

January 9, 2018 05:02 PM GMT

HDFC

## Quality at a Good Price

Stock Rating  
Overweight

Industry View  
Attractive

Price Target  
Rs2,030.00

On sum-of-the-parts analysis, valuation looks attractive. We see it as a good entry point to a stock that offers a comprehensive play on India's financial industry via best-in-class, fast-growing businesses with meaningful scale, market share and top-quartile profitability. Resume coverage at OW.

**Unique asset – A basket of quality and fast compounding, listed and unlisted financial businesses.** HDFC is a single stock to invest in almost all secular themes in the Indian financial services space. The fact that it is a large cap stock with good trading liquidity, professionally managed with strong track record, widely owned by foreigners with no foreign ownership cap, makes it more attractive.

**At an attractive valuation.** On our computations, valuing the stakes in listed subsidiaries at current market prices and the others at our estimates, we assess that the share of the core mortgage business in overall valuation has fallen to ~30% from ~50% two years ago. Share in consolidated earnings (1HF18) on our computations is ~50%. Core mortgage business valuation at 2.1x F2019e BV and 1.8x F2020e BV is trading almost two standard deviations below ten year average. Even if we were to apply at 20% hold co discount to the value of the stakes, valuation of 3.0x F2019e BV and 2.6x F2020e BV is below most HFC peers and is attractive for a quality franchise generating high-teen ROE.

**Our price target implies 17% upside over the next 12 months, with no meaningful rerating built in.** Our March 2019 target valuation for the aggregate stakes post 20% hold co discount is Rs1,130 per share (currently Rs952 per share, we estimate). We value the core mortgage business at 3.0x F2020e BV, i.e., Rs900 per share (currently Rs789 we estimate).

**Risk reward is attractive.** A key investor concern is rising rates and aggressive competition from PSU banks. We believe current valuation offers good margin of safety (both in absolute and relative terms), and we believe HDFC's superior mortgage franchise positions it well to navigate the headwinds better. Also, we note the stock is usually viewed as a relatively safe prospect in tough markets.

**Key catalysts.** Consistent mid-teen loan or NII growth; strong listing of AMC (announced); news flow around utilization of capital-raise proceeds, given the company's strong track record with seeding and monetizing investments.

**Key downside risks.** Gap between bank lending rates and bond borrowing costs remains at current extremely low levels for an extended period of time; irrational loan pricing by PSU banks; overall investor outlook for financial services weakens; any significant adverse impact on account of IND AS.

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## HDFC (HDFC.NS, HDFC IN)

## India Financials / India

<b>Stock Rating</b>	<b>Overweight</b>
<b>Industry View</b>	<b>Attractive</b>
Price target	Rs2,030.00
Up/downside to price target (%)	17
Shr price, close (Jan 9, 2018)	Rs1,735.05
52-Week Range	Rs1,804.00-1,212.60
Mkt cap, curr (bn)	US\$43.8
Avg daily trading value (mn)	US\$66

Fiscal Year Ending	03/17	03/18e	03/19e	03/20e
ModelWare EPS (Rs)	39.2	46.7	49.0	56.4
EPS, basic (Rs)*	46.1	73.8	52.9	60.3
Consensus EPS (Rs)§	47.3	53.3	59.4	69.1
ModelWare net inc (Rs mn)	62,552	75,102	83,520	97,115
P/E	38.3	37.2	35.4	30.8
P/BV	6.1	4.9	4.3	4.0
Return on avg eqty (%)	17.0	15.0	13.0	13.5

Unless otherwise noted, all metrics are based on Morgan Stanley ModelWare framework

\* = GAAP or approximated based on GAAP

§ = Consensus data is provided by Thomson Reuters Estimates

e = Morgan Stanley Research estimates

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**Risk-Reward: HDFC (HDFC.NS, Rs1,740.95, OW, PT Rs2,030)**

Quality franchise at an attractive valuation. OW.



Source: Thomson Reuters, Morgan Stanley Research

**Price Target Rs2,030**

Derived from a base case sum-of-the-parts methodology

**Bull Rs2,815****3.5x Base Case March-20e BVPS (Core)**

**Overall financial services sector fundamentals get further stronger.** Financial flows in the insurance and asset management sector accelerate. In the core mortgage business, loan growth picks up strongly, competitive intensity eases, borrowing costs decline and loan spreads improve. NII growth averages 20% during F2018-20. We value stakes in subsidiaries and associates at Rs1,765 per share and apply no holdco discount

**Base Rs2,030****3.0x Base Case March-20e BVPS (Core)**

**Financial sector flows remain strong but start moderating; Wholesale funding costs stay elevated with upward bias and it is a challenging year for HFCs.** In the core mortgage business, we expect loan growth to remain broadly at current levels and average 17% over next three years. We expect loan spreads and NIM to compress slightly. We forecast NII growth to average 14% during F2018-20. We value stakes in subsidiaries and associates at Rs1,412 per share and apply a 20% holdco discount.

**Bear Rs1,200****2.0x Base Case March-20e BVPS (Core)**

**Financial sectors flows start reversing; wholesale funding costs rise sharply and competitive intensity picks up thus hurting the core mortgage business:** Competition from banks intensifies more along with irrational pricing, resulting in loss of market share and hence lower AUM growth. Spreads compress as wholesale borrowing costs rise sharply. NII growth averages below 10% during F2018-20. We value stakes in subsidiaries and associates at Rs857 per share and apply a 30% holdco discount

**Investment Thesis: Why Overweight?**

■ Strong brand and management. Quality play on financial services sector growth story in India, with 'best in class' subsidiaries/associates – allows an investor to invest across sectors while lowering idiosyncratic sector risk.

■ Core mortgage business is high quality and has a great track record. Its implied valuation, after deducting valuation of stakes in subsidiaries and associates works out at 1.8x F2020e Core BVPS (assuming no holdco discount) and 2.6x F2020e Core BVPS (assuming a 20% holdco discount). This is attractive given quality franchise and high teens ROE. Our price target builds in 3.0x F2020e Core BVPS and 20% holdco discount.

■ We believe this is an attractive entry point for long-term investors. For investors with a shorter horizon, the core business valuation, which is at a discount to both peers and HDFC's own history, provides good margin of safety in what could prove a tough year for HFCs. HDFC stock has historically also outperformed in difficult markets, which also makes it an attractive play following a strong 2017 for equity markets.

**Key Value Drivers**

- Loan growth and loan spreads.
- Valuation of key listed stakes.

**Potential Catalysts**

- Consistent mid-teen loan or NII growth.
- News flow around utilization of capital-raise proceeds.
- Strong listing of the AMC (announced).

**Risks to Achieving Price Target**

- Lower incremental loan spreads for longer.
- Irrational loan pricing by PSU banks.
- Overall investor outlook for financial services weakens.
- Any significant adverse impact on account of IND AS.

### Exhibit 1: Financial Summary

HDFC (Standalone)					Per Share Data and Valuations				
Profit and Loss Statement					Year end March				
Rs Min (Year end March)	F2017	F2018E	F2019E	F2020E	Per Share (Rs)	F2017	F2018E	F2019E	F2020E
Interest Income	304,061	336,095	389,270	452,947	Reported EPS (basic)	46.1	73.8	52.9	60.3
Interest Expense	208,962	228,670	266,682	312,213	Reported EPS (diluted)	45.7	73.2	52.5	59.8
<b>Net Interest Income</b>	<b>99,542</b>	<b>112,970</b>	<b>129,151</b>	<b>148,413</b>	Modelware EPS (diluted)	39.2	46.7	49.0	56.4
---Fee Income	3,462	2,493	2,867	3,297	Core Business EPS (diluted)	33.6	40.6	42.4	48.9
---Capital Gains	818	6,340	2,000	2,000	BVPS (Headline)	249.6	359.9	402.7	436.7
---Dividend Income	9,091	10,037	11,543	13,274	BVPS (Core Business)	197.1	220.3	266.1	300.1
---Other non int. income	521	527	606	697	DPS	18.0	27.0	19.5	22.5
<b>Total Non Interest Income</b>	<b>13,893</b>	<b>19,397</b>	<b>17,015</b>	<b>19,268</b>	Dividend Yield	1.0%	1.6%	1.1%	1.3%
<b>Total Income</b>	<b>113,435</b>	<b>132,368</b>	<b>146,167</b>	<b>167,681</b>	<b>Valuation</b>				
Provisions for Contingencies	3,888	4,277	4,704	5,175	P/E (Headline)	44.4	37.3	35.5	30.9
---Employee Expenses	4,480	4,928	5,420	5,962	P/BV (Headline)	7.0	4.8	4.3	4.0
---Other Operating exp	8,368	9,204	10,125	11,137	<b>@ No Hold Co Discount</b>				
<b>Operating Profit</b>	<b>105,067</b>	<b>123,163</b>	<b>136,042</b>	<b>156,543</b>	P/E (Core)	16.4	13.6	13.0	11.3
Provisions for Contingencies	4,250	3,864	4,526	5,295	P/BV (Core)	2.8	2.5	2.1	1.8
<b>Pre-tax Profit</b>	<b>100,817</b>	<b>119,299</b>	<b>131,516</b>	<b>151,248</b>	<b>@ 20% Hold Co Discount</b>				
Tax	31,843	37,102	40,902	47,038	P/E (Core)	23.5	19.4	18.6	16.1
<b>Net Profit</b>	<b>68,975</b>	<b>82,197</b>	<b>90,615</b>	<b>104,210</b>	P/BV (Core)	4.0	3.6	3.0	2.6
Extraordinary (post-Tax)	5,452	36,750	0	0	<b>Ratio Analysis</b>				
<b>Reported Profit</b>	<b>74,426</b>	<b>118,947</b>	<b>90,615</b>	<b>104,210</b>	<b>Year end March</b>	<b>F2017</b>	<b>F2018E</b>	<b>F2019E</b>	<b>F2020E</b>
Less: Shelter assistance reserve utilisation	1,463	1,250	1,250	1,250	<b>Spread Analysis</b>				
<b>Reported Profit (for EPS)</b>	<b>72,964</b>	<b>117,697</b>	<b>89,365</b>	<b>102,960</b>	Avg. Yield on Earning Assets	10.3%	9.8%	9.7%	9.7%
Less: ZCB Impact (net of tax)	4,960	5,845	5,845	5,845	Cost of Earning Assets	7.1%	6.7%	6.6%	6.7%
<b>Modelware PAT</b>	<b>62,552</b>	<b>75,102</b>	<b>83,520</b>	<b>97,115</b>	Net Interest Margin	3.2%	3.1%	3.1%	3.0%
					NIM (with Off B/S Items)	3.0%	2.9%	2.8%	2.8%
<b>Balance Sheet Data</b>					<b>Growth Ratios</b>				
Rs Min (Year end March)	F2017	F2018E	F2019E	F2020E	Net Interest Income	14%	13%	14%	15%
Total Assets (including off B/S)	3,621,854	4,395,301	5,087,047	5,915,856	Non Interest Income	1%	40%	-12%	13%
Loans (including off B/S)	3,384,780	3,979,962	4,656,555	5,448,169	Operating Expenses	10%	10%	10%	10%
Total Earning Assets	3,582,015	4,209,092	4,910,534	5,751,045	Operating Profit	13%	17%	10%	15%
Total Borrowings (On B/S)	2,805,340	3,289,640	3,809,403	4,479,858	Reported Net profit	4%	61%	-24%	15%
Shareholders' Equity (Standalone)	396,454	601,589	687,880	745,973	Modelware Net Profit	11%	20%	11%	16%
No. of shares (EOP, basic)	1,589	1,672	1,708	1,708	EPS (Modelware)	11%	19%	5%	15%
<b>Average Assets</b>	<b>2,962,467</b>	<b>3,546,511</b>	<b>4,194,256</b>	<b>4,861,557</b>	Total Loans (on B/S)	14%	17%	17%	17%
					AUM	16%	18%	17%	17%
<b>Asset Quality</b>	<b>F2017</b>	<b>F2018E</b>	<b>F2019E</b>	<b>F2020E</b>	Total Assets (including off B/S)	19%	21%	16%	16%
Credit Costs (Underlying, bp)	15	12	12	12	<b>Profitability Ratios (Headline)</b>				
Gross NPL's	23,421	34,759	40,668	47,581	Return on Equity	20.2%	17.3%	13.0%	13.5%
Loan Loss Reserve	30,667	50,169	54,694	59,989	Return on Assets	2.1%	2.1%	2.0%	2.0%
Gross NPL Ratio	0.8%	1.0%	1.0%	1.0%	Core ROE	18.7%	19.2%	17.6%	17.4%
Coverage Ratio (including all loan related provisions)	131%	144%	134%	126%	<b>Efficiency</b>				
<b>Capital Ratios</b>	<b>F2017</b>	<b>F2018E</b>	<b>F2019E</b>	<b>F2020E</b>	Cost Income Ratio	7.4%	7.0%	6.9%	6.6%
Tier 1 Ratio	11.8%	11.8%	13.2%	13.3%	Expenses/average assets	0.3%	0.3%	0.2%	0.2%
Tier 2 Ratio	2.7%	2.5%	2.5%	2.5%					
Capital Adequacy ratio	14.5%	14.3%	15.7%	15.8%					

Source: Company Data, Morgan Stanley Research; E=Morgan Stanley Research Estimates

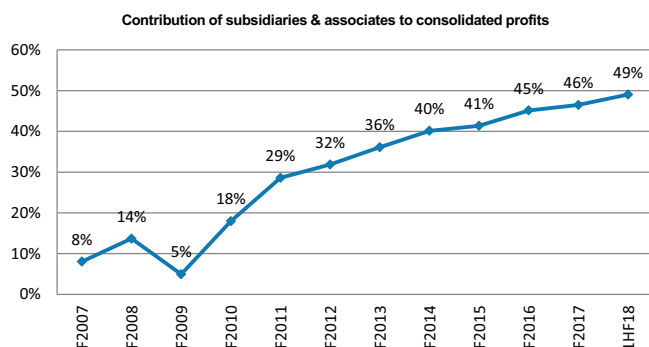
Source: Company Data, Morgan Stanley Research; e: Morgan Stanley Research estimates

## Investment Thesis

**Over the past 12-24 months, HDFC's stock price has been up in absolute terms but has lagged Bankex, and especially HFCs, NBFCs and diversified financials, which have delivered much stronger returns.** The stock is up 38% since both December 2016 and December 2015 vs. 40% and 50% for Bankex, respectively. Other HFCs, NBFCs and diversified financials have delivered much stronger returns. This is despite significant value creation at major subsidiaries and associates over the past two years via:

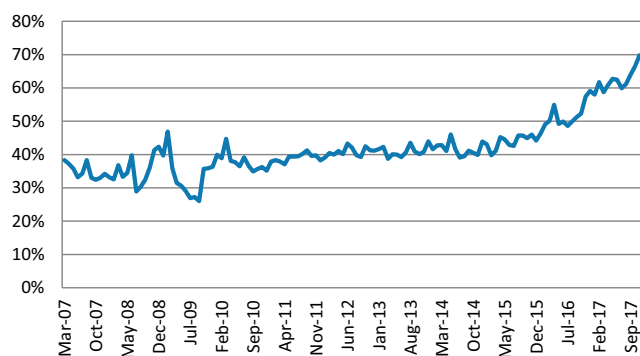
- a) Listing of HDFC Life in November 2017 – current market capitalization of ~Rs848bn vs. previous deal valuation of Rs209bn in December 2014, when Premji investments bought a 0.95% equity stake for Rs1.99bn.
- b) Strong stock performance at listed subsidiaries and associates (HDFC Bank and Gruh Finance are up 72% and 83%, respectively, since December 2015).
- c) Strong listing of peers in 2017 at premium valuations in other businesses (asset management and general insurance) where HDFC subsidiaries have been delivering top-quartile growth and profitability.

