

## The Rise of Discount Brokers

The equity broking industry is getting disrupted with the rapid rise of discount brokers in general and Zerodha in particular. Within just 5 years Zerodha has clocked 15% volume market share. 5 PAISA, the second largest discount broker is now around 1.3% of the overall market. Zerodha now has the largest active customer base of ~0.9mn.

Given this context, we recently hosted Mr. Nithin Kamath, founder and CEO of Zerodha to meet with institutional investors. Additionally we also spoke with 5 PAISA on their plans. Our interactions gave us valuable insights on the industry.

### Below are our key takeaways

- With the growing customer base of discount brokers and the announced entry plan of PayTM Money, the low fixed rate broking model is poised to grow further. The largest discount brokers in the US- Schwab, Fidelity, TD Ameritrade, and Pershing already control ~62% of the broking market. We believe that over the next few years as the disruption picks pace incumbents will be forced to reduce broking charges even for the cash product.
- While discount brokers have been growing, they have not been very successful in capturing substantial

market share in the 40+ age category. This is because given their relatively young age, they currently do not have very high credibility associated with their brand. We believe that discount brokers will increasingly look to target the 40+ age segment. Additionally, we foresee that capturing new clients for incumbents has increasingly become more difficult. This over a period of time may constrain growth.

- In such a scenario cost competitiveness will become a key. Zerodha is operating on fixed operating costs of ~Rs 1.2bn and total operating costs of Rs 2.0bn (FY18). This is considerably lower than that of ISEC, which is operating at a total cost of ~Rs 9.4bn in FY18. HDFC Securities, the second largest bank owned broker, is better placed in this respect with as its total costs were ~Rs 2.5bn in FY18.
- Discount brokers continue to invest in new apps- Zerodha has recently on-boarded Smallcase (index creating and investing platform), Sensibull (option strategy trading platform) and Streak (algo-creation, backtesting platform). Additionally Zerodha's new product plans include de-construction of ULIP and selling term insurance and direct mutual funds separately, launching investing platform for US equities, margin funding and direct retail investing in Indian government bonds. -Assuring exciting times ahead.

Company	Mcap (Rs bn)	CMP (Rs)	TP (Rs)	Rating
MOFS	94.7	640	611	NEU
ISEC	83.1	258	298	NEU

Broking companies: Absolute returns (%)			
Company	3M	6M	12M
MOFS	0.3	(15.9)	(43.3)
ISEC	(4.5)	(18.0)	-
GEOFSL	(7.0)	(25.9)	(56.7)

#### Madhukar Ladha

madhukar.ladha@hdfcsec.com  
+91-22-6171-7323

#### Keshav Binani

keshav.binani@hdfcsec.com  
+91-22-6171-7325

**Zerodha now has the highest number of active clients (~0.9mn) and has the highest volume market share (~15).**

**Zerodha's active client base has grown at 122.2 % CAGR during FY14-Feb19.**

**As of Feb-19, 5 Paisa has an active client base of ~100K, which has increased from ~3K in FY17.**

**Among traditional brokers Axis securities has done better than peers.**

## Market share moving towards discount brokers

- In the last four years Zerodha has been the largest disruptor in equity broking space and now has a 15% volume market share with the highest ~0.9mn active customers.
- 5 PAISA the second largest discount broker is at ~2% cash volumes and 1.3% F&O volumes market share and ~100k active customers.
- In certain segments (BANK NIFTY options) Zerodha is hitting the maximum allowed market wide OI limit of 15%.
- This presents an opportunity for brokers in general and more so for disruptors such as PayTM Money or any other discount broker as hitting of upper limit for certain derivative contracts indicates that opportunity exists for low cost capacity.
- Currently the likes of 5 PAISA are still not very large in total customer accounts. 5 PAISA has a customer base of ~200k clients compared to Zerodha's ~1.4mn clients.
- ISEC and HDFC securities currently serve ~4.2mn and ~2.5mn clients respectively.
- With volume market share moving more towards discounters the incumbents, over the years, have responded by cutting pricing mainly for the derivatives segment.
- **View:** While the overall market is growing and the potential may seem very large the total number of direct equity investors is still quite low. Our conversations with industry professionals peg this number to be ~15mn. The immediate growth area is the mutual fund investor who has not yet invested in direct equities i.e. ~15mn. A smaller market means higher compulsion to keep acquiring new customers and also increased competition for existing customers.

