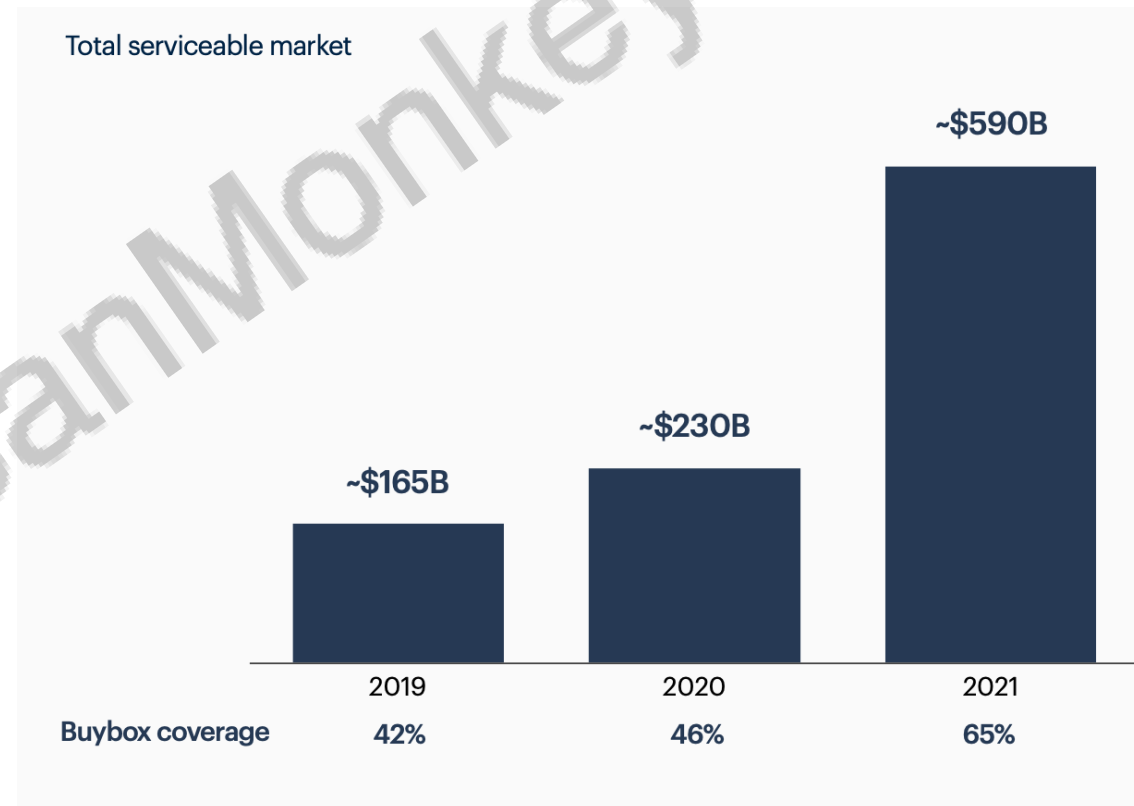
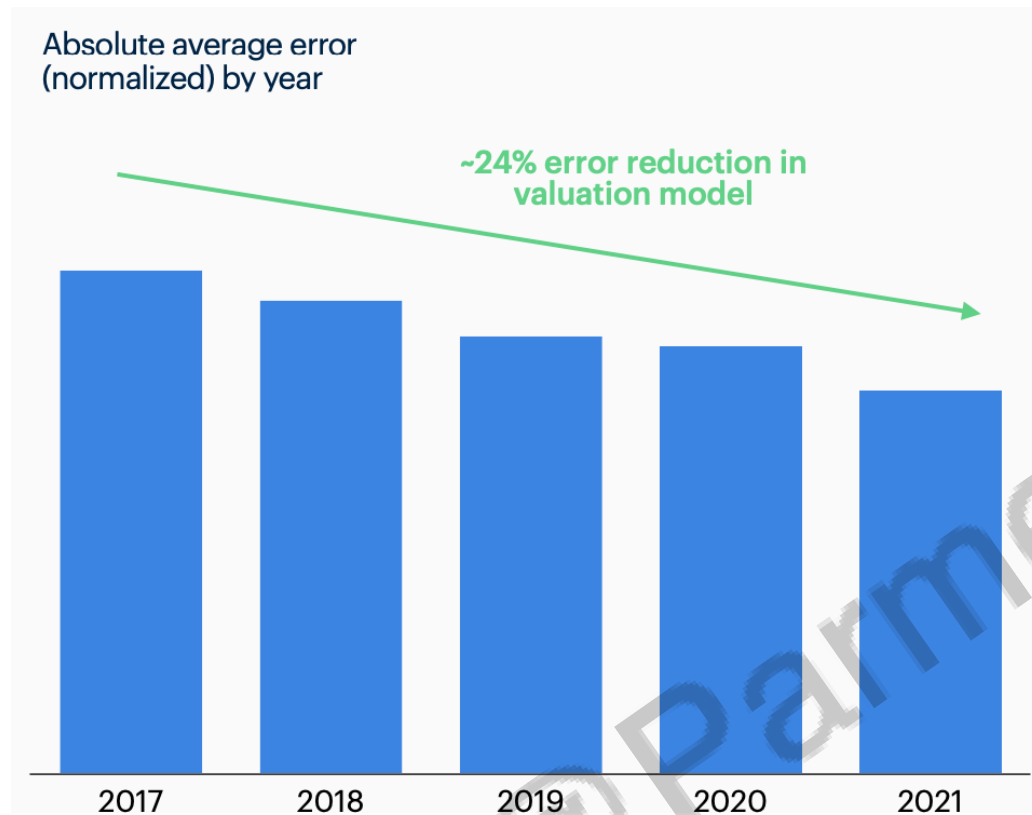


Source: Opendoor

## Appendix – Opendoor's Liquidity Model shows Housing Cycle



## Appendix – Opendoor improving pricing model while increasing buybox coverage



Source: Opendoor