**Exhibit 2:** Contribution of subsidiaries and associates to consolidated profits has risen to almost 50%, on our computations\*\*



Source: Company Data, Morgan Stanley Research Estimates. \*\*We compute this as (1 - core business profits / consolidated profits). We adjust consolidated profits for ZCB costs and large extraordinary capital gains. Core business profits = Reported standalone profits minus ZCB costs minus dividends from subsidiaries and associates.

**Exhibit 3:** We estimate that aggregate valuation of subsidiaries and associates – both listed (at CMP) and unlisted (our estimate), without applying a holdco discount, has risen to almost 70% of entity valuation (at CMP)



Source: Company Data, Morgan Stanley Research Estimates

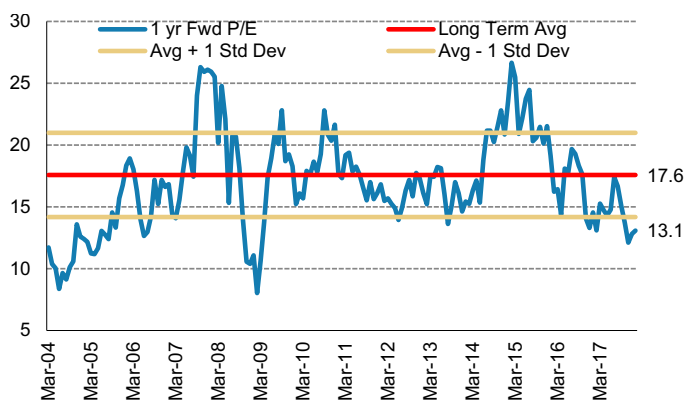
**Implied valuation of the core business (adjusted for investments in subsidiaries and associates) has derated significantly.**

**Methodology:** The core business includes largely the mortgage business and non-subsidiary/associate equity investments (financial investments) that the company keeps making over time. We exclude the market valuation of stakes in listed subsidiaries/associates and our valuation of stakes in unlisted subsidiaries/associates from HDFC's market price. Correspondingly, from EPS, we deduct income from subsidiaries/associates (dividends, capital gains on stake sales) and from book value, we deduct book value of investments in subsidiaries and associates.

We have factored in HDFC's announced equity issuance of Rs130bn and its participation (Rs85bn) in HDFC Bank's announced capital raise (of Rs240bn), based on exchange filings. Further, we have set aside ~US\$1bn (Rs65bn) for investments in future opportunities (which we value at 1x book value) as HDFC is carrying significant excess capital on our computations and in its exchange filings, it has mentioned that it is exploring opportunities in health insurance, acquisition and resolution of stressed assets in real estate and will need capital to sponsor funds it has set up to invest in equity and mezzanine debt of affordable housing projects.

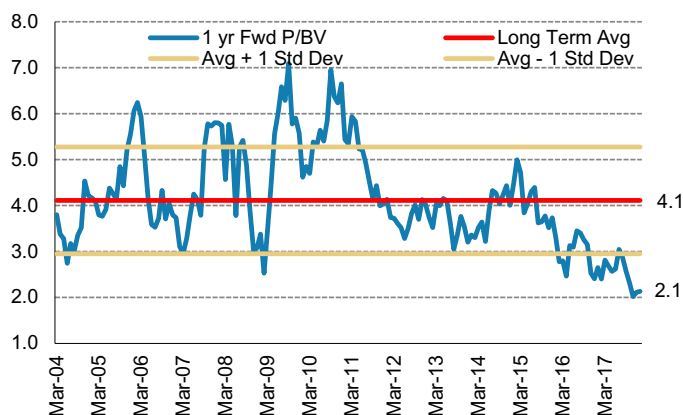
We note that the core business valuation multiples are below long-term (10-year) averages both on P/E and P/B metrics.

**Exhibit 4:** HDFC One-year forward core P/E (adjusted for investments in subsidiaries and associates) – without building in any holdco discount



Source: Company Data, Morgan Stanley Research Estimates

**Exhibit 5:** HDFC One-year forward core P/B (adjusted for investments in subsidiaries and associates) – without building in any holdco discount

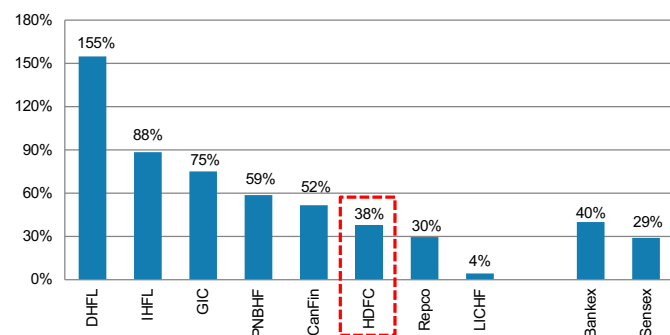


Source: Company Data, Morgan Stanley Research Estimates

This is even as HFC stocks did very well in 2017 and valuation multiples re-rated significantly amid news flow on government initiatives to boost affordable housing in India.

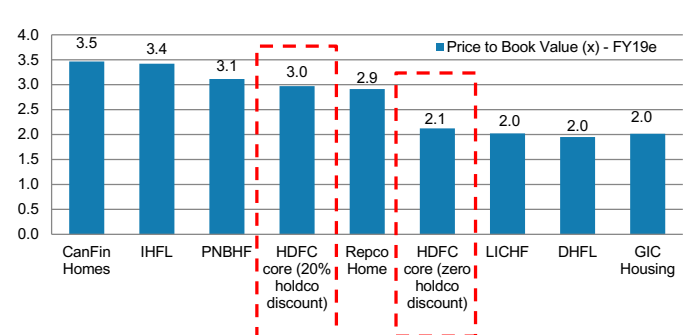
In fact, even in absolute terms, HDFC's core valuation multiples are lower than some of the peer HFCs.

**Exhibit 6:** HFCs: Last 12 months stock performance



Source: Thomson Reuters, Morgan Stanley Research

**Exhibit 7:** HFCs: 1 Yr Fwd P/BV (FY19e)



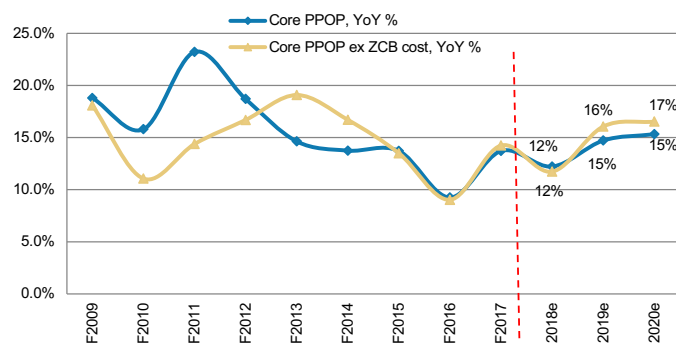
Source: Thomson Reuters, Bloomberg, Company data, Morgan Stanley Research (e) estimates. Note: Bloomberg consensus estimates are used for CanFin Homes, GIC Housing, DHFL, Repco.

**What could explain the derating?**

**a)** Both earnings growth and return ratios have considerably moderated over the years. This has been driven by a combination of factors – gradual shift in loan mix towards individual loans, lower leverage, lower capital gains from sale of financial investments as a proportion of assets, etc.

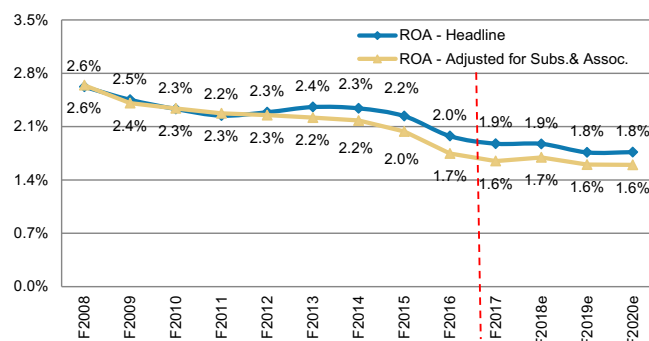
However, we note that relative to ROE, P/B (F2019) still screens vis-à-vis other HFCs.

**Exhibit 8:** Core PPOP growth at HDFC has slowed in recent years; We expect gradual improvement over next couple of years



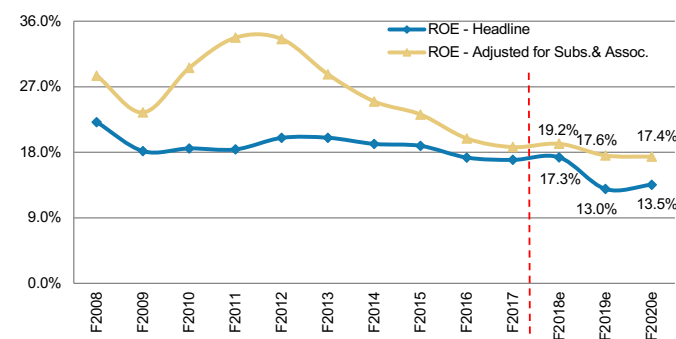
Source: Company data, Morgan Stanley Research (e) estimates. Core PPOP = Nil + Fee + Other Income - Operating Costs

**Exhibit 9:** ROA has also moderated over the years...



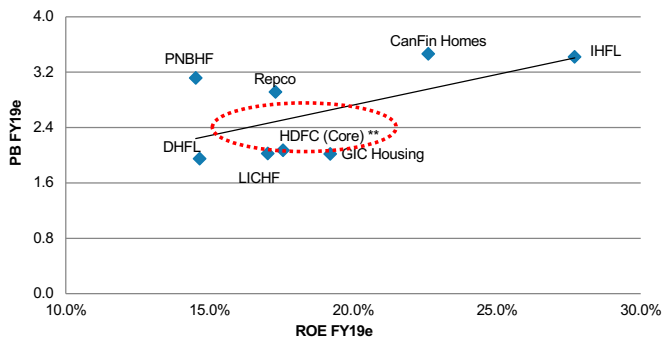
Source: Company data, Morgan Stanley Research (e) estimates.

**Exhibit 10:** ...and so has ROE



Source: Company data, Morgan Stanley Research (e) estimates.

**Exhibit 11:** However, on P/BV (F2019e) vs. ROE (F2019e), HDFC core business valuation\* screens attractive relative to peers



Source: Thomson Reuters, Bloomberg, Company data, Morgan Stanley Research (e) estimates. Note: Bloomberg consensus estimates are used for Canfin Homes, GIC Housing, DHFL, Repco. \*This is computed applying no hold co discount to value of subsidiaries and associates.

**b)** Another likely factor is that market could have started ascribing a holding company discount to the valuation of its subsidiaries and associates, as commentary around listing many of these started increasing. However, as we see in Exhibit 12 below, we note that even if we applied a 20% holdco discount, the resultant one-year forward core P/E is at long-term average and core P/B is at one standard deviation below mean and below some of the peer HFCs.

**Exhibit 12: Implied valuation of core business at various assumed levels of holding company discount**

CMP (Rs per share)	1,741					
Valuation of Subs & Assoc at CMP ** (Rs per share)	1,190					
Holding Company Discount	0%	10%	20%	30%	40%	50%
Valuation of Subs & Assoc post Hold Co Discount (Rs per share)	1,190	1,071	952	833	714	595
Implied Core Business Valuation (Rs per share)	551	670	789	908	1,027	1,146
<b>Core P/E</b>						
F19e	13.0	15.8	18.6	21.4	24.2	27.0
F20e	11.3	13.7	16.1	18.6	21.0	23.4
<b>Core P/B</b>						
F19e	2.1	2.5	3.0	3.4	3.9	4.3
F20e	1.8	2.2	2.6	3.0	3.4	3.8

Source: Thomson Reuters, Morgan Stanley Research estimates. \*\*We have valued stakes in listed subsidiaries and associates at current market price and used our valuation for other unlisted ones.

**In our view, valuation is attractive and offers a great entry point for investors.** Based on a sum-of-the-parts valuation, we arrive at March 2019 base-case scenario valuation of Rs2,030 per share, implying ~17% upside from the current market price.

*a) Across stocks in various sectors in India coverage, we observe a holdco discount range of 0-50%. We believe our holding company discount assumption of 20% is fair given:*

- i) An investment in HDFC stock gives a comprehensive exposure to India's financial services growth story via a basket of high-quality stocks, which are top quartile in their respective industries in terms of growth and return ratios. For such investors, it also helps diversify away idiosyncratic risks associated with individual industries.
- ii) Almost all the major underlying assets – bank, life and general insurance, asset management, education loans, property funds, are seeing strong current growth trends or tailwinds.
- iii) Holdco discounts are usually higher where the holding company is a shell company. In the case of HDFC, the holding company's core business accounts for over 40% of overall valuation in our view.

*b) Our valuation of the core business does not build in any rerating from current levels.*

Given the overhang of higher bond yields (which could have a transient impact on spreads and margins until banks raise lending rates) and potential rise in competitive intensity from PSU banks following recapitalization, upside to valuations in the near term could be tough. However, book value compounding itself should help deliver good returns.

Also, unlike many other HFCs, valuations have good margin of safety. Further, HDFC has a strong and consistent track record of growth, profitability and asset quality; and a well diversified loan and borrowing mix which help it better manage volatility in interest rates and competitive environment. Hence, any pickup in loan and revenue growth could result in rerating of core business valuations, given the low starting point relative to history.

**Key downside risks**

*a) Sharply higher interest rates and/or irrational loan pricing from PSU banks resulting in decline in incremental spreads and pressure on NII growth.*

b) Meaningful slowdown in loan growth/loss of market share.

c) Financial sector flows see reversal.

**Exhibit 13:** HDFC: Base-case sum-of-the-parts valuation summary

	Method of Valuation	Book Value / AUM / PAT / EV (Rs bn)	Multiple (P/B / P/E / % of AUM)	Entity Valuation (Rs bn)	% Stake of HDFC Ltd	Stake of HDFC Ltd (Rs bn)	Rs per Share	Hold Co Discount	Post HoldCo Discount	% of Total post HoldCo Discount
Core Mortgage Business	P/B F20	513	3.0x	1,537	100%	1,537	900		900	44.3%
Other Subs / Associates						2,412	1,412			55.7%
HDFC Bank	SOTP F20			6,781	21.7%	1,472	862	20%	689	34.0%
HDFC Life Insurance	Appraisal Value, F20			856	51.7%	441	258	20%	207	10.2%
HDFC ERGO	P/E FY20	5.4	25x	135	50.4%	68	40	20%	32	1.6%
HDFC AMC	% of AUM F20	4,632	7.5%	347	57.4%	199	117	20%	93	4.6%
Gruh Finance	MCAP			183	58.0%	106	62	20%	50	2.5%
Property Fund	% of Funds Sep-17	100	10.0%	10	100%	10	6	20%	5	0.2%
Credila	P/E FY20	1.8	30x	55	90%	50	29	20%	23	1.1%
Other New Investments / Capital Set Aside	1.0x Book Value	65	1.0x	65	100%	65	38	20%	30	1.5%
Less: HoldCo Discount @	20%					482	282			
Overall valuation						3,467	2,030			

Source: Morgan Stanley Research estimates. % stake in HDFC Bank accounts for equity issuance by the bank..