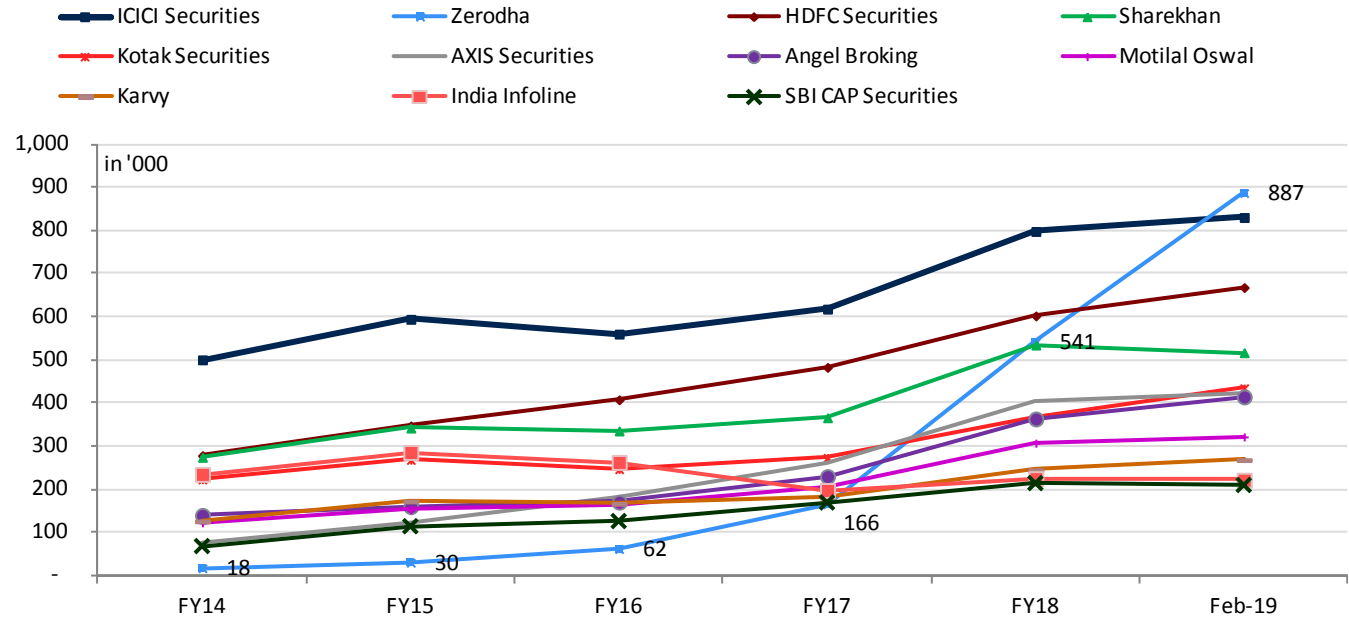
### Active Customers: Trend For Top Players

Active clients (in '000)	FY14	FY15	FY16	FY17	FY18	Feb-19
Zerodha	18	30	62	166	541	887
ICICI Securities	501	595	560	618	798	831
HDFC Securities	279	348	408	483	602	668
Sharekhan	275	343	336	366	535	517
Kotak Securities	223	268	247	274	369	435
AXIS Securities	77	120	184	259	405	422
Angel Broking	140	160	171	230	364	415
Motilal Oswal	123	153	166	207	308	322
Karvy	126	172	167	181	245	268
India Infoline	235	286	263	198	225	222
SBI CAP Securities	68	114	126	169	214	210

Source: NSE handbook, HDFC sec Inst Research

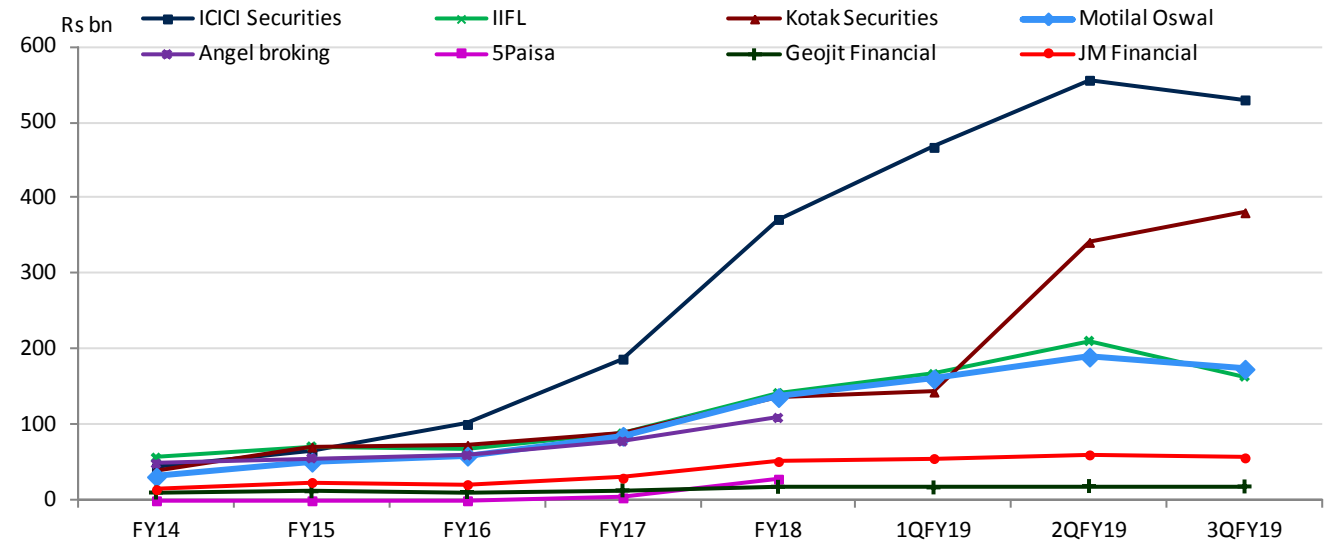
*The rise of Zerodha is striking in the chart.*

**Active Customers: Trend For Top Players**



Source: NSE handbook, HDFC sec Inst Research

**ADTV Comparison**



Source: Respective company investor presentation, HDFC sec Inst Research Note: ADTV for 5Paisa capital is available only annually.

