

When Growth Destroys Value

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Zillow Group Overview



Ticker:

ZG

Stock Price:

\$36

Market Cap:

~\$7.4bn

EV:

~\$6.7bn

- Portfolio of real estate and home-related brands on mobile and web focusing on all stages of the home lifecycle
 - \$1.3bn total revenue in 2018
 - 157 million average monthly unique users
 - Over 7 billion visits on platform
 - 110 million homes in database
- Reportable segments
 - Internet, Media & Technology (IMT)
 - Mortgages
 - **Homes**
- New CEO change: Richard Barton replaces Spencer Rascoff
 - Co-founded Zillow in 2005
 - CEO from 2005 – 2010



out east

The Rise of “iBuying”

- “iBuying” is similar to trading in your car at the dealer
 - Paying fair prices to motivated sellers who want the security of getting cash now vs. traditional listing and waiting
 - Few quick touch-up repairs/renovations to ready the home for listing on the market
 - Put house back on the market
 - Make a small profit due to price appreciation
 - Favors homogenous markets
 - Quick turnover important
- Home flipping is buying a distressed property at a discount
 - Invest significantly to improve the home
 - Longer timeframe and potentially larger profits
 - Profit is made on basis of home improvement and price appreciation



Homes Timeline Overview

- April 2018 Zillow launches “iBuying”
 - Provides homeowners in certain metropolitan areas to receive offers to purchase their home from Zillow
- Began buying homes through Zillow Offers in April 2018 and selling in July 2018
- Currently operating in 7 markets
 - Phoenix, Las Vegas, Atlanta, Denver, Houston, Charlotte, Raleigh
 - 7 additional markets to be added in 2019

Why is Zillow Buying Homes?

- Growth in core IMT business slowing down
 - Has not shown a GAAP profit – despite now being a \$1.3B business
- Competition from start-ups starting to heat up in the home buying space
- Creates a new market to go after which Zillow knows well
 - \$1.8T TAM vs. \$17B TAM for IMT segment
- **Zillow believes it can re-invent itself into a growth story stock**

Management Projections: 3-5 years

- Homes Segment

- Buying 60,000 homes annualized
- \$20 billion revenue stream
- Adjusted EBITDA margin ~2-3%

- IMT Segment

- \$2 billion in annual run-rate revenue (almost doubling)
- Adjusted EBITDA margin ~30%
- Current EBITDA margin 2%

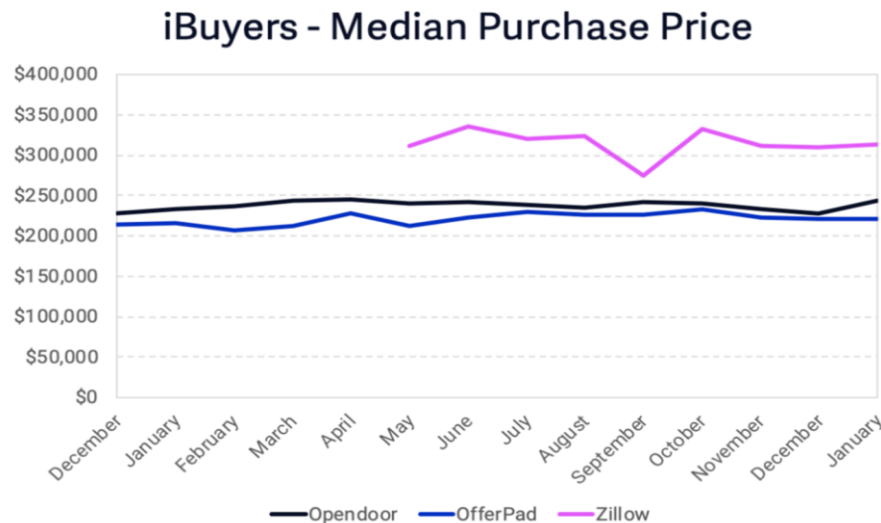
Thesis 1: Home Price Appreciation

- In 2018, Zillow averaged a \$2,500 net profit from every home they sold
- Roughly **\$6,400 of that profit was due to home price appreciation** in the hottest markets in the U.S.
- As ZG expands to newer markets, these will be less attractive and decrease profitability
- Small decline in home appreciation price can quickly wipe out any profits from homes sold

<u>2018 Selling Markets</u>	<u>2018 % change</u>	<u>Zillow offer bridge</u>	
Phoenix, AZ	8.20%	Home acquisition cost	266,345
Las Vegas, NV	11.70%	Average Zillow fee	7%
Atlanta, GA	13.70%	Market value at purchase	<u>\$286,392</u>
Denver, CO	6.60%	(+) Price appreciation	6,356
		(+) Return on renovation	1,769
		(+) Cost benefit	1,330
		<u>Selling price</u>	<u>\$295,847</u>

Thesis 2: Agent Commission Fees

- Competitors have better business model – can bypass agent commission fees
 - Better unit economics
 - Better positioned to dominate the market
- Zillow uses real estate agents on both sides of the transaction and pays them normal commissions
- Competitors can compete better on price for higher quality homes, leaving Zillow winning bids on lower quality/slower moving homes
- **ZG can't cut out agents – their core IMT business depends on them**



Getting priced out of the iBuying “sweet spot” market of \$200,000 – \$250,000 home price range