**Exhibit 14:** HDFC: Sensitivity of our base-case SOTP valuation to target P/B multiple and holdco discount

Core BVPS F20e (Rs)	300
Value of Subs (Rs)	1,412
CMP (Rs)	1,741

HDFC Valuation Per Share (Rs)	F20e P/B					
Holding Co Discount	2.0x	2.3x	2.5x	2.8x	3.0x	3.5x
0%	2,012	2,087	2,162	2,237	2,312	2,462
10%	1,871	1,946	2,021	2,096	2,171	2,321
15%	1,800	1,875	1,951	2,026	2,101	2,251
20%	1,730	1,805	1,880	1,955	2,030	2,180
25%	1,659	1,734	1,809	1,884	1,959	2,109
30%	1,589	1,664	1,739	1,814	1,889	2,039

HDFC % Upside to PT from CMP	F20e P/B					
Holding Co Discount	2.0x	2.3x	2.5x	2.8x	3.0x	3.5x
0%	16%	20%	24%	29%	33%	41%
10%	7%	12%	16%	20%	25%	33%
15%	3%	8%	12%	16%	21%	29%
20%	-1%	4%	8%	12%	17%	25%
25%	-5%	0%	4%	8%	13%	21%
30%	-9%	-4%	0%	4%	8%	17%

Source: Morgan Stanley Research estimates



## Investment Positives and Concerns

### Positives

**1. Quality diversified financial services play:** HDFC has a great track record in seeding and monetizing both strategic and financial stakes. The stock is a good way to comprehensively invest in the financial services sector growth story via quality franchises. This also helps lower the idiosyncratic risks associated with investing in individual stocks, especially when at expensive valuations. News flow around utilization of capital raise proceeds and the proposed IPO of AMC (announced by the company, see [link](#)) could prove catalysts for upside in the stock price.

**2. Strong mortgage lending franchise:** In the core mortgage business, a well-diversified loan and borrowing mix position HDFC much better than other HFCs. HDFC is one of the few HFCs with a deposit accepting license and has also utilized it extensively (deposits form 30% of borrowings). HDFC is one of the lowest cost producers of mortgages – its cost of funds (on outstanding borrowings) is the lowest among HFCs and cost of operations is also one of the lowest. HDFC has a strong track record with respect to asset quality. It has much lower exposure to LAP and self employed home loans relative to peers. It has also lowered the share of non-individual loans, mainly corporate term loans in overall AUM in recent years. Further, RERA is positive for lenders with strong quality controls as their addressable market grows. Thus there is scope to take risk and improve spreads as the environment improves. Relative valuation (both vs. its own history and peer HFCs) is attractive which provides margin of safety in a tough environment for HFCs.

**3. Stock to own during flight to safety:** HDFC stock is normally viewed as a relatively safe haven by investors in tough markets. The fact that equity markets have had a strong run in 2017, coupled with attractive valuation at HDFC, make now a good entry point in our view.

### Concerns

**1. Wholesale borrowing costs go up sharply without much corresponding change in bank lending rates.** We have already seen this happen in recent months, which has compressed incremental spreads. If this sustains for much longer, loan spreads and NII growth could come under significant pressure.

**2. Potential further competitive intensity (irrational pricing) by PSU banks in home loans.** This could be a concern in the aftermath of PSU bank recapitalization and coupled with rising rates can be extremely negative for loan spreads/margins.

**3. Any potential adverse impact on account of IND AS, etc.** There is still not much clarity on the likely impact, but if provisioning on a steady-state basis were to rise (given the extremely low base of annual provisioning), there could be some negative implications for the stock at least initially. Over a period of time, investors could separate the accounting impact from the economic impact (which should be negligible since write-offs don't change).

## Book Value and Valuation Walk-through

*In this section, we lay out in detailed tables the impact of recent announcements by HDFC on book value and earnings and also our assumptions and methodology of computation of core earnings, book value and valuations.*

### **Key effects that we have built in our numbers:**

*a) Capital gains on recent sale of stake in HDFC Life as part of the IPO. As per exchange filings, HDFC will book a gain of Rs52.5bn in F3Q18 of which it will allocate 30%, i.e., Rs15.75bn towards provisions and contingencies as it usually does when it earns large capital gains.*

*b) Capital gains on sale of stake in CAMS and sale of HDFC Realty and HDFC Developers to Quikr. This should result in ~Rs5.7bn of capital gains which we have assumed will be booked in F4Q18.*

*c) Proposed equity issuance of Rs130bn and investment of Rs85bn in HDFC Bank. For purposes of core mortgage business book value and Tier I computation, we completely deduct the Rs85bn investment in HDFC Bank.*

*d) Capital infusion from conversion of warrants by October 2018. In October 2015, HDFC had issued optional convertible warrants along with an NCD issuance. The warrants are due for exercise by October 2018 at an exercise price of Rs1,475 which is ~14% below HDFC's CMP of Rs1,741. Hence, we have assumed that these warrants would get converted, resulting in an increase in share count by 36.5mn shares and in book value by Rs53.8bn.*

*e) We have not currently built in our numbers any capital gains from sale of stake in HDFC AMC in proposed IPO in F2019. HDFC has a stake of 57.4%. It is unclear as of now as to how much stake HDFC Ltd. will be selling in the IPO – [media articles](#) have stated from 5.0% to 7.4%. In our SOTP (see price target discussion section for details), we have valued the company at ~Rs350bn. To assess the impact on standalone book value and Tier I ratio, one would also have to allocate 30% of capital gains to provisions and contingencies and also additional dividends. Accordingly impact on standalone Tier I ratio could be 20-30bp on F2020 RWA, we estimate.*

*f) We have set aside capital of Rs65bn for likely new investments. Following the above adjustments, we find that HDFC will be carrying significant surplus capital in a year from now. HDFC in its exchange filings has announced that it will be looking to invest in the health insurance space via HDFC Ergo and will also require capital for sponsoring funds in the distressed real estate assets space and affordable housing space. Hence, we have set aside ~US\$1bn or Rs65bn of capital for new investments in our numbers.*

Net of all adjustments, we compute that even as of March 20, 2020, HDFC will be carrying a Tier I ratio of 13%+ (this is based on our assumptions and subject to the company's investment plans).

**Exhibit 15:** HDFC standalone book value: Expected movement over next three years and summary of key driving components.

Flow of Standalone Headline Net Worth (Rs bn)	F2018e	F2019e	F2020e	Cumulative F18e-20e
Opening Book Value	396	602	688	396
Add: PAT (pre-exceptionals) **	75	84	97	256
Add: Exceptional Items (post tax)	37	0	0	37
Capital gains on stake sale (HDFC Life (F18)	53			
Less: Provision for contingencies	(16)			
Add: Capital Raise	130	54	0	184
F18 - Equity issuance for which board approval has been sought	130			
F19 - Warrant Conversion		54		
Less: Dividends paid (including tax)	(37)	(51)	(39)	(127)
<b>Closing Book Value</b>	<b>602</b>	<b>688</b>	<b>746</b>	<b>746</b>

Source: Company Data, Morgan Stanley Research (e) Estimates. \*\* Deductions through reserves like ZCB costs and transfer to shelter assistance reserve

**Exhibit 16:** HDFC Share count: Expected movement over next three years

Outstanding Shares (mn)	F2018e	F2019e	F2020e
<b>Opening (Basic)</b>	<b>1,589</b>	<b>1,672</b>	<b>1,708</b>
Add: Issuance	83	37	0
<b>End of Period (Basic)</b>	<b>1,672</b>	<b>1,708</b>	<b>1,708</b>
Average Sharecount (Basic)	1,595	1,690	1,708
Average Sharecount (Diluted)	1,608	1,703	1,721

Source: Company Data, Morgan Stanley Research (e) estimates.

**Exhibit 17:** HDFC Tier I ratio: Expected movement over next three years and summary of key driving components.

Tier I ratio evolution (numbers in Rs bn)	F2018e	F2019e	F2020e	Total	As % of F20 RWA
<b>Opening Tier I Capital</b>	<b>300</b>	<b>355</b>	<b>441</b>	<b>300</b>	<b>8.0%</b>
Add: PAT (pre-exceptionals) **	75	84	97	256	6.8%
Add: Exceptional Items (post tax)	37	0	0	37	1.0%
Add: Capital Raise	130	54	0	184	4.9%
(Less): Dividends paid (including tax)	(37)	(51)	(39)	(127)	-3.4%
(Less) Investments	(150)	0	0	(150)	-4.0%
In HDFC Bank issuance	(85)			(85)	-2.3%
Others (Health Insurance / Real Estate Fund etc.) - Assumption	(65)	0	0	(65)	-1.7%
<b>Closing Tier I Capital</b>	<b>355</b>	<b>441</b>	<b>499</b>	<b>499</b>	<b>13.3%</b>
<b>Tier I Ratio</b>	<b>11.8%</b>	<b>13.2%</b>	<b>13.3%</b>	<b>13.3%</b>	
RWA	3,001	3,334	3,744	3,744	
% YoY	18%	11%	12%		
RWA / Assets	68%	66%	63%		

Source: Company Data, Morgan Stanley Research (e) estimates. \*\* Deductions through reserves like ZCB costs and transfer to shelter assistance reserve

**Exhibit 18:** HDFC: Computation of core business metrics and valuation

	MCAP (Rs bn)	% Stake	Stake (Rs bn)	Per Share (Rs)
<b>HDFC Ltd.</b>	<b>2,777</b>		<b>2,777</b>	<b>1,741</b>
<b>Less: Value of Subs &amp; Associates</b>				
HDFC Bank (@ CMP)	5,047	21.7%	1,095	641
HDFC Life (@ CMP)	848	51.7%	438	257
Gruh Finance (@ CMP)	183	58.0%	106	62
Other Unlisted Subsidiaries			392	230
Total value of stakes (pre hold co discount)			2,032	1,190
Hold Co Discount @		20.0%	406	238
<b>Total value of stakes (post hold co discount)</b>			<b>1,626</b>	<b>952</b>
<b>HDFC Ltd. Core Price (@20% hold co discount)</b>			<b>1,151</b>	<b>789</b>
<b>HDFC Ltd. Core Price (@zero hold co discount)</b>			<b>745</b>	<b>551</b>
<b>Rs bn</b>	<b>FY17</b>	<b>FY18e</b>	<b>FY19e</b>	<b>FY20e</b>
HDFC Standalone Book Value	396	602	688	746
Less: Investments in Subs & Assoc	83	233	233	233
<b>HDFC Core Book Value</b>	<b>313</b>	<b>368</b>	<b>455</b>	<b>513</b>
HDFC Reported Standalone PAT	73.0	117.7	89.4	103.0
Less: Exceptionals (Post tax)	5.5	36.8	0.0	0.0
ZCB Interest cost	5.0	5.8	5.8	5.8
Dividends from Subs & Assoc	9.1	10.0	11.5	13.3
<b>HDFC Core PAT</b>	<b>53.5</b>	<b>65.1</b>	<b>72.0</b>	<b>83.8</b>
ROE (Headline)	17.0%	17.3%	13.0%	13.5%
ROE (Core)	18.7%	19.2%	17.6%	17.4%
HDFC Standalone BVPS (Headline)	250	360	403	437
HDFC Standalone BVPS (Core)	197	220	266	300
HDFC Standalone EPS (Headline)	39.2	46.7	49.0	56.4
HDFC Standalone EPS (Core)	33.6	40.6	42.4	48.9
<b>Valuations</b>	<b>FY17</b>	<b>FY18e</b>	<b>FY19e</b>	<b>FY20e</b>
<b>P/B</b>				
Headline	7.0	4.8	4.3	4.0
– Core (@20% hold co discount)	4.0	3.6	3.0	2.6
– Core (@ zero hold co discount)	2.8	2.5	2.1	1.8
<b>P/E</b>				
Headline	44.4	37.3	35.5	30.9
– Core (@20% hold co discount)	23.5	19.4	18.6	16.1
– Core (@ zero hold co discount)	16.4	13.6	13.0	11.3

Source: Company Data, Morgan Stanley Research (e) estimates. \*\* Deductions through reserves like ZCB costs and transfer to shelter assistance reserve

## A Discussion on the Core Mortgage Business

### 1. Top down, we believe 2018 is more likely to be a challenging year for HFCs' fundamentals and stock performance.

*a) Surplus liquidity following demonetization has normalized. This, along with other factors (fiscal worries, crude oil prices), have resulted in sharp spike in government bond yields and market borrowing rates in recent months.*

In the normal course of business, HFCs fund themselves primarily in the bond market – at least to the extent of their home loan book, if not more. Thus, HFCs primarily run fixed-rate liability books and floating-rate asset books. Further, in a typical rate cycle, market borrowing rates move first and bank deposit and lending rates move with a lag. Thus, HFCs will be at a disadvantage early on, since their spreads on new business will be under pressure owing to higher bond borrowing costs even as bank MCLR and hence home loan rates remain unchanged. Later in the cycle, as banks start increasing lending rates, loan spreads for HFCs improve as their back books (which are floating rate) reprice higher.

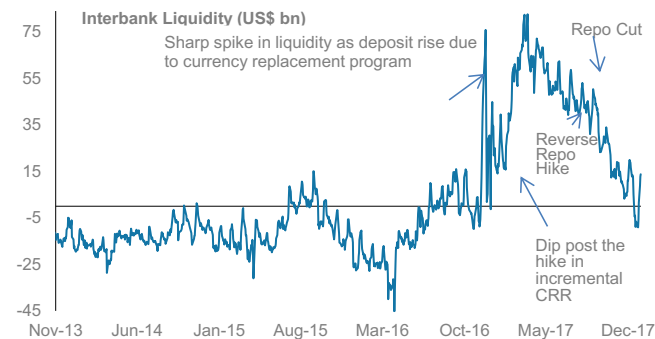
*b) Overhang of risk of irrational competition from PSU banks*

A key concern is that PSU banks, following recapitalization could get more aggressive on large ticket retail loans like home loans and LAP. We note that PSU banks have been aggressive in home loans even in recent years ever since the corporate cycle started slowing and yet have been unable to take market share away from HFCs. However, the concern is that if they get irrational on loan pricing in order to get volumes, which has been the strategy all this while, it can severely hurt profitability at HFCs even if not market share, as HFCs are price takers. The impact could be magnified on incremental spreads in the transient periods where there is also pressure from funding costs (bond yields) going up.

*c) Affordable housing finance initiatives' impact will take time to show up as supply will take time to kick in.*

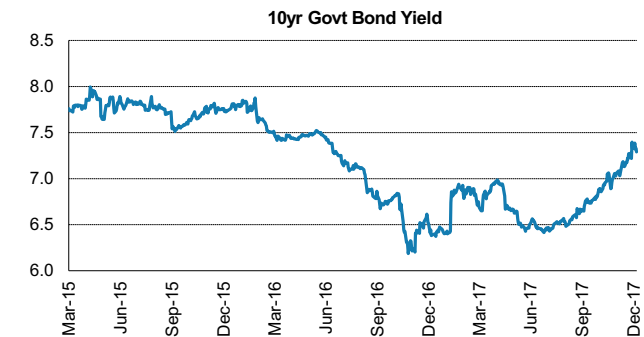
Stocks of HFCs (especially small and medium sized ones) did well in 2017 driven by news flow around government initiatives to boost affordable housing. However, as also acknowledged and reiterated by all market participants (HFCs, developers, regulators), while these initiatives will boost long term growth, near term growth is unlikely to be meaningfully impacted.