*Market ADTV has grown at 44.1 % during FY14-18.*

**75% of Zerodha's clients are aged less than 35 years.**

**Most of the client additions for Zerodha are first time investors.**

**Industry internet trading volumes are on the rise. Its share has increased from 22% in FY13 to 29% in FY18.**

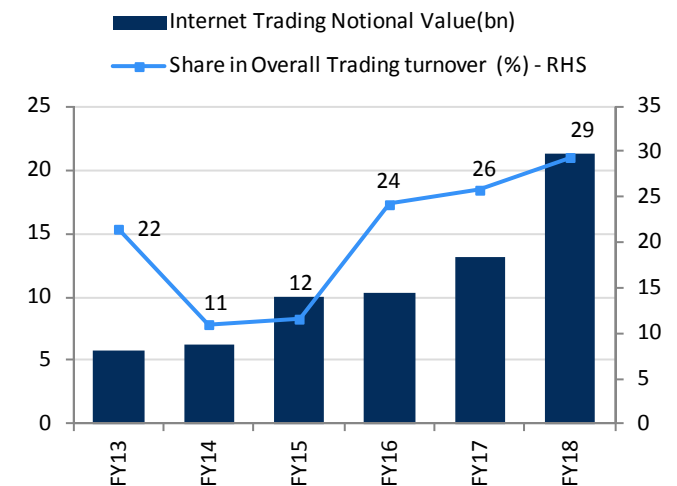
**5 Paisa derives 75%+ broking revenues from its mobile app.**

## Discounters successful with the millennial customer segment

- Zerodha indicated that most of its customers are in the 25-40 age bracket, while it has not been successful in gaining market share within the 40+ category.
- 75% of Zerodha's clients are aged less than 35 years. Zerodha has positioned itself as a platform for first time investors /traders (65-70% of net client additions last year were first time investors).
- Mr. Kamath stated that Zerodha has never spent any amount on advertisement. Most clients are on-boarded on the platform digitally. Positive word of mouth has worked phenomenally well for the company.
- 5 PAISA too has a younger customer profile. The company indicated that a large number of its customers are from tier 2 & tier 3 cities.
- This indicates that new set of customers are savvy about trading costs and research before opening an account.
- Zerodha also mentioned that several of its customers are white collared employees who trade the markets and are from the IT hubs (particularly Bangalore and Pune).
- Zerodha is currently structured as a partnership; but is converting to a public company beginning April 1, 2019. This will ensure that financials are disclosed by the company, which in turn improves credibility.
- Additionally, Zerodha is demerging its prop-desk to a separate vehicle. This will de-risk broking and add credibility to its operations.

- **View:** We believe that discounters have not been able to gain market share in the 40+ category as the companies need to establish themselves as brands and need to gain credibility among wealthy customers.
- We believe that Zerodha will target the 40+ segment over the next couple of years. Additionally, for incumbents capturing new clients has increasingly become more difficult. This over a period of time will constrain growth. Incumbents will need to keep investing in technology as new customers are technologically savvy.

## Industry Internet Trading Volume Trends



Source: NSE handbook, HDFC sec Inst Research

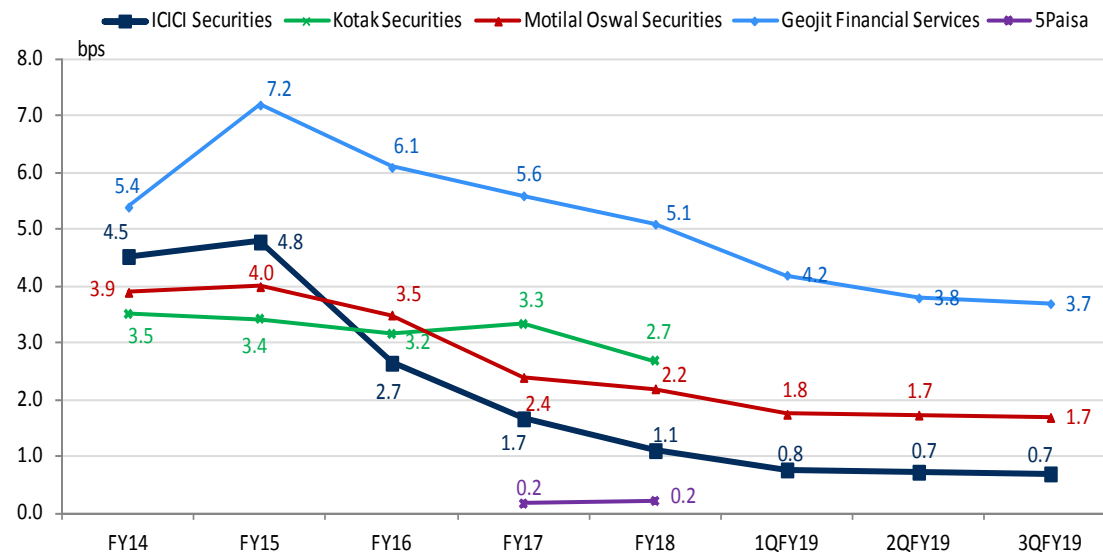
**Fixed rate discount brokers charge brokerage irrespective of the transaction volume.**