Thesis 3: Compression of Fees

- Sellers are very price sensitive and will compare offers from the different platforms – ultimately choosing highest offer
 - \$5,000 difference in price goes straight to the seller's pocket
 - Customers are not sticky
 - Uber vs. Lyft prices
- Currently, all iBuyers are in overlapping markets with each other
- **Competition between platforms will ultimately lead to reduction in fees for Zillow**

Pure Play iBuyers		
	Founded	Markets
 Zillow	2018	4
 Opendoor	2014	16
 Offerpad	2015	8
 knock	2015	4
 RedfinNow	2017	3

Thesis 4: Capital Intensive Business

- Contrary to Zillow's core advertising business, home buying is capital intensive
- Requires operational expertise and discipline to keep turnover high – operational risk is greatly underappreciated by the street
- As Zillow grows into new markets - inventory risk compounds
- **Stale inventory will lead to higher holding costs and higher interest expense**

Thesis 5: Ancillary Revenue Dream

- Bulls claim that the Holy Grail of the iBuying business is seller leads that manifest from ZG bidding on homes
- A smaller additional stream of revenue comes from cross-selling mortgages to buyers from Zillow Offers inventory
- Currently the street models “pie in the sky” scenarios
- **Even the best-case scenario for seller leads won't be enough to offset losses from Homes segment**

Catalysts and Risks

Catalysts

- Economic slowdown
 - Lower existing home sales
 - Deceleration in home price appreciation
- Interest rate increase
- Decline in IMT segment

Risks

- Operational execution
- Home prices continue to increase
- Consolidation in industry

Summary

- Both management and sell-side believe the Homes business can be profitable on its own
- My differentiated view and short thesis hinges on the unit economics of the Homes segment which is not well understood and modeled by the street
- I believe that ZG will have a **net loss of \$8,900 on every home they sell**
- **Short ZG with a 2020 price target of \$23, representing a 24% IRR to current stock price.**

Appendix - Valuation and Returns

Sum of Parts Valuation			
	Dec-19	Dec-20	Dec-21
<u>Core IMT Segment</u>			
Forward revenue	1,654	1,927	2,258
(x) Multiple	3.5x	3.5x	3.5x
Enterprise value	5,791	6,744	7,904
<u>Homes Segment</u>			
NTM Adj. EBITDA	(61.5)	(91.5)	(172.9)
(x) Multiple	9.0x	9.0x	9.0x
Enterprise value	(554)	(823)	(1,556)
Exit Returns			
	Dec-19	Dec-20	Dec-21
Total enterprise value	5,237	5,921	6,348
(-) Debt	(1,279)	(2,183)	(3,276)
(+) Cash	1,614	1,583	1,518
Equity value	5,571	5,320	4,590
Diluted shares	223	230	238
Share price	\$25.0	\$23.1	\$19.3
IRR	-47%	-25%	-22%

Appendix - Homes Segment Unit Economics

Unit Economics - Return on Homes Sold					
	2018A	2019E	2020E	2021E	2022E
Revenue per home	295,847	309,161	323,832	332,830	338,819
<u>Operating costs:</u>					
Home acquisition cost	266,345	282,326	297,079	306,977	314,121
Renovation cost	8,847	8,443	8,884	9,180	9,393
Holding costs	2,520	2,713	2,913	3,120	3,182
Selling costs	13,260	14,116	14,854	15,349	15,706
Operating income	4,875	1,563	102	(1,796)	(3,584)
<i>% margin</i>	1.6%	0.5%	0.0%	-0.5%	-1.1%
Interest expense	2,389	3,946	4,509	5,043	5,314
Net income per home	\$2,486	-\$2,383	-\$4,408	-\$6,838	-\$8,897
<i>% margin</i>	0.8%	-0.8%	-1.4%	-2.1%	-2.6%

Appendix - Homes Segment Projections

Homes Segment Income Statement					
(\$ million)	2018A	2019E	2020E	2021E	2022E
Homes sold	177	2,555	8,633	22,497	41,146
Revenue	52	790	2,796	7,488	13,941
Cost of goods	(49)	(743)	(2,641)	(7,113)	(13,311)
Gross profit	3	47	154	375	630
<i>% margin</i>	5.9%	5.9%	5.5%	5.0%	4.5%
Sales & Marketing	(19)	(57)	(161)	(394)	(718)
Technology & Dev.	(21)	(29)	(39)	(51)	(63)
General and Admin.	(23)	(29)	(35)	(39)	(43)
Operating income	(60)	(69)	(80)	(109)	(194)
<i>% margin</i>	-114.9%	-8.7%	-2.9%	-1.5%	-1.4%
Interest expense	(2)	(18)	(58)	(126)	(237)
Net loss	(62)	(87)	(138)	(236)	(431)
<i>% margin</i>	-119%	-11%	-5%	-3.1%	-3.1%
Adj. EBITDA	(45)	(51)	(62)	(91)	(173)
<i>% margin</i>	-86.2%	-6.4%	-2.2%	-1.2%	-1.2%
FCF		(121)	(279)	(411)	(762)
FCF/share		-\$0.54	-\$1.21	-\$1.73	-\$3.13

Appendix - IMT “Bull Case” Segment Projections

IMT Segment Income Statement					
<i>(\$ million)</i>	2018A	2019E	2020E	2021E	2022E
Total revenue (inc. seller leads)	1,281	1,471	1,654	1,927	2,258
<i>% growth</i>		15%	12%	16%	17%
Adj. EBITDA	246	316	381	491	632
<i>% margin</i>	19%	22%	23%	26%	28%
FCF		184	248	346	476
FCF/share		\$0.83	\$1.08	\$1.46	\$1.96