**Exhibit 19:** Liquidity in the financial system has normalized from a significant surplus situation following demonetization



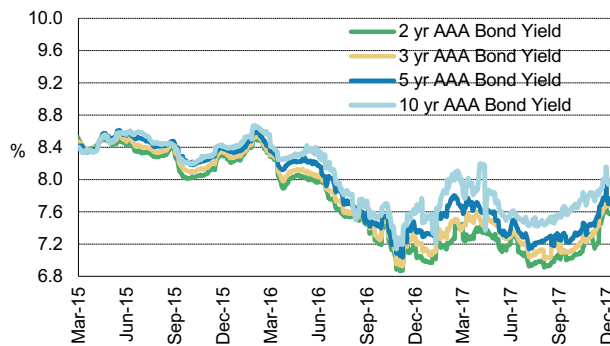
Source: CEIC, RBI, Morgan Stanley Research

**Exhibit 20:** 10 year government bond yields have moved up ~90bp from the lows



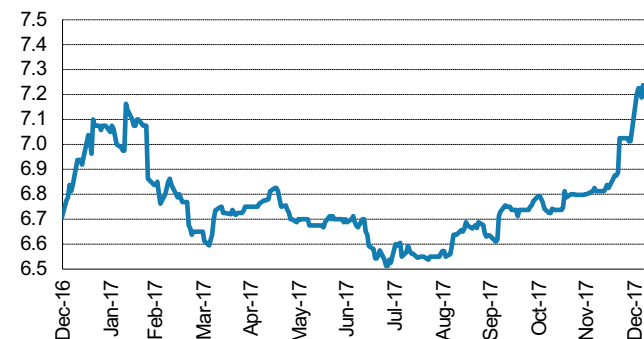
Source: Bloomberg, Morgan Stanley Research

**Exhibit 21:** AAA corporate bond yields have also moved higher across tenors by 50-70bp from the lows



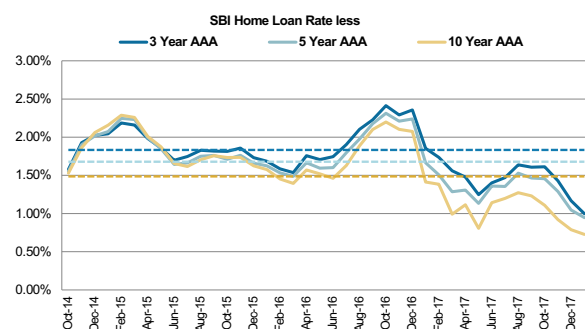
Source: Bloomberg, Morgan Stanley Research

**Exhibit 22:** Short-term borrowing rates – Three-month commercial paper yields are also ~70bp higher



Source: Bloomberg, Morgan Stanley Research

**Exhibit 23:** Incremental spreads on "prime home loans" have come under significant pressure since the beginning of 2017, such that ROE barely meets cost of equity on new home loans at HFCs



Source: Bloomberg, Company Data, Morgan Stanley Research

As mentioned earlier, incremental home loan spreads on prime home loans are down significantly and at these spreads, HFCs are barely meeting cost of equity on new loans even assuming high double-digit leverage. However, we note that incremental spreads can be quite volatile and there is an element of seasonality in 2H of every financial year that causes liquidity to tighten and interest rates to move up. Coping measures for HFCs in 2018 will be increase the share of non individual loans or within individual loans increase the share of higher yielding products like home loans to the self employed segment, loan against property and home improvement loans, etc.

2. Against this backdrop, among HFCs, risk reward at HDFC is appealing given quality franchise at cheaper valuations.

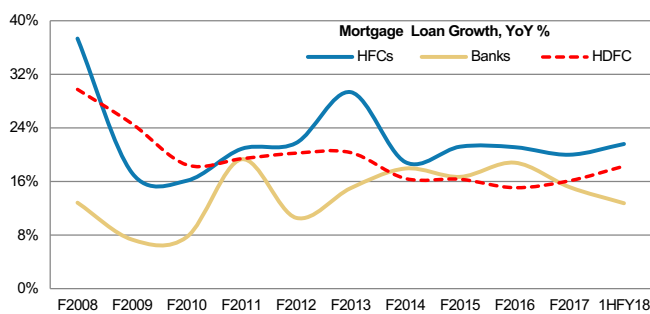
We cite few points below that highlight how HDFC has a much more stable franchise relative to other HFCs.

a) Steady high teens loan growth and market share trends over the years.

HDFC has historically focused on the salaried home loan segment and competes with the banks in this segment. Despite intense competition from the banks, HDFC has not lost market share in any meaningful way and has consistently delivered high teens home loan growth.

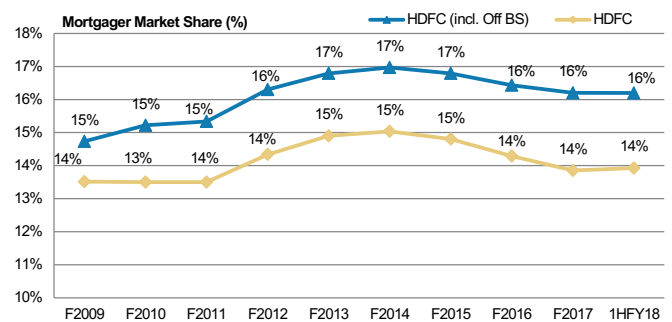
Further over the past five years, individual portfolio has recorded a CAGR of 18%, non-individual portfolio has a 13% CAGR and overall AUM has a 16% CAGR. As a result, share of individual AUM in overall AUM has gone up to 72%.

**Exhibit 24:** HDFC's individual loan growth has been consistently in high teens and higher than banking system home loan growth in most years



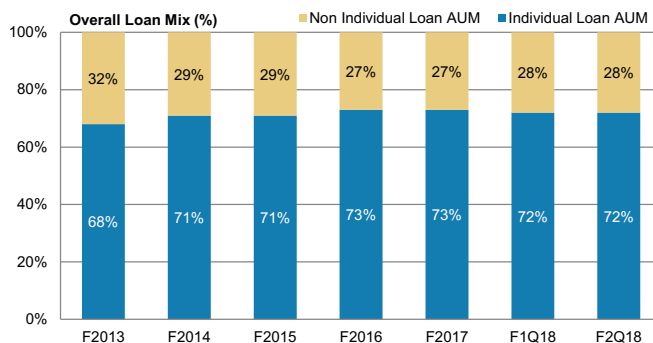
Source: RBI, NHB, Morgan Stanley Research

**Exhibit 25:** HDFC's home loan market share has been relatively steady in high teens over the years



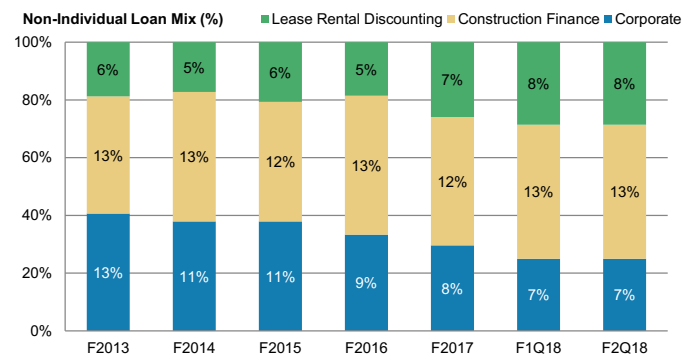
Source: RBI, NHB, Company data, Morgan Stanley Research

**Exhibit 26:** HDFC AUM Mix: Share of individual loans has gone up over the years



Source: Company Data, Morgan Stanley Research

**Exhibit 27:** Non Individual AUM Mix: Share of corporate credit has been managed down and has made way for lease rental discounting



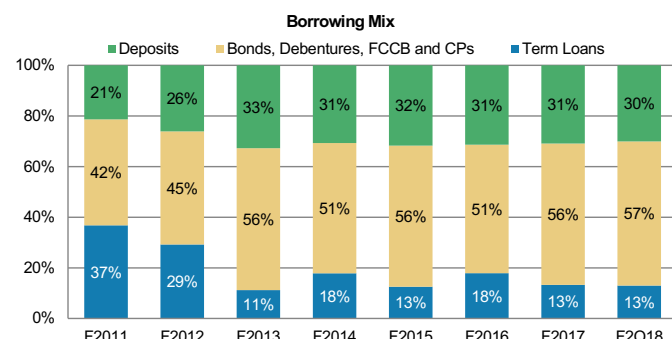
Source: Company Data, Morgan Stanley Research

b) Diversified borrowing mix and good treasury management with lowest cost of funds. Further low operating costs make it among the lowest cost producer of home loans enabling it to compete with the banks too.

HDFC is a AAA-rated entity and hence its market borrowing costs (bonds and commercial paper) are among the lowest. Further, it is among the few HFCs which has a license to access term deposits and also uses this source (30% of on balance sheet funding). HDFC also prudently uses securitization and interest rate derivatives to manage its asset liability and interest rate mismatches. As a result, over the years and through interest rate cycles, HDFC has been able to stay competitive and also maintain

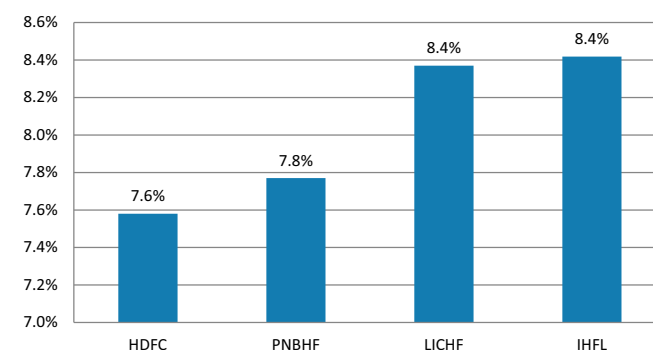
its loan spreads in a tight range.

**Exhibit 28:** On balance sheet borrowing mix: HDFC runs a very diversified book



Source: Company data, Morgan Stanley Research

**Exhibit 29:** Reported cost of funds on outstanding borrowings across leading HFCs: HDFC screens the lowest



Source: Company Data, Morgan Stanley Research. Note: Cost of Funds for IHFL has been annualized.

c) Optimum balance between risk profile of loan mix and loan spreads.

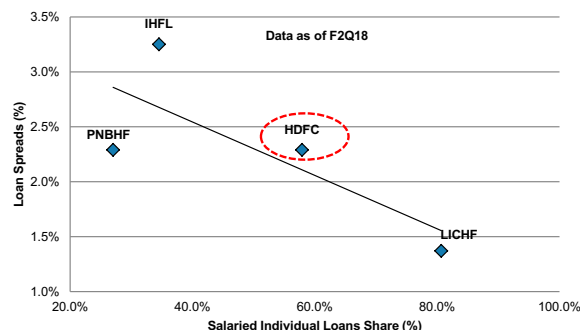
We also notice that HDFC runs a very balanced risk reward profile with respect to loan mix vs. loan spread vis-à-vis other leading HFCs. While it runs a relatively lower risk with respect to exposure to self employed home loans, LAP and non individual segments, loan spreads are better than some of the HFCs with a riskier profile; for instance, PNBHF, which runs a 60:40 housing:non housing mix and also a much higher share of loans to self employed segments.

**Exhibit 30:** AUM Mix: Comparison of leading HFCs

Loan Mix, F2Q18	PNBHF	HDFC	LICHF	IHFL
Individual**	80%	72%	96%	78%
-o/w Self-Employed	53%		15%	44%
-Housing	59%		83%	58%
-Self-Employed	32%		12%	23%
-LAP	16%		13%	21%
-Self-Employed	16%		4%	21%
-Non Residential Premises	5%			
-Self-Employed	5%			
Non Individual**	20%	28%	4%	22%
-LRD	4%	8%		
-Construction Finance	12%	13%	4%	
-Corp. Term Loans	4%	7%		21%
-Others				0%
Total	100%	100%	100%	100%

Source: Company data, Morgan Stanley Research

**Exhibit 31:** Loan spread vs. risk profile: Comparison of leading HFCs

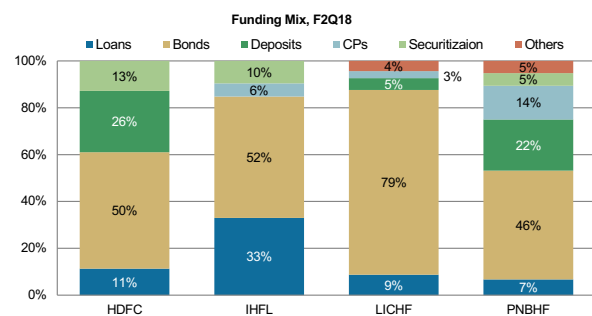


Source: Company data, Morgan Stanley Research

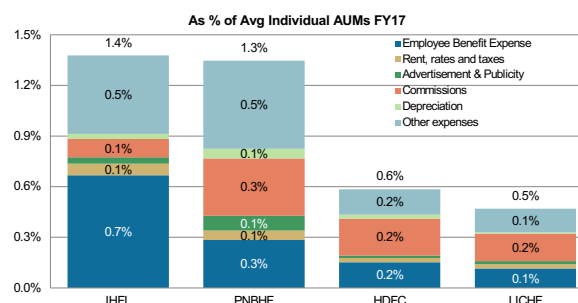
d) In addition to being efficient with respect to borrowing mix and cost of funds, HDFC also has one of the lowest cost of operations.

As we see in the charts below, HDFC's cost ratios have kept improving year-on-year with increasing scale.

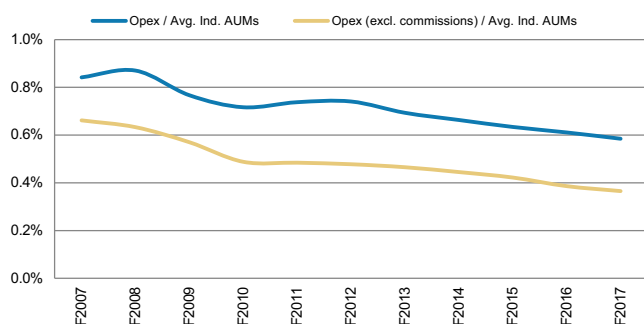


**Exhibit 32: Funding Mix: Comparison of leading HFCs**


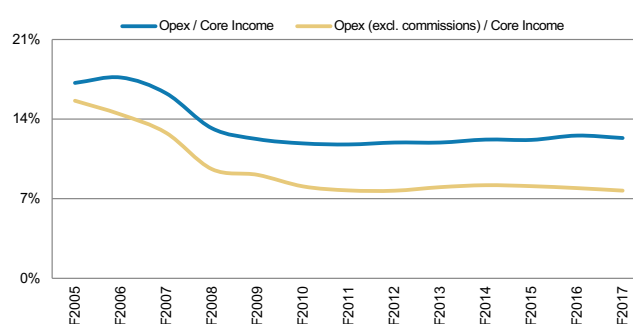
Source: Company data, Morgan Stanley Research; e = Morgan Stanley Research estimates

**Exhibit 33: Operating cost structure: Comparison of leading HFCs**


Source: Company data, Morgan Stanley Research

**Exhibit 34: HDFC: Cost/average individual AUM trend**


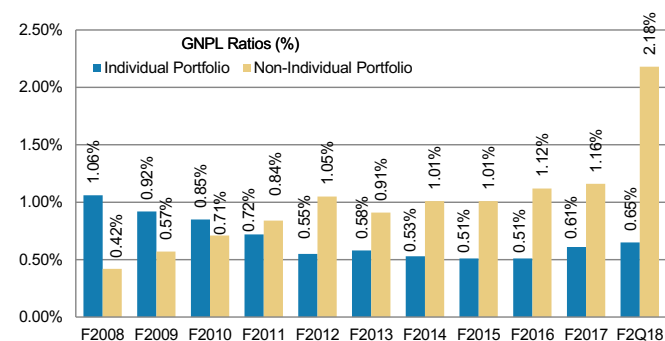
Source: Company data, Morgan Stanley Research

**Exhibit 35: HDFC: Cost/income trend**


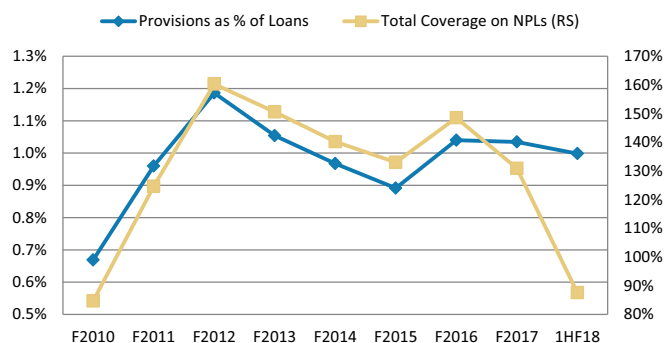
e) Strong asset quality track record, conservative provisioning policy and adequate provisioning cover

HDFC's individual loan GNPL ratio has remained low for many years. The non individual home loan portfolio saw a spike in NPLs recently owing to delinquency in one large corporate term loan. HDFC, however, has provisioned adequately for this exposure, per the company. Further, it also has policy of setting aside 30% of one-time large capital gains for provisioning. Presently, it runs a provisioning cover of just under 100%. We estimate provisioning cover to be >140% by March 2018 following additional provisions that the company will make from the capital gains from sale of its stake in HDFC Life as part of the listing in November 2017.