**Broking yields for most brokerages have taken a hit during 9MFY19. Pricing pressure and change in product mix has lead to steep fall in yields.**

### Fixed rate brokerage model of discounters

- Discount brokers in India are charging fixed rates per trade as what the case is in the US- Charles Schwab, TD Ameritrade, Fidelity etc.
- Zerodha charges Rs 20/- per F&O trade. For intraday cash transactions it charges lower of 1) Rs 20/- a trade, or 2) 0.01% of turnover while 5 PAISA charges Rs 10/trade for any segment. These rates are significantly lower than those charged by full service providers.
- In the west the market has moved away from full service providers towards discounters ultimately resulting in full service providers cutting pricing.
- The steep pricing cut has resulted in the ADTV volume shift in favor of discounters.
- View:** The market is about to get even more competitive as incumbents cut pricing further to defend their markets share and new discount brokers enter i.e. PAYTM and older ones continue to gain market share. Pricing on the derivatives segment will continue to be very competitive.

### Broking Yields

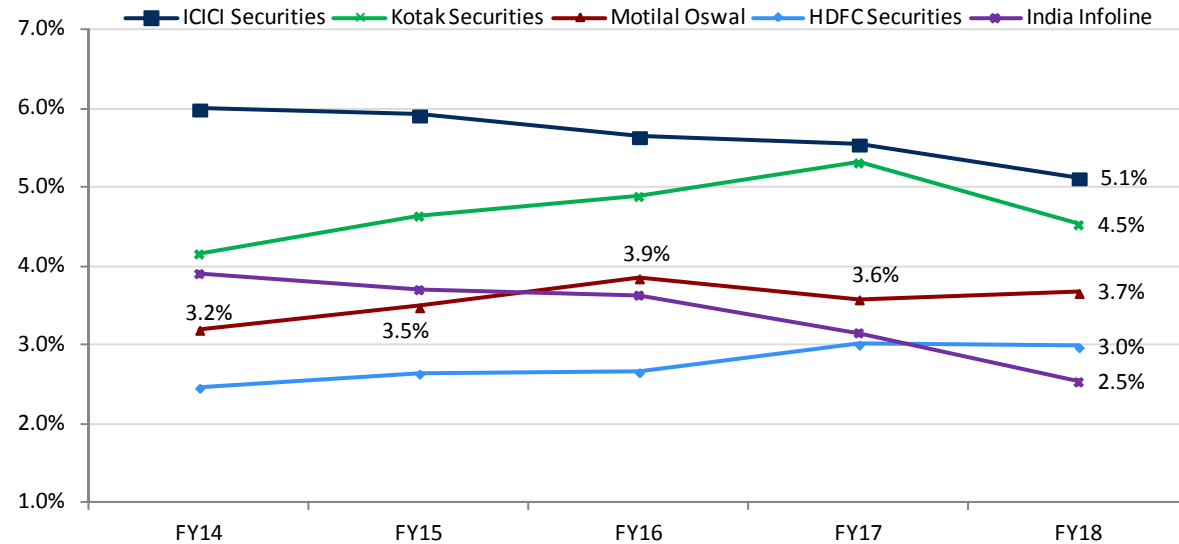


Source: : Respective company investor presentations, HDFC sec Inst Research

Note: Kotak securities and 5 paisa capital's core broking revenues are available only annually, thus yields not calculated quarterly.

*Revenue market share of ISEC fell from 6.0% in FY14 to 5.1% in FY18.*

### Revenue Market Share For Top 5 Brokers



Source: Respective broker web-sites, Angel broking DRHP, HDFC sec Inst Research

### Broking Revenue For Top 10 Players (Rs bn)

Broker	FY14	FY15	FY16	FY17	FY18
ICICI Securities	5.0	7.6	6.6	7.8	10.2
Kotak Securities	3.4	5.9	5.7	7.4	9.1
Motilal Oswal	2.6	4.4	4.5	5.0	7.3
HDFC Securities	2.0	3.4	3.1	4.2	6.0
India Infoline	3.2	4.7	4.3	4.4	5.1
Angel Broking	2.6	3.3	3.1	3.6	4.8
Edelweiss Securities	1.3	1.8	1.6	2.0	2.3
Geojit Financial	1.4	2.2	1.7	1.9	2.2
JM Financial	0.9	1.5	1.3	1.6	2.2
Axis Securities	0.5	1.1	1.2	1.6	2.0
Others	60	92	84	100	149
<b>Total</b>	<b>83</b>	<b>128</b>	<b>117</b>	<b>140</b>	<b>200</b>

Source: Respective broker web-sites, Angel broking DRHP, HDFC sec Inst Research

**Zerodha handles ~2.5mn trades every day.**

**For Zerodha mobile trading volumes have grown exponentially. Share of mobile revenues have grown from 15% to 70% in last 3 years.**

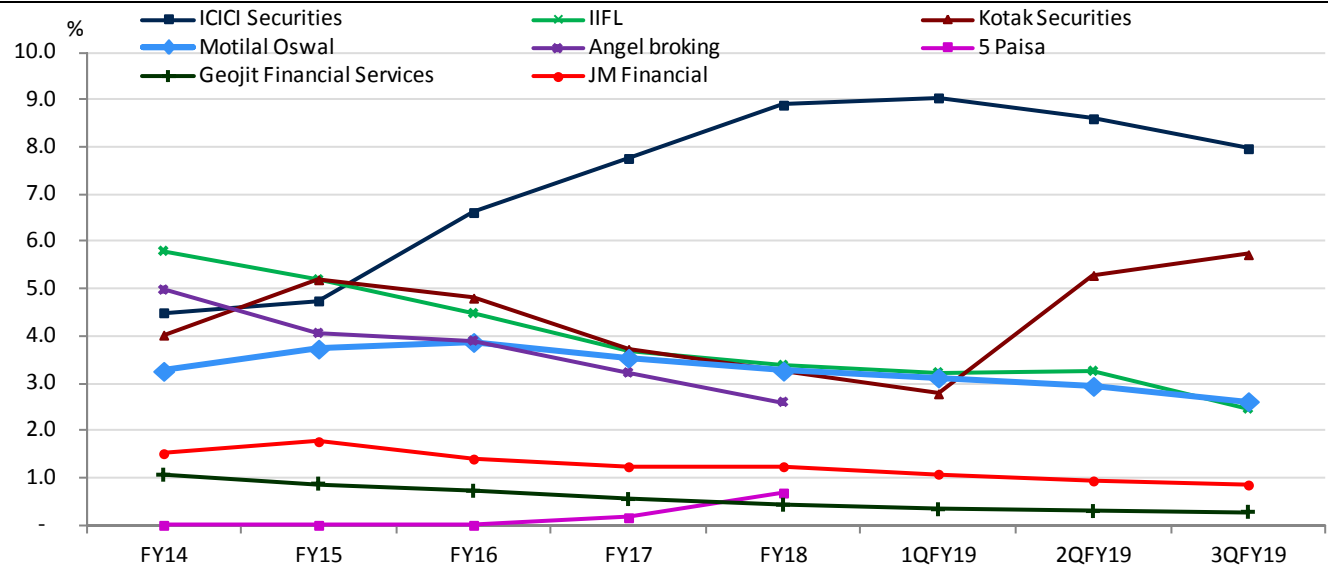
**For contracts such as the BANKNIFTY, Zerodha is hitting the OI exchange limit of 15% per broker and may take a price hike for this particular derivative instrument.**

## Zerodha Revenues driven by F&O volumes

- Zerodha charges only on F&O and cash intra-day trades.
- For FY18, Zerodha printed a topline of ~Rs 5.5bn. Broking contributed ~55% to revenues, followed by interest income which contributed 15-18%. Proprietary trading contributed 15-20% whereas other miscellaneous items contributed 10%.
- Zerodha has total clients of ~1.4mn, of which ~0.9mn are active (traded at least once in the last 12 months). Around 0.2mn of the clients trade daily on the platform and ~0.4mn trade once a month.
- According to Zerodha, ~2-3mn trades are being executed on the platform daily. Around 30% of orders are F&O, 30% cash intraday and 40% cash delivery based.
- 90%+ revenues are order based and have no relation to order value.
- 70% of the revenues come from mobile trading, whereas 3 years ago mobile trading contributed only 15% to revenues.
- Mr Kamath highlighted that he believes that trading volumes would not get impacted even if Zerodha were to increase per order charge by 50% i.e. from Rs 20 to Rs 30. According to him, pricing is not the only value proposition for Zerodha customers. Zerodha customers enjoy the platform.
- For contracts such as the BANKNIFTY, Zerodha is hitting the OI exchange limit of 15% per broker and may take a price hike for this particular derivative product.
- **View:** *As derivatives charges are very nominal we believe at this price point the demand is relatively inelastic. Thus we believe increasing or reducing prices by Rs 10/order will not impact volumes much.*
- *Our calculations suggest that yield of Zerodha works out to ~0.32bps. We estimate a yield of ~0.45bps for F&O for ISEC. Note that ISEC's F&O yield is still about 50% higher.*
- *Zerodha has high concentration of clients as 18% of clients bring ~80% of brokerage revenues but our understanding is that this is lower than other bank led brokers.*