Also, HDFC has further de-risked its book by going slow on non-individual loans in the last five years and within that lowering the share of corporate term loans and increasing the share of lease rental discounting which is relatively much safer from an asset quality perspective. Based on our discussions with management, we understand that the share of self-employed segment in individual loans is in high teens (much lower than at peers) and share of LAP in overall loans is also in single digits (again much lower than at peers). Thus the risk profile is much safer vis-à-vis peers in our view.

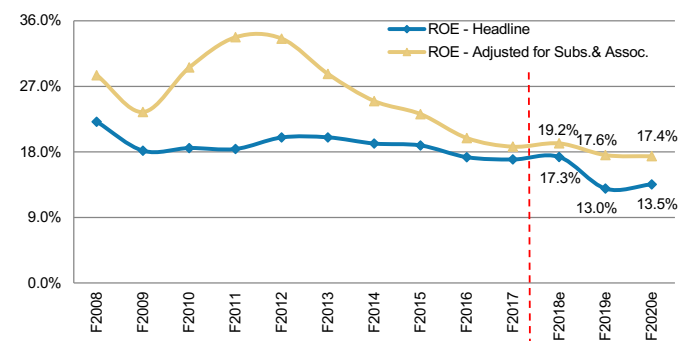
**Exhibit 36: HDFC: Individual vs. non-individual GNPL ratio**


Company data, Morgan Stanley Research

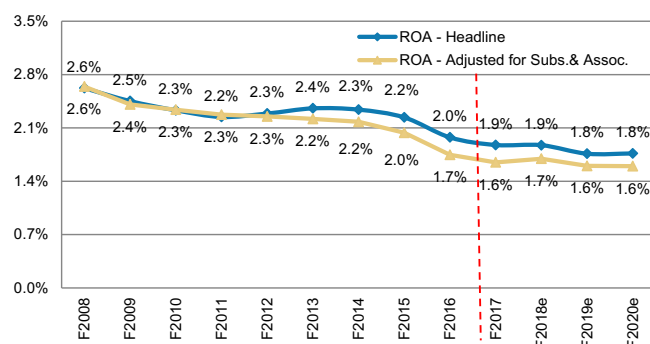
**Exhibit 37: HDFC: Total loan loss provisioning cover and as a proportion of loans**


Company data, Morgan Stanley Research

f) Return ratios have moderated over the years but ROE is still in high teens.

**Exhibit 38: Return Ratios – RoE**


Source: Company data, Morgan Stanley Research (e) estimates. Note: RoA and RoE are adjusted for value of all subsidiaries and associate investments

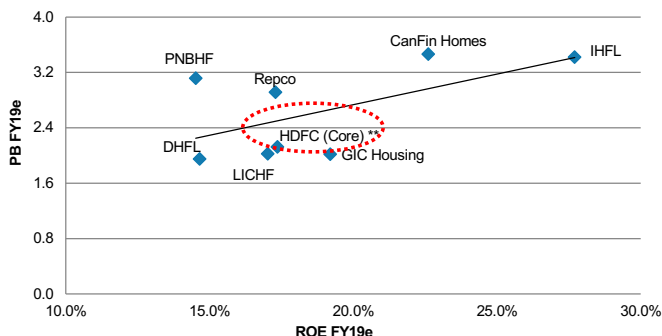
**Exhibit 39: Return Ratios – RoA**


Source: Company data, Morgan Stanley Research (e) estimates. Note: RoA and RoE are adjusted for value of all subsidiaries and associate investments

g) Yet valuations are at a discount to many HFCs...

**Exhibit 40: HFCs: 1 Yr Fwd P/BV (FY19e)**


Source: Thomson Reuters, Bloomberg, Company data, Morgan Stanley Research (e) estimates. Note: Bloomberg consensus estimates are used for Canfin Homes, GIC Housing, DHFL, Repco.

**Exhibit 41: HFCs: 1 Yr Fwd P/BV vs ROE (FY19e)**


Source: Thomson Reuters, Bloomberg, Company data, Morgan Stanley Research (e) estimates. Note: Bloomberg consensus estimates are used for Canfin Homes, GIC Housing, DHFL, Repco. \*\*HDFC (core) is computed applying no holding company discount to value of subsidiaries and associates.

## Details of earnings estimates and key drivers

In our view, the key metrics that investors will focus on will be loan spreads and NII

growth.

While rising rates have caused incremental spreads to compress and the risk of irrational loan pricing in mortgages from PSU banks is further negative for margins, we see certain mitigants that could help HDFC. We note that HDFC has much lower exposure to LAP and self employed home loans relative to peers. It has also lowered the share of non-individual loans, mainly corporate term loans in overall AUM in recent years. Further, RERA is positive for lenders with strong quality controls as their addressable market grows. Thus there is scope to take risk and improve spreads as the environment improves.

We have, however, built in some compression in calculated loan spreads and margins. We are forecasting ~17% CAGR in overall AUM over next three years. NII growth has been under pressure in recent years. We are assuming NIM compression, and are building in NII CAGR of 14% over the next three years.

We expect cost control to be good. HDFC will also see some capital gains from sale of stakes in subsidiaries and certain financial investments (per recent announcements). We expect HDFC to strengthen its provisioning base via making additional provisions as it traditionally has.

Overall we forecast Modelware Standalone PAT CAGR F2017-20 of 16%, EPS CAGR of 13% and average ROE of 14.5% with Tier I ratio at 13.5% even as of F2020e (per our assumption of new investments of US\$1bn – i.e., Rs65bn).

We forecast core mortgage business PAT CAGR F2017-20 of 17%, EPS CAGR of 14% and average ROE of 18%.

Please refer to table below for more details.

*IND AS provisions if applicable in F2019 could be the key risk to earnings but we await final guidelines for details.*

Key potential implications of IND AS:

- a)** IND AS will require commission expenses paid on origination of loans as well as fee income earned from customers to be amortized over the life of the loan. Presently, HDFC accounts for these items upfront. Since commission expenses incurred are much higher than fee income charged to retail customers, it could have a slightly positive impact on accounting profits
- b)** Cost of zero coupon bonds will have to be incurred via the P&L. Currently it is being accounted via the reserves as allowed by current regulation. While headline profits could be impacted, we already adjust these to arrive at our ModelWare PAT for the standalone business and also the core mortgage business PAT. Both fundamentally as well as for the stock we do not expect this to have implications as this is known to investors.
- c)** A key implication where there is lack of clarity is provisioning. Per IFRS 9, accounts which display early signs of stress either via overdues or otherwise also need to be provided for. Given that HDFC historically has operated at extremely low (single digit) provisioning through the P&L (and even cumulative write-offs have been under 5bp), it is

unclear if there could be a rise in provisioning on account of IND AS transition. While this could have an initial negative impact from a stock perspective, we believe that on an underlying basis, nothing likely changes as actual end losses / write-offs do not change.

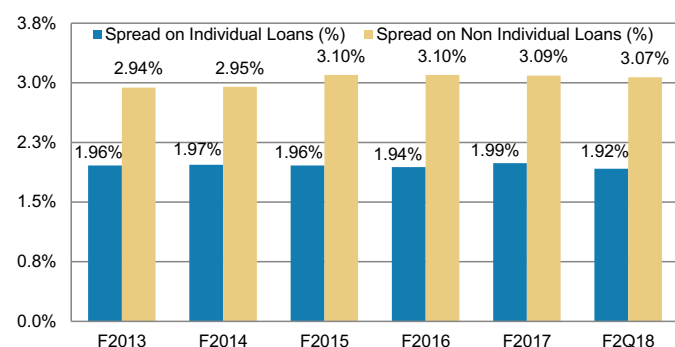
The other adjustment to watch for will be potential additional provisioning on historical book, which would be taken through book value. We lack data or information here, however, we note that HDFC has been carrying provisions in excess of statutory requirements under the existing regime which could help.

**Exhibit 42:** HDFC: Summary of key assumptions and earnings expectations

Summary Table (Key Metrics)	F2017	F2018e	F2019e	F2020e
AUM Growth	16%	18%	17%	17%
Loan Growth	14%	17%	17%	17%
Loan Spread (Computed)	2.1%	2.2%	2.1%	2.1%
NIM (Computed)	3.0%	2.9%	2.8%	2.8%
NII Growth	14%	13%	14%	15%
NII (ex ZCB) Growth	15%	13%	16%	16%
Total Income Growth	13%	17%	10%	15%
Cost / Income Ratio	7.4%	7.0%	6.9%	6.6%
Cost / AUM Ratio	0.27%	0.25%	0.23%	0.22%
Operating Profit Growth	13%	17%	10%	15%
Credit Costs (as % of AUM)	0.15%	0.12%	0.12%	0.12%
Effective Tax Rate	32%	31%	31%	31%
Reported PAT Growth	4%	61%	-24%	15%
Reported EPS Growth	4%	60%	-28%	14%
Modelware EPS Growth	11%	19%	5%	15%
Core EPS Growth	10%	21%	4%	15%
Headline ROA	1.9%	1.9%	1.8%	1.8%
Headline ROE	20.2%	17.3%	13.0%	13.5%
Core ROE	18.7%	19.2%	17.6%	17.4%
Dividend Payout Ratio (excl. tax)	38%	38%	37%	37%
Tier I Ratio	11.8%	11.8%	13.2%	13.3%

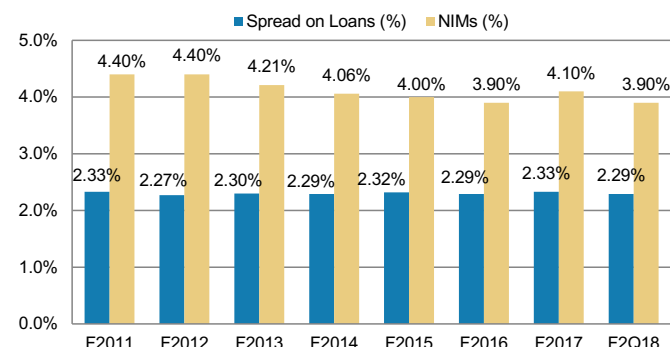
Source: Company data, Morgan Stanley Research; e = Morgan Stanley Research estimates

**Exhibit 43:** Reported loan spread components (%)

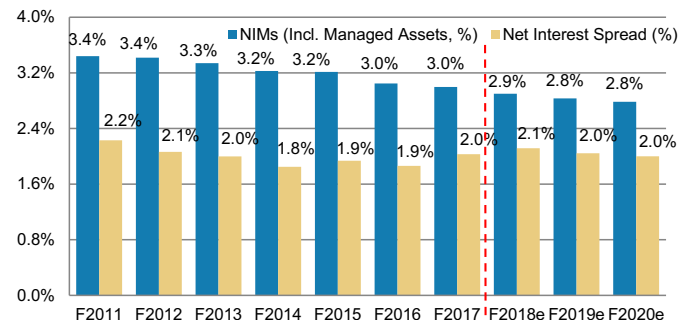


Source: Company Data, Morgan Stanley Research

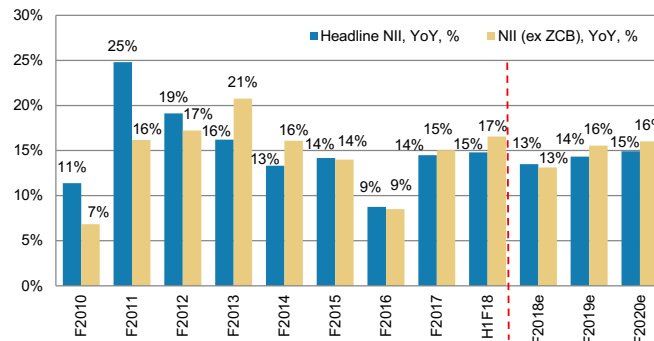
**Exhibit 44:** Reported NIM vs. loan spread (%)



Source: Company Data, Morgan Stanley Research

**Exhibit 45: Calculated NIM vs. loan spread (%)**


Source: Company Data, Morgan Stanley Research (e) Estimates

**Exhibit 46: Headline NII vs NII (ex ZCB) growth**


Source: Company Data, Morgan Stanley Research (e) Estimates

**Exhibit 47: HDFC (Standalone): Dupont Analysis**

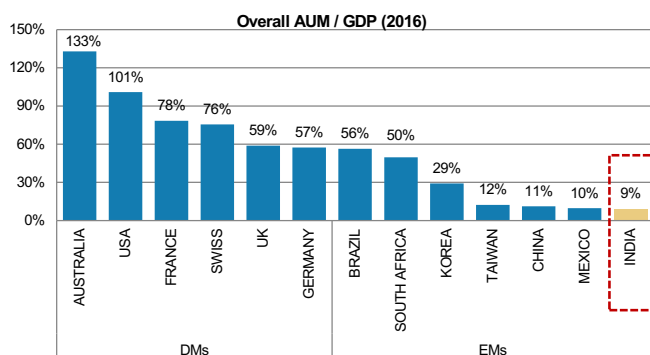
Dupont Analysis (% of average assets)	F2016	F2017	F2018E	F2019E	F2020E
Net Interest Income	3.1%	3.0%	2.8%	2.7%	2.7%
Less: ZCB (Pre-tax)	0.2%	0.2%	0.2%	0.2%	0.2%
Net Interest Income (Adj)	2.8%	2.8%	2.6%	2.5%	2.5%
Fee Income	0.1%	0.1%	0.1%	0.1%	0.1%
Other Non Interest Income	0.02%	0.02%	0.01%	0.01%	0.01%
<b>Total Core Revenues</b>	<b>3.0%</b>	<b>2.9%</b>	<b>2.7%</b>	<b>2.6%</b>	<b>2.6%</b>
<b>Total Costs</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.2%</b>
<b>Core PPOP</b>	<b>2.7%</b>	<b>2.6%</b>	<b>2.4%</b>	<b>2.4%</b>	<b>2.4%</b>
Provisions (Standard & NPA)	0.1%	0.1%	0.1%	0.1%	0.1%
Capital Gains	0.0%	0.0%	0.2%	0.0%	0.0%
Dividends	0.3%	0.3%	0.3%	0.2%	0.2%
<b>PBT</b>	<b>2.9%</b>	<b>2.8%</b>	<b>2.8%</b>	<b>2.6%</b>	<b>2.6%</b>
Tax	0.9%	0.9%	0.8%	0.8%	0.8%
Utilisation of Shelter Reserve (net of tax)	0.03%	0.04%	0.03%	0.03%	0.02%
<b>PAT (pre-exceptionals)</b>	<b>2.0%</b>	<b>1.9%</b>	<b>1.9%</b>	<b>1.8%</b>	<b>1.8%</b>
Exceptional Items	0.3%	0.2%	0.9%	0.0%	0.0%
<b>Reported PAT ex ZCB costs</b>	<b>2.3%</b>	<b>2.0%</b>	<b>2.8%</b>	<b>1.8%</b>	<b>1.8%</b>
Leverage (Average)	8.7x	9.0x	8.0x	7.4x	7.7x
<b>ROE</b>	<b>20.1%</b>	<b>18.4%</b>	<b>22.4%</b>	<b>13.0%</b>	<b>13.5%</b>
<b>Core ROA</b>	<b>1.7%</b>	<b>1.6%</b>	<b>1.6%</b>	<b>1.5%</b>	<b>1.5%</b>
Leverage (Average)	11.7x	11.6x	11.8x	11.5x	11.4x
<b>Core ROE</b>	<b>19.9%</b>	<b>18.7%</b>	<b>19.2%</b>	<b>17.6%</b>	<b>17.4%</b>

Source: Company data, Morgan Stanley Research (e) estimates. Average assets including off balance sheet loans

# HDFC AMC – A Quick Overview in Charts

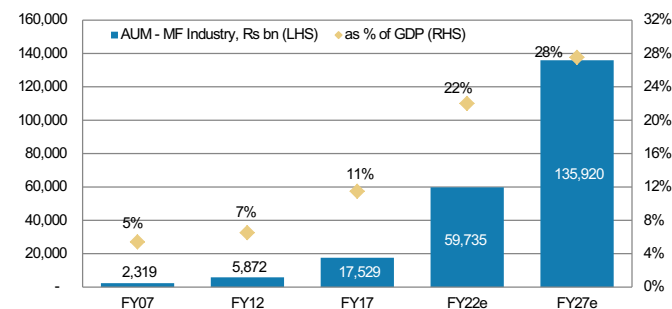
## Under-penetrated industry and great long term growth potential

**Exhibit 48:** Overall domestic AUM/GDP, 2016



Source: International Monetary Fund (IMF), ICI (Investment Company Institute) Factbook, Morgan Stanley Research.

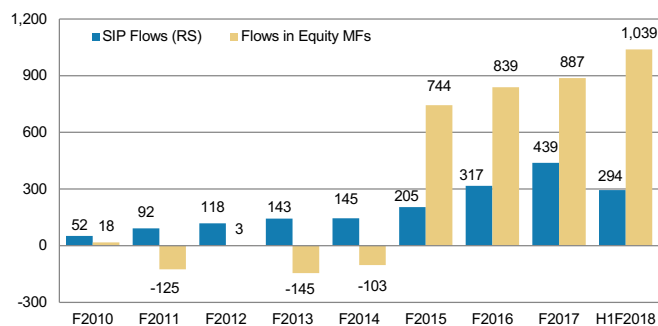
**Exhibit 49:** As discussed in our India Blue Paper, published in September 2017, we expect the mutual fund industry's domestic AUM to post a 23% CAGR in F2017-27; AUM/GDP should increase from 11% to 28%



Source: AMFI, Morgan Stanley Research; e = Morgan Stanley Research estimates

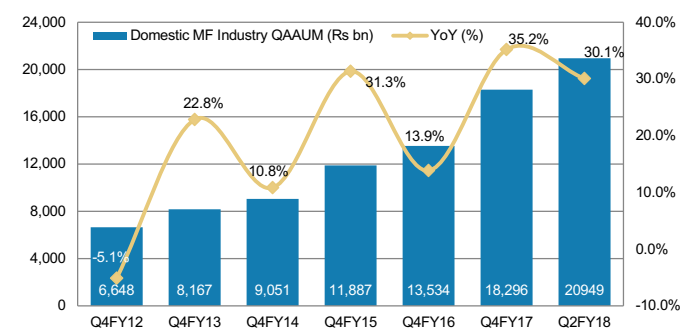
## Strong industry trends in recent years

**Exhibit 50:** Mutual fund industry: Systematic flows grown at a fast pace and are gaining share



Source: AMFI, Morgan Stanley Research. Note: Numbers in Rs billion.

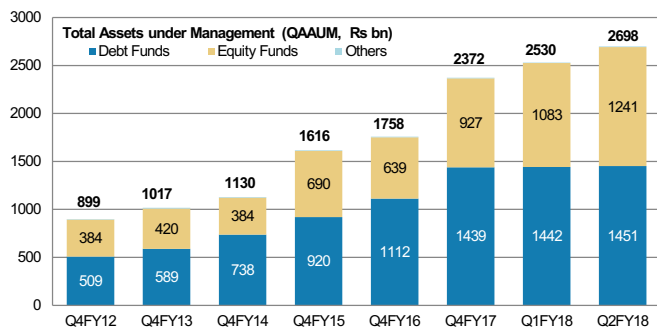
**Exhibit 51:** Mutual fund industry AUM



Source: Association of Mutual Funds in India (AMFI), company data, Morgan Stanley Research.

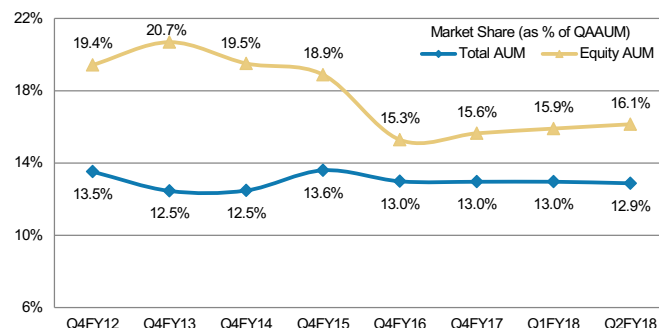
## HDFC MF – AUM growth and market share trends – HDFC AMC is the second-largest player in India by AUM

**Exhibit 52: HDFCFM: Total funds under management - 3yr CAGR of 24% and 5yr CAGR of 23%**



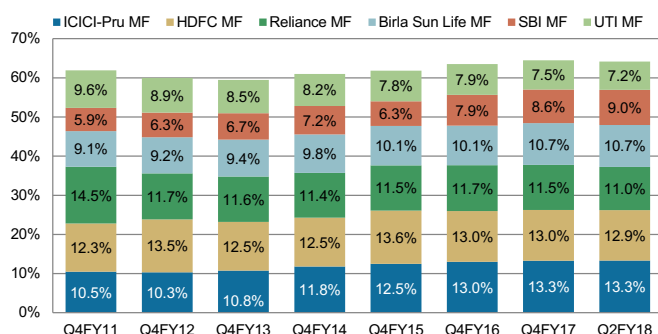
Source: AMFI Data, Morgan Stanley Research. We have classified Equity, ELSS and Balanced schemes as equity in order to be able to compare across AMCs. Hence share of equity in total AUM computes to 45% vs. 41% as reported by the company.

**Exhibit 53: HDFCFM: Market share on calculated basis; reported equity market share of 16.7% as on Sept-17**



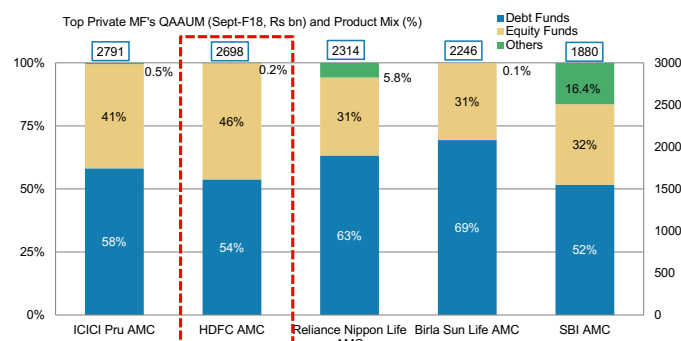
Source: AMFI Data, Morgan Stanley Research.

**Exhibit 54: Leading AMCs – Market share (% of QAAUM)**



Source: AMFI Data, Morgan Stanley Research.

**Exhibit 55: Key players: Mutual funds AUM mix.**



Source: AMFI Data, Morgan Stanley Research. Note: Above computations are based on average AUM in Mar-17.

## Profitability Comparison – HDFC MF screens at the top among the large players.

**Exhibit 56: Profitability analysis – P&L line items as a percentage of average annual AUM (domestic mutual funds only\*) for the top 5 AMCs**

DuPont - AMCs	ICICI Prudential AMC				HDFC AMC				Reliance Nippon AMC				Birla Sun Life AMC				SBI AMC			
	F2014	F2015	F2016	F2017	F2014	F2015	F2016	F2017	F2014	F2015	F2016	F2017	F2014	F2015	F2016	F2017	F2014	F2015	F2016	F2017
Income from Operations	0.56%	0.62%	0.59%	0.59%	0.80%	0.70%	0.83%	0.68%	0.65%	0.65%	0.75%	0.67%	0.58%	0.54%	0.56%	0.54%	0.63%	0.59%	0.57%	0.53%
—Management & Advisory Fees	0.49%	0.55%	0.53%	0.53%	0.66%	0.63%	0.70%	0.66%	0.63%	0.63%	0.73%	0.64%	0.56%	0.51%	0.53%	0.49%	0.61%	0.58%	0.55%	0.52%
—Portfolio Management Fees	0.05%	0.05%	0.04%	0.04%	0.13%	0.07%	0.13%	0.02%	0.02%	0.02%	0.03%	0.02%	0.00%	0.01%	0.02%	0.04%	0.01%	0.00%	0.00%	0.00%
—Advisory Fees	0.02%	0.02%	0.02%	0.01%									0.03%	0.02%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%
Other Income	0.02%	0.01%	0.01%	0.02%	0.04%	0.03%	0.03%	0.05%	0.12%	0.09%	0.07%	0.07%	0.03%	0.03%	0.01%	0.03%	0.01%	0.03%	0.01%	0.03%
Total Revenues	0.58%	0.63%	0.61%	0.61%	0.84%	0.73%	0.86%	0.73%	0.77%	0.74%	0.82%	0.74%	0.62%	0.57%	0.57%	0.57%	0.64%	0.62%	0.58%	0.56%
Employee	0.11%	0.09%	0.09%	0.08%	0.10%	0.09%	0.08%	0.07%	0.14%	0.12%	0.12%	0.10%	0.13%	0.13%	0.12%	0.10%	0.15%	0.13%	0.11%	0.10%
Admin	0.14%	0.20%	0.17%	0.13%	0.09%	0.07%	0.08%	0.07%	0.16%	0.14%	0.13%	0.13%	0.08%	0.07%	0.07%	0.07%	0.07%	0.08%	0.09%	0.09%
Brokerage and Marketing	0.02%	0.05%	0.04%	0.07%	0.16%	0.14%	0.29%	0.22%	0.11%	0.11%	0.24%	0.20%	0.22%	0.20%	0.13%	0.20%	0.04%	0.06%	0.11%	0.13%
Depreciation & Interest	0.01%	0.01%	0.01%	0.00%	0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.00%	0.01%	0.01%	0.01%	0.00%	0.00%	0.01%	0.01%	0.01%	0.01%
Total Opex	0.29%	0.35%	0.31%	0.28%	0.35%	0.30%	0.45%	0.36%	0.41%	0.38%	0.49%	0.43%	0.44%	0.40%	0.33%	0.38%	0.27%	0.29%	0.32%	0.33%
PBT	0.29%	0.28%	0.30%	0.33%	0.48%	0.43%	0.41%	0.37%	0.36%	0.36%	0.33%	0.31%	0.18%	0.17%	0.24%	0.19%	0.37%	0.33%	0.26%	0.24%
Tax	0.10%	0.10%	0.10%	0.12%	0.15%	0.14%	0.13%	0.12%	0.06%	0.06%	0.06%	0.09%	0.06%	0.05%	0.08%	0.07%	0.12%	0.11%	0.09%	0.08%
PAT	0.19%	0.19%	0.19%	0.22%	0.33%	0.29%	0.28%	0.25%	0.30%	0.28%	0.25%	0.21%	0.13%	0.12%	0.16%	0.13%	0.25%	0.22%	0.17%	0.16%

Source: Company data, AMFI, Morgan Stanley Research. Note (\*): We have taken only the annual average of domestic mutual fund AUM in the denominator owing to consistent data availability, whereas the P&L includes some contribution from other forms of AUM such as alternatives and portfolio management services (PMS), although quite small.

## HDFC – Price Target Discussion

We value HDFC using a base-case sum-of-the-parts valuation method. Our base-case scenario valuation works out to Rs2,030, which is also our price target. The core mortgage business (40%), HDFC's stake in HDFC Bank (37%) and its stake in HDFC Life (11%) account for most of our base case scenario valuation (prior to applying hold co discount to value of stakes in subsidiaries and associates). Our bull and bear case scenario values are Rs2,815 and Rs1,200 respectively.

In our base case, we apply a 20% hold co discount to the value of stakes in subsidiaries and associates. In our bear case, we apply a 30% holdco discount and in our bull case we apply no holdco discount.

*Rationale for assumption of 20% holdco discount in our base case:*

Across stocks in various sectors in India coverage, we observe a holdco discount of 0-50%. We believe our holding company discount assumption of 20% is fair given:

- i) An investment in HDFC stock gives a comprehensive exposure to India's financial services growth story via a basket of high-quality stocks, which are top quartile in their respective sectors in terms of growth and return ratios. For such investors, it also helps diversify away idiosyncratic risks associated with individual sectors.
- ii) Almost all the major underlying assets – bank, life and general insurance, asset management, education loans, property funds are seeing strong current growth trends or tailwinds.
- iii) Holdco discounts are usually higher where the holding company is a shell company. In the case of HDFC, the holding company's core business accounts for over 40% of overall valuation, in our view.

In this section, we discuss our valuation methodology for the various businesses.