**Amongst traditional brokers, ISEC has the highest volume market share of ~8%.**

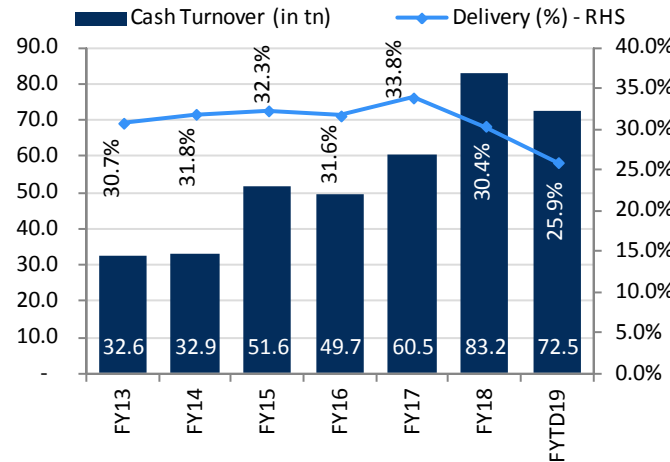
**Volume Market Share**



Source: Respective company investor presentations, HDFC sec Inst Research. ADTV for 5Paisa capital is available only annually.

**Industry cash delivery volumes fell from 30.4% in FY18 to 25.9% in FYTD.**

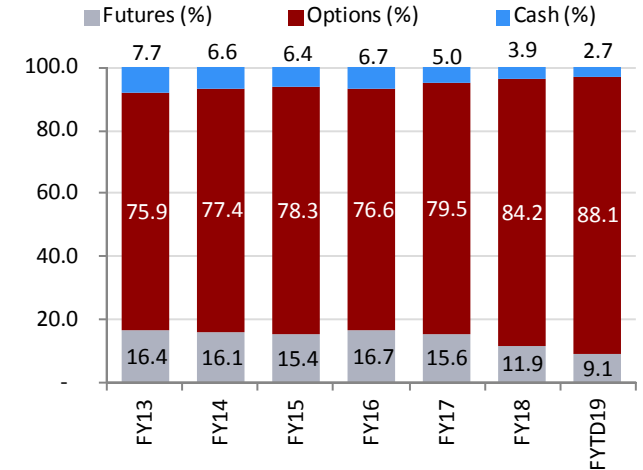
**Industry Cash Delivery Volumes Are Falling**



Source: NSE,BSE, HDFC sec Inst Research

**F&O volumes now have around 97% share which has contributed to fall in blended yields for most brokerages.**

**Industry : Rising Share Of Derivatives ADTV**



Source: NSE,BSE, HDFC sec Inst Research  
Note: FY17 onwards product mix share is on ex prop basis.



**Cash delivery business is the highest yielding product for brokerages.**

**On the contrary, Zerodha doesn't charge any brokerage on cash delivery trades and that has been one of its USP.**

**Direct MF investing space is getting very competitive with entry of new players like ET Money and PayTM money.**

**Zerodha claims that Coin is the largest platform (by AUM size) for direct MF investing in India.**

## Cash delivery business will become intensely more competitive

- The bigger threat for incumbents is the possibility of losing higher paying clients to the likes of discount brokers.
- **View:** We believe this is a possibility as over the next year or two as 1) Zerodha gains credibility as a corporate, 2) The likes of 5 PAISA gain market share and 3) New players such as PayTM money enter the space.
- While Zerodha currently does not levy any charges on the cash delivery segment we believe it can easily charge Rs 10/trade and still enjoy large profits. On its current trade base, Zerodha will stand to rake in Rs 10mn/day just by charging Rs 10/trade on cash delivery transactions. This means incremental revenue of Rs 2.5bn p.a.

## Zerodha works on tight costs and hence is immensely profitable

- According to Mr. Kamath, Zerodha earned a PBT of Rs 3.5bn and a PAT of Rs 2.5bn for FY18.
- Total fixed costs including employee variable expenses for FY18 were Rs 1.2bn. Other expenses were around Rs 0.8bn.
- Total employee strength of ~1200 (Client acquisition: 650, technology: 45, back office: 500). Most employees are aged around 25; hence salaries are lower.
- Zerodha also does not provide research or trading advise to customers. Thus it does not have an active research and marketing desk and is positioned as an execution only platform. This helps keep costs lower.

- Mr Kamath highlighted that revenues and PAT for FY19E are expected to grow ~60-70%.
- **View:** Keeping costs low will be vital to survive if discount brokers continue to grow. We believe that ISEC will continue to be under pressure as just its employee costs were ~Rs 5.5bn in and total costs were Rs 9.4bn in FY18. Even if adjusted for institutional equities and investment banking business staff costs will still be high at ~Rs 4.4bn (HDFC Sec estimate).
- HDFC Securities, the second largest bank owned broker, is better placed in this respect with as its total costs were ~Rs 2.5bn in FY18.

## Discounters disrupting the distribution landscape

- Zerodha also has a platform for Direct MF investing named "Coin". Current AUM size ~Rs 25bn.
- Zerodha began with a subscription based model for this platform- charging Rs 50/month; but this was later made free of cost for all customers.
- Zerodha claims that Coin is the largest platform (by AUM size) for direct MF investing in India.
- Mr Kamath highlighted that this space is getting very competitive with entry of players such as PayTM Money, ET Money, and 5 PAISA etc.
- **View:** While this business does not have an independent top-line but over time the idea is to allow customers to borrow against mutual fund units held in customers' demat accounts and build a spread income.

***New tech platforms enhances user experience and may prove to be attractive add on feature for certain set of customers.***

***Zerodha plans to launch a platform to invest in global equities and a platform for retail investors to invest directly in government bonds.***

## New technology is more agile

- According to Zerodha the key difference between itself and incumbents is the fact that it is simplistic and has no legacy systems to deal with.
- Most incumbents are still building off technologies which are over two decades old and hence are difficult to change or build off.
- According to Mr. Kamath, Zerodha was able to completely strip down the entire broking software and build it up back again 4 times over the last 5 years. This is testament to the superior technology which it has deployed.
- Zerodha believes in a minimalistic user interface and delivers only what is essential to clients. This results in superior client experience.
- Zerodha has also invested in fintech trading related platforms:
  - **Sensibull:** Sensibull offers simplified options trading to complex option trading strategies. Sensibull guides investors to buy the right option basis investors target and also compares options under various scenarios.
  - **Streak:** Streak provides traders/investors a platform to algo-trade, without coding. Customers can create their algorithms and back test the same.
  - **Smallcase:** Smallcase offers thematic investing. It is a basket of stocks/ETFs that reflect an idea/strategy.

- **View:** We believe that if technology is correctly deployed, new entrants will be able to disrupt the market. Given that companies have seen Zerodha to be immensely profitable, we expect new entrants to follow suit.
- Platforms such as Sensibull, Streak and Smallcase enhance user experience and may prove to be attractive add on feature for certain set of customers. Traditional retail brokers are adapting and also integrating such applications on to their platforms.

## What's next for discount brokers?

- **LAS and MTF**
  - Zerodha is expected to launch margin trading facility in Mar-19 with an initial capital deployment of ~Rs 0.5-1.0bn in this business.
  - 5 PAISA is already in this line of business.
- **Deconstructing the ULIP**
  - Selling term insurance and direct mutual funds separately thereby improving returns for the insured and cutting out agents. In fact such a product will also be a lot more liquid compared to a ULIP.
- **Others**
  - Zerodha plans to launch a platform to invest in global equities and a platform for retail investors to invest directly in government bonds.
  - 5 PAISA is looking to start P2P lending.

*Zerodha's ADTV market share has improved from 9% in FY18 to 15% in FY19E.*

*Mr. Kamath highlighted that revenues and PAT for FY19E are expected to grow by ~60%.*

*Beginning April-19 the company will also begin offering MTF facility to customers.*

## Estimated Financials of Zerodha

### Income Statement

(Rs mn)	FY18
<b>Revenues</b>	<b>5,500</b>
Fixed expenses	1,200
Other expenses	800
<b>PBT</b>	<b>3,500</b>
Tax	1,000
<b>PAT</b>	<b>2,500</b>

Note: Above numbers are HDFC sec estimates based on conversation with Mr Nithin Kamath

### Revenue Split

(Rs mn)	FY18
Revenue from derivatives	2,845
Revenue from Cash Intraday	215
<b>Total broking revenues</b>	<b>3,060</b>
Interest Income	990
Prop Trading	935
Others	515
<b>Total Revenues</b>	<b>5,500</b>

Note: Above numbers are HDFC sec estimates based on conversation with Mr Nithin Kamath

### Operating Metrics

Particulars	FY18
<b>Total Orders per day (mn)</b>	<b>2.0</b>
-F&O orders	0.6
-Cash delivery orders	0.8
-Cash intraday orders	0.6
<b>Estimated yield (%)</b>	<b>0.00320</b>
<b>Zerodha ADTV share (%)</b>	<b>9.0</b>

Note: Above numbers are HDFC sec estimates based on conversation with Mr Nithin Kamath

*5Paisa is the discount broking arm of IIFL group.*

*5 Paisa now also offers direct MF investing.*

## 5 PAISA Financials

### Income Statement

(Rs mn)	FY16	FY17	FY18	9MFY19
<b>Revenue from operations</b>	<b>-12</b>	<b>75</b>	<b>197</b>	<b>408</b>
<b>Expenses:</b>				
Employee benefits expenses	22	82	193	192
Other expenses	25	141	321	382
<b>Total expenses</b>	<b>47</b>	<b>223</b>	<b>514</b>	<b>574</b>
<b>EBITDA</b>	<b>-59</b>	<b>-149</b>	<b>-317</b>	<b>-166</b>
Depreciation and amortization expense	0	3	7	11
<b>EBIT</b>	<b>-59</b>	<b>-151</b>	<b>-324</b>	<b>-177</b>
Finance costs	18	13	8	43
<b>EBT</b>	<b>-77</b>	<b>-164</b>	<b>-332</b>	<b>-220</b>
<b>Total tax expense</b>	<b>-22</b>	<b>-47</b>	<b>-79</b>	<b>-58</b>
<b>PAT</b>	<b>-55</b>	<b>-117</b>	<b>-253</b>	<b>-162</b>