**Exhibit 57: HDFC Ltd.: Details of sum-of-the-parts (SOTP) valuation**

		Base	Bull	Bear	Valuation	% of Pre holdco discount valuation
	<b>Probability Weights</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>		
	<b>Rs Mn</b>					
I	<b>HDFC - Core Mortgage Lending Business (Parent)</b>					
	Core Book Value (F20)	512,653	512,653	512,653	512,653	
	Target P/B	3.0x	3.5x	2.0x	3.0x	
	<b>Value Attributable to HDFC</b>	<b>1,537,264</b>	<b>1,793,474</b>	<b>1,024,842</b>	<b>1,537,264</b>	
	Value per share of HDFC (Rs)	900	1,050	600	900	39%
II	<b>HDFC Bank</b>					
	Target Price	2,500	2,900	1,600	2,500	
	HDFC 's stake (21.7% **) (Mn Shares)	589	589	589	589	
	<b>Value Attributable to HDFC</b>	<b>1,471,778</b>	<b>1,707,262</b>	<b>941,938</b>	<b>1,471,778</b>	
	Value per share of HDFC (Rs)	862	1,000	551	862	37%
III	<b>Life Insurance</b>					
	Target Price	425	580	200	425	
	HDFC 's stake (51.7%) (Mn Shares)	1,039	1,039	1,039	1,039	
	<b>Value Attributable to HDFC</b>	<b>441,321</b>	<b>602,371</b>	<b>207,763</b>	<b>441,321</b>	
	Value per share of HDFC (Rs)	258	353	122	258	11%
IV	<b>AMC</b>					
	Q4FY20 AAUM	4,632,375	5,835,459	3,191,398	4,632,375	
	Q4FY17-Q4FY20 CAGR	25%	35%	10%		
	Valuation Multiple	7.5%	9.0%	5.0%	7.5%	
	Market value	347,428	525,191	160,846	347,428	
	HDFC's stake (Post Stake Sale - Assumption)	57.4%	57.4%	57.4%		
	<b>Value Attributable to HDFC</b>	<b>199,424</b>	<b>301,460</b>	<b>92,326</b>	<b>199,424</b>	
	Value per share of HDFC (Rs)	117	176	54	117	5%
V	<b>Gruh Finance</b>					
	CMP (Rs)	212	212	212	212	
	HDFC 's stake (57.99%) (Mn Shares)	502	502	502	502	
	<b>Value Attributable to HDFC</b>	<b>106,363</b>	<b>106,363</b>	<b>106,363</b>	<b>106,363</b>	
	Value per share of HDFC (Rs)	62	62	62	62	3%
VI	<b>HDFC Ergo</b>					
	PAT FY20e	5,414	7,606	3,947	5,414	
	F17-F20 CAGR	25%	40%	13%	25%	
	Target P/E	25.0x	35.0x	15.0x	25.0x	
	Market value	135,344	266,209	59,200	135,344	
	HDFC's stake	50.4%	50.4%	50.4%		
	<b>Value Attributable to HDFC</b>	<b>68,214</b>	<b>134,169</b>	<b>29,837</b>	<b>68,214</b>	
	Value per share of HDFC (Rs)	40	79	17	40	2%
VII	<b>HDFC Property Fund</b>					
	Fund Corpus	99,865	99,865	99,865	99,865	
	Valuation Multiple	10.0%	15.0%	5.0%		
	<b>Value Attributable to HDFC</b>	<b>9,987</b>	<b>14,980</b>	<b>4,993</b>	<b>9,987</b>	
	Value per share of HDFC (Rs)	6	9	3	6	0%
VIII	<b>Credila Financial Services</b>					
	Loan Book - F20e	90,826	117,392	57,197	90,826	
	FY17-20 CAGR	40%	53%	20%	40%	
	PAT - F20e	1,812	2,345	1,131	1,812	
	FY17-20 CAGR	40%	53%	20%	40%	
	P/E	30.4x	40.0x	15.0x	30.4x	
	HDFC's stake	90%	90%	90%		
	<b>Value Attributable to HDFC</b>	<b>49,685</b>	<b>84,602</b>	<b>15,307</b>	<b>49,685</b>	
	Value per share of HDFC (Rs)	29	50	9	29	1%
IX	<b>Other New Potential Investments</b>					
	Book Value of Investments (Assumption)	65,000	65,000	65,000	65,000	
	P/B	1.0x	1.0x	1.0x	1.0x	
	<b>Value Attributable to HDFC</b>	<b>65,000</b>	<b>65,000</b>	<b>65,000</b>	<b>65,000</b>	
	Value per share of HDFC (Rs)	38	38	38	38	2%
	<b>Overall Sum of the Parts Valuation</b>	<b>3,949,033</b>	<b>4,809,681</b>	<b>2,488,368</b>	<b>3,949,033</b>	<b>100%</b>
	<b>Holding Company Discount</b>	<b>20%</b>	<b>0%</b>	<b>30%</b>	<b>20%</b>	
	Rs mn	482,354	0	439,058	482,354	
	<b>Sum of Listed + Unlisted Stakes (post Hold Co Discount)</b>	<b>3,466,679</b>	<b>4,809,681</b>	<b>2,049,310</b>	<b>3,466,679</b>	
	NOS (mn), FY20e	1,708	1,708	1,708	1,708	
	<b>Scenario Values (Rs)</b>	<b>2,030</b>	<b>2,815</b>	<b>1,200</b>	<b>2,030</b>	

Source: Company Data, Morgan Stanley Research. e: Morgan Stanley Research estimates; % stake in HDFC Bank accounts for equity issuance by the bank (discussed earlier in this report)

## Core Mortgage Lending Business

**Exhibit 58:** HDFC: Valuation of core mortgage lending business

HDFC Core Mortgage Lending (Parent)	Base Case	Bull Case	Bear Case
Scenario Valuation (Rs)	900	1,050	600
Core BVPS (F2020e) (Rs)	300	300	300
Target P/BV	3.0	3.5	2.0

Source: Morgan Stanley Research (e) estimates

We value the business using a target price-to-book valuation method. To arrive at our March 2019 scenario value, we apply our target P/B multiple to our March 2020 (one-year forward from March 2019) core book value per share. We arrive at the core book value by deducting HDFC's investments in subsidiaries and associates (which we value separately) from the standalone book value.

The key assumptions are cost of equity ( $K_e$ ), normalized return on equity (ROE) and long term growth ( $g$ ) assumptions.

We arrive at our target price to book multiple using the formula  $(ROE - g) / (K_e - g)$ .

Our cost of equity is 12.75%, derived using a risk-free rate of 7.25%, a beta of 1.0 and a market risk premium of 5.5%.

In our base case, we assume normalized ROE of 18% which we believe is a sustainable ROE at normalized leverage and we assume long-term " $g$ " of 10%, in line with what we observe for the private retail banks, given HDFC's long-term track record and expertise in the mortgage space, consistent growth historically and the long-term opportunity in housing finance, which has received a fillip because of government initiatives like the housing for all programme, introduction of RERA and initiatives to strengthen and deepen the bond market. We thus arrive at a target P/B of 3.0x.

In our bull and bear case scenarios, we assume ROE of 20% and 16%, respectively, and " $g$ " of 10% and 9%, respectively, thereby arriving at target P/B multiples of 3.5x and 2.0x, respectively.

**HDFC Bank**

HDFC Ltd. currently has a stake of 21% in HDFC Bank (September 2017). We estimate that following the proposed capital raise by HDFC Bank (we assume it will raise the entire amount of Rs240bn for which the company has board approval) and HDFC's investment of Rs85bn (we assume, for which the company has board approval), HDFC's stake in HDFC Bank will rise to 21.7%, which we value at our published scenario values for HDFC Bank.

**Exhibit 59:** Valuation of HDFC's stake in HDFC Bank (prior to applying holding company discount)

HDFC Bank (Rs Mn)	Base Case	Bull Case	Bear case	@ Curr Price
HDFC's stake (21.7% **) (Mn Shares)	589	589	589	589
Price	2500	2900	1600	1861
Value of Stake (Rs mn)	1,471,778	1,707,262	941,938	1,095,356
Value per Share	862	1000	551	641

Source: Company Data, Morgan Stanley Research (E) estimates. \*\* Post equity issuance by HDFC Bank and subscription by HDFC Ltd. as discussed in this report.

Please see below the valuation discussion for HDFC Bank.

Our price target of Rs2,500 is derived using a base case sum-of-the-parts model:

1. **Banking entity:** We derive our value using a residual income model (RI) with three phases: a five-year high-growth period and a 10-year maturity period, followed by a declining period.
2. **HDB Financial Services:** We derive the valuation of the NBFC subsidiary entity assigning a P/E multiple to our earnings forecast.

Our scenario values are as follows:

- **Base case:** Rs2,500
- **Bear case:** Rs1,600
- **Bull case:** Rs2,900

**Banking entity:** We use a 12.0% cost of equity (beta of 0.95, risk-free rate of 6.75%, and market risk premium of 5.5%.

**Exhibit 60:** HDFC Bank: Banking business residual income valuation

Banking Business	Base	Bear	Bull	Wtd
Probability Weights	100%	0%	0%	
Ke	12.0%	12.0%	12.0%	
RI Based Value	2360	1540	2710	2360
BVPS (Mar-20e)	636	636		
Implied Target P/BV (Mar-2020)	3.7x	2.4x	4.3x	
<b>Target Price</b>	<b>2360</b>			

Source: Morgan Stanley Research. E = Morgan Stanley Research estimates

**HDB Financial Services:** We value this unit by assigning a P/E multiple of 25x to our earnings forecast for the 12 months ending March 2020. Our assumption is broadly in line with multiples observed at peers across cycles, which we view as appropriate given the similar growth outlook. Our scenario values are as follows:

- **Base case:** Rs140
- **Bear case:** Rs60
- **Bull case:** Rs190

**Exhibit 61:** HDB Financial Services: Valuation summary

HDB Financial Services	Base	Bear	Bull
<b>Rs Mn</b>			
Probability Weights	100%	0%	0%
PAT (F2020e)	15222	10627	17192
F17-20e CAGR	30%	15%	35%
EPS (2020e) (Rs)	18	13	20
P/E Multiple	25x	15x	30x
Fair Price per share (Rs), Mar-20	451	189	612
No. of Shares (HDB) - (Mn)	843	843	843
Fair Value (Rs Mn), Mar-2020	380549	159411	515771
% Stake	97.2%	97.2%	97.2%
HDFC Bank - No. of Shares (Mn)	2747	2747	2747
<b>Per Share Value (Rs)</b>	<b>140</b>	<b>60</b>	<b>190</b>

Source: Company data, Morgan Stanley Research. E = Morgan Stanley Research estimates.

**Exhibit 62:** HDFC Bank: Sum-of-the-parts

HDFC Bank - Sum of the Parts (Rs)	Base	Bear	Bull
Probability Weights	100%	0%	0%
Banking Business	2360	1540	2710
HDB Financial Services	140	60	190
<b>Overall Valuation</b>	<b>2500</b>	<b>1600</b>	<b>2900</b>

Source: Morgan Stanley Research estimates.

## HDFC Standard Life

HDFC Ltd. has a 51.7% stake in HDFC Standard Life Insurance. We base our valuation under various scenarios on the published scenarios for HDFC Standard Life.

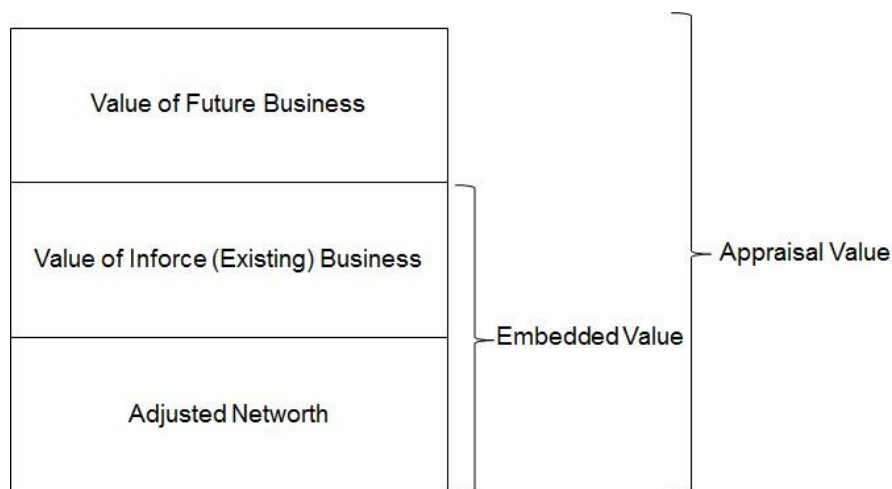
**Exhibit 63:** Valuation of HDFC's stake in HDFC Standard Life Insurance (prior to applying holding company discount)

HDFC Standard Life (Rs Mn)	Base Case	Bull Case	Bear case	@ Curr Price
HDFC's stake (51.7%) (Mn Shares)	1039	1039	1039	1039
Price	425	580	200	422
<b>Value of Stake (Rs mn)</b>	<b>441,321</b>	<b>602,371</b>	<b>207,763</b>	<b>438,357</b>
<b>Value per Share</b>	<b>258</b>	<b>353</b>	<b>122</b>	<b>257</b>

Source: Company Data, Morgan Stanley Research (E) estimates

Please see below the valuation discussion for HDFC Standard Life.

**We value Indian insurers based on appraisal value methodology.**

**Exhibit 64:** Appraisal value methodology


Source: Morgan Stanley Research

We arrive at a valuation of Rs856bn for HDFC Standard Life.

**Exhibit 65:** HDFC Life valuation based on Appraisal Value, and scenarios

Appraisal Value, Rs Bn	Base Case	Bull Case	Bear Case
Embedded Value, F19E - (A)	181	187	144
Structural Value - (B)	675	978	252
VNB, F20	19	23	11
VNB Multiple	35.2x	41.7x	23.6x
Appraisal Value- (A) + (B)	856	1,165	396
—Implied P/EV, F20	4.0	5.2	2.4
Price Target/Share	425	580	200
MEMO: F20 EV	214	226	164

Source: Company data, Morgan Stanley Research (E) estimates.

In the base-case scenario, we value the company using appraisal methodology: 1x EV (F2019e) + 35.2x VNB (F2020e).

**a) assumptions behind F2019e EV computations:** We use: a) an unwind rate of 9.0%; b) VNB growth of 23%, F2017-F19e, based on 18% premium growth and 24% average margins during the same period; and c) operating variances of Rs2bn and Rs1.8bn in F2018 and F2019, respectively.

**b) assumptions behind new business multiple:** Our new business multiple of 35.2x is based on three growth phases over the next 15 years: a five-year high-growth period, a 10-year maturity period, and a terminal period. We assume terminal growth of 6%, similar to other financials in our coverage. We have assumed 17.5% premium growth and 25% margins in the high-growth phase, followed by 13.7% premium growth and 25% margins in the maturity phase. Margin under terminal period is 20%.

**Exhibit 66:** HDFC Life - New business value computation and assumptions, under various scenarios

New Business Value Computations, Rs Bn	Base Case	Bear Case	Bull Case
VNB, F20	19	11	23
VNB Multiple	35.2x	23.6x	41.7x
<b>--Assumptions</b>			
<b>High Growth Phase - 5 Years</b>			
—Premium Growth CAGR	17.5%	14.9%	20.0%
—Average Margins	25%	15%	28%
<b>Maturity Period - 10 Years</b>			
—Premium Growth CAGR	13.7%	11.2%	15.0%
—Average Margins	25%	13%	29%
<b>Terminal Period</b>			
—Growth Rate	6.0%	5.0%	6.0%
—Margins	20.0%	12.5%	20.0%
Average Protection Margin (F20-35E)	81%	61%	90%
Average Protection Mix (F20-35E)	18%	14%	20%
Cost of Equity	12.5%	12.5%	12.5%

Source: Morgan Stanley Research estimates

**Key downside risks:** Changes to corporate income tax rate for life insurers; higher-than-expected competition in protection driving lower growth and margin contraction; weaker-than-expected growth from bancassurance channel; and material deterioration in persistency ratios.

AMC business (HDFC MF)

We value this business as a percentage of AUM (which is the industry parlance) and cross-check in the context of P/E ratios.

As we see in the [Exhibit 67](#) below, many of the past deals have happened in the range of 5-6% of AUM. However, in recent years, AUM growth has accelerated significantly and this, coupled with the overall strength in capital markets, has driven valuations much higher. Reliance Nippon Life Asset Management (RNAM), which is the only listed AMC in India, is trading at about 7.5% of last reported (i.e., trailing) QAAUM (quarterly average AUM) excluding pension assets.

A key determinant of valuation is the mix of equity (higher profitability) in overall AUM. As discussed earlier in the note, HDFC AMC's share of equity AUM in overall AUM at >40% is considerably higher than the top peers and hence the profitability (PAT / average annual AUM) is about ~20% higher to that of RNAM, on our computations.