Note: Revenue in FY16 is negative due to loss from trading in securities. Source: Company, HDFC sec Inst Research

### Revenue Split

(Rs mn)	FY16	FY17	FY18
Brokerage income	3	16	151
Fund based Activity	-31	52	30
Financial Products Distribution	15	7	15
<b>Total revenues</b>	<b>-12</b>	<b>75</b>	<b>197</b>

Source: Company, HDFC sec Inst Research

**5Paisa charges flat Rs 10 per order on all transactions.**

**5 Paisa now have ~2% Cash and ~1.3% F&O volume market share.**

**Our estimates suggest that the company handles close to ~.15mn orders a day now.**

## Operating Metrics

Particulars	FY17	FY18
Total Orders (mn)	1.6	15.1
Days	246	246
Order per day (mn)	0.01	0.06
Revenue per order	10	10
<b>Broking income</b>	<b>16</b>	<b>151</b>
<b>5 Paisa ADTV (Rs bn)</b>		
-Cash	0.2	1.7
-Derivatives	3.7	26.9
<b>Total</b>	<b>3.9</b>	<b>28.6</b>
<b>Market ADTV (ex prop)</b>		
-Cash	199	270
-Derivatives	2,214	3,914
<b>Total</b>	<b>2,413</b>	<b>4,184</b>
<b>Market Share (%)</b>		
-Cash	0.1	0.6
-Derivatives	0.2	0.7
<b>Total</b>	<b>0.2</b>	<b>0.7</b>
<b>Yield (%)</b>	<b>0.0017</b>	<b>0.0022</b>

Source: Company, HDFC sec Inst Research

*Although 5Paisa capital has reported losses for more than 3 years now but the losses have narrowed in the recent past.*

### Recent Financial Performance

Particulars (Rs mn)	1QFY19	2QFY19	3QFY19
Revenues	90.7	127.7	189.9
Employee benefits expenses	62.9	61.9	67.2
Operating expenses	91.7	141.4	149.0
<b>EBITDA</b>	<b>(63.9)</b>	<b>(75.6)</b>	<b>(26.3)</b>
Depreciation	3.4	4.1	3.4
<b>EBIT</b>	<b>(67.3)</b>	<b>(79.7)</b>	<b>(29.7)</b>
Other Income	0.1	-	
Interest & Financial Charges	7.6	15.9	20.0
<b>PBT</b>	<b>(74.8)</b>	<b>(95.6)</b>	<b>(49.7)</b>
Tax	(18.6)	(25.1)	(14.2)
<b>RPAT</b>	<b>(56.2)</b>	<b>(70.4)</b>	<b>(35.5)</b>

Source: Company, HDFC sec Inst Research

### Balance Sheet

(Rs mn)	FY17	FY18	Sep-18
<b>SOURCES OF FUNDS</b>			
Share Capital	127	127	127
Reserves	755	502	375
<b>Total Shareholders Funds</b>	<b>882</b>	<b>629</b>	<b>502</b>
<b>Total Debt</b>	<b>0</b>	<b>161</b>	<b>891</b>
Other Financial Liabilities & Provisions	3	2	3
<b>TOTAL SOURCES OF FUNDS</b>	<b>886</b>	<b>793</b>	<b>1,396</b>
<b>APPLICATION OF FUNDS</b>			
<b>Total Non-current Assets</b>	<b>47</b>	<b>347</b>	<b>355</b>
<b>Total Current Assets</b>	<b>1,045</b>	<b>971</b>	<b>2,122</b>
Creditors	5	21	29
Other Current Liabilities and Provisions	202	504	1,052
<b>Total Current Liabilities</b>	<b>207</b>	<b>686</b>	<b>1,080</b>
<b>Net Current Assets</b>	<b>838</b>	<b>284</b>	<b>1,041</b>
<b>TOTAL APPLICATION OF FUNDS</b>	<b>886</b>	<b>631</b>	<b>1,396</b>

Source: Company Annual Report, HDFC sec Inst Research

Note: Numbers for Sep-18 are of the standalone entity.

**INSTITUTIONAL RESEARCH**
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**HDFC securities Limited, I Think Techno Campus, Building - B, "Alpha", Office Floor 8, Near Kanjurmarg Station, Opp. Crompton Greaves, Kanjurmarg (East), Mumbai 400 042 Phone: (022) 3075 3400 Fax: (022) 2496 5066**

**Compliance Officer: Binkle R. Oza Email: [complianceofficer@hdfcsec.com](mailto:complianceofficer@hdfcsec.com) Phone: (022) 3045 3600**

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**HDFC securities**

**Institutional Equities**

Unit No. 1602, 16th Floor, Tower A, Peninsula Business Park,

Senapati Bapat Marg, Lower Parel, Mumbai - 400 013

Board: +91-22-6171-7330 [www.hdfcsec.com](http://www.hdfcsec.com)