We value the business at 7.5% of Mar-20 QAAUM (one year forward from Mar-19). This implies ~32x Mar-20 P/E (we have assumed F2017-20 AUM and PAT CAGR at 25%). While the headline multiple appears steep, we believe this is justified given the high growth trajectory and this being a capital-light business.

In our **bull case**, we assume that the share of equity AUM is over 50% on the back of overall AUM rising at a 35% CAGR, F2017-20. We assign a valuation of 9.0% of Mar-20 QAAUM.

In our **bear case**, we assume that the share of equity AUM is around 30% on sustainable basis and growth slows down to 10% CAGR over F2017-20. We assign a valuation of 5.0% of Mar-20 QAAUM.

**Exhibit 67:** Valuation of recent deals

Year	Acquirer	Target	AUM (Rs bn)	Estimated Deal Value (Rs bn)	Derived Valuation (Rs bn)	Valuation (% of AUM)
2015	Nippon Life	Reliance AMC	1510.1	12.0	85.4	5.7%
	Reliance AMC	Goldman Sachs	71.3	2.4	2.4	3.4%
2013	HDFC MF	Morgan Stanley	32.9	1.5-1.7	1.5-1.7	4.5-5%
	Nippon Life	Reliance AMC	842.9	14.5	56.0	6.6%
2012	L&T Finance	Fidelity India	88.8	5.5	5.5	6.2%
	Invesco	Religare	146.0	4.65	9.49	6-7%

Source: Reliance Nippon AMC IPO Prospectus, Morgan Stanley Research.

**Exhibit 68:** Valuation of HDFC AMC

AMC (Rs Bn)	Base Case	Bull Case	Bear Case
Q4FY20e AAUM	4,632	5,835	3,191
F17-20 CAGR	25%	35%	10%
Valuation Multiple	7.5%	9.0%	5.0%
HDFC AMC Valuation	347	525	161
HDFC's Stake	57.4%	57.4%	57.4%
Value Attributable to HDFC	199	301	92
Value per share (Rs)	117	176	54

Source: Company data, Morgan Stanley Research (E) estimates.

## Gruh Finance

HDFC Ltd. has a 57.99% stake in Gruh Finance Ltd (listed entity). We base our valuation on current market capitalization adjusted for HDFC's stake.

**Exhibit 69:** Valuation of GRUH Finance

Gruh Finance (Rs Mn)	Base Case	Bull Case	Bear case	@ Curr Price
HDFC's stake (57.99%) (Mn Shares)	212	212	212	212
CMP (Rs)	502	502	502	502
Valuation of HDFC's Stake	106,363	106,363	106,363	106,363
<b>Per Share Value</b>	<b>62</b>	<b>62</b>	<b>62</b>	<b>62</b>

Source: Company data, Morgan Stanley Research (E) estimates.

## General Insurance business (HDFC ERGO)

HDFC Ltd. has a 50.4% stake in its general insurance subsidiary HDFC ERGO. We value this business on the basis of a target P/E multiple.

The general insurance industry in India is extremely under penetrated there signifying huge growth opportunity. In recent years both growth and profitability for the industry has improved.

We are building in 25% PAT CAGR for the business over the next three years driven by strong growth in premiums, improvement in combined ratio driven by cost efficiencies and higher investment income driven by higher interest rates.

HDFC also intends to make meaningful investments in health insurance via HDFC ERGO, as highlighted in recent exchange filings, indicating that there will be focus on driving growth in this business. Hence, we believe the business can command high P/E multiples.

In our **base case**, we estimate 25% PAT CAGR over F2017-20. We assign a P/E of 25x to Mar-20 earnings. The implied F2017 P/E multiple of ~48x is at a ~20% discount to the F2017 P/E of 60x of ICICI Lombard, a listed private sector general insurance company that got listed in 2H17.

In our **bull case**, we assume 40% PAT CAGR over F2017-20 and assign a P/E of 40x to Mar-20 EPS.

In our **bear case**, we assume PAT CAGR of 13% over F2017-20 and assign 15x P/E to Mar-20 earnings.

**Exhibit 70:** Valuation of HDFC ERGO

General Insurance (Rs Mn)	Base Case	Bull Case	Bear Case
PAT FY20e	5,414	7,606	3,947
F17-20 CAGR	25%	40%	13%
P/E	25.0x	35.0x	15.0x
Value of Business	135,344	266,209	59,200
Value of HDFC's stake (50.4%)	68,214	134,169	29,837
<b>Per Share Value (Rs)</b>	<b>40</b>	<b>79</b>	<b>17</b>

Source: Company data, Morgan Stanley Research (E) estimates.

## Credila Financial Services

HDFC Ltd. owns a 90% stake in education loan lending subsidiary HDFC Credila.

In F2015-17, Credila has reported loan CAGR of ~40% and profit CAGR of ~55%. We

expect these strong trends to continue and forecast Loan book and PAT CAGR of 40% over F2017-20e in our base case. We assign a target P/E multiple of 30x P/E on Mar-20 earnings, given the high growth trajectory and a highly profitable (20%+ ROE) unique pure play business.

In our **bull case**, we assume 53% PAT CAGR over F2017-20 and assign a P/E of 40x to Mar-20 EPS.

In our **bear case**, we assume PAT CAGR of 20% over F2017-20 and assign 15x P/E to Mar-20 earnings.

**Exhibit 71:** Valuation of HDFC Credila

Credila	Base Case	Bull Case	Bear Case
Loan Book Outstanding - FY17	33,100	33,100	33,100
Loan Book - F20e	90,826	117,392	57,197
F17-20 Loan Book CAGR	40%	53%	20%
PAT - F17	655	655	655
PAT - F20e	1,812	2,345	1,131
F17-20 PAT CAGR	40%	53%	20%
P/E	30x	40x	15x
<b>Total Valuation</b>	<b>55,083</b>	<b>93,794</b>	<b>16,970</b>
HDFC's Stake	90%	90%	90%
Value Attributable to HDFC	49,685	84,602	15,307
<b>Value per share (Rs)</b>	<b>29</b>	<b>50</b>	<b>9</b>

Source: Company data, Morgan Stanley Research (E) estimates.

## HDFC Property Fund

We value this business on a percentage of AUM basis. Given that fees are much higher in this segment vs. traditional mutual funds, we use 10% in our base case, 15% in our bull case, and 5% in our bear case.

Per recent announcements, HDFC is in the process of launching more funds targeting affordable housing as well as a fund to invest in distressed assets in the real estate space.

**Exhibit 72:** Valuation of Property Funds

HDFC Property Fund	Base Case	Bull Case	Bear Case
<b>Fund Corpus (Rs Mn)</b>			
HDFC International Fund	52,000	52,000	52,000
HDFC International Fund II	20,865	20,865	20,865
HDFC Capital Affordable Real Estate Fund – I	27,000	27,000	27,000
Valuation Multiple	10%	15%	5%
Value Attributable to HDFC	9,987	14,980	4,993
<b>Value per share (Rs)</b>	<b>6</b>	<b>9</b>	<b>3</b>

Source: Company data, Morgan Stanley Research (E) estimates.

## Other Investments

As discussed earlier in the report, HDFC, despite participation in HDFC Bank's equity issuance will likely be left with significant excess capital following proposed equity issuance, conversion of warrants that is due in F2019 and receipt of proceeds from sale of stakes in subsidiaries (HDFC Life). The company has indicated in its exchange filings



that it is likely to invest capital in the health insurance space and will also need capital for sponsoring funds targeting affordable housing and distressed real estate assets. Hence, in our numbers, we have set aside ~US\$1bn i.e., ~Rs65bn for new investments. As of now, we value this capital at 1x value invested.

**Exhibit 73: Other Investments**

Other New Investments	Base Case	Bull Case	Bear Case
Book Value of Investments (Assumption, Rs bn)	65,000	65,000	65,000
P/B	1.0x	1.0x	1.0x
Valuation	65,000	65,000	65,000
<b>Per Share Value (Rs)</b>	<b>38</b>	<b>38</b>	<b>38</b>

Source: Morgan Stanley Research (E) estimates.

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(as of December 31, 2017)

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STOCK RATING CATEGORY	COVERAGE UNIVERSE		INVESTMENT BANKING CLIENTS (IBC)			OTHER MATERIAL INVESTMENT SERVICES CLIENTS (MISC)	
	COUNT	% OF TOTAL	COUNT	% OF TOTAL IBC	% OF RATING CATEGORY	COUNT	% OF TOTAL OTHER MSC
<b>Overweight/Buy</b>	<b>1142</b>	<b>36%</b>	<b>320</b>	<b>40%</b>	<b>28%</b>	<b>560</b>	<b>38%</b>
<b>Equal-weight/Hold</b>	<b>1424</b>	<b>44%</b>	<b>371</b>	<b>47%</b>	<b>26%</b>	<b>674</b>	<b>46%</b>
<b>Not-Rated/Hold</b>	<b>55</b>	<b>2%</b>	<b>6</b>	<b>1%</b>	<b>11%</b>	<b>9</b>	<b>1%</b>
<b>Underweight/Sell</b>	<b>583</b>	<b>18%</b>	<b>95</b>	<b>12%</b>	<b>16%</b>	<b>237</b>	<b>16%</b>
<b>TOTAL</b>	<b>3,204</b>		<b>792</b>			<b>1480</b>	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

### Analyst Stock Ratings

**Overweight (O).** The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

**Equal-weight (E).** The stock's total return is expected to be in line with the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

**Not-Rated (NR).** Currently the analyst does not have adequate conviction about the stock's total return relative to the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

**Underweight (U).** The stock's total return is expected to be below the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

### Analyst Industry Views

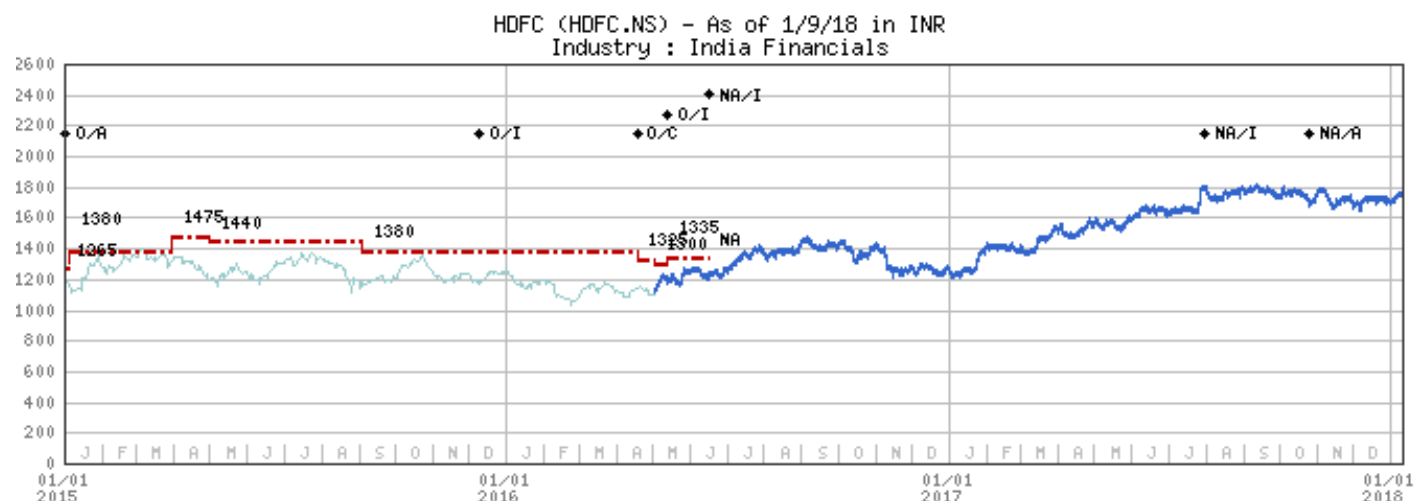
**Attractive (A):** The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.

**In-Line (I):** The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be in line with the relevant broad market benchmark, as indicated below.

**Cautious (C):** The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.

Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

### Stock Price, Price Target and Rating History (See Rating Definitions)



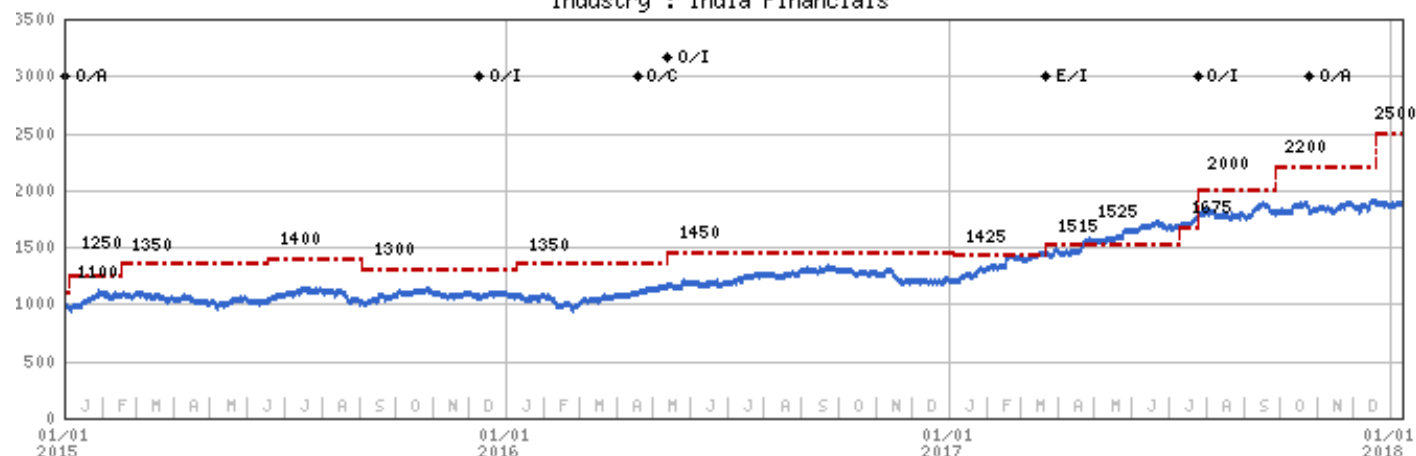
Stock Rating History: 1/1/15 : O/A; 12/10/15 : O/I; 4/18/16 : O/C; 5/13/16 : O/I; 6/17/16 : NA/I; 7/31/17 : NA/I;  
10/25/17 : NA/A

Price Target History: 9/19/14 : 1265; 1/5/15 : 1380; 3/30/15 : 1475; 4/30/15 : 1440; 9/3/15 : 1380;  
4/18/16 : 1325; 5/3/16 : 1300; 5/13/16 : 1335; 6/17/16 : NA

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target — No Price Target Assigned (NA)  
Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) —  
Stock and Industry Ratings (abbreviations below) appear as ♦ Stock Rating/Industry View  
Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)  
Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

Effective January 13, 2014, the stocks covered by Morgan Stanley Asia Pacific will be rated relative to the analyst's industry (or industry team's) coverage.

Effective January 13, 2014, the industry view benchmarks for Morgan Stanley Asia Pacific are as follows: relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

HDFC Bank (HDBK.NS) - As of 1/9/18 in INR  
Industry : India Financials

Stock Rating History: 1/1/15 : 0/A; 12/10/15 : 0/I; 4/18/16 : 0/C; 5/13/16 : 0/I; 3/21/17 : E/I; 7/25/17 : 0/I;  
10/25/17 : 0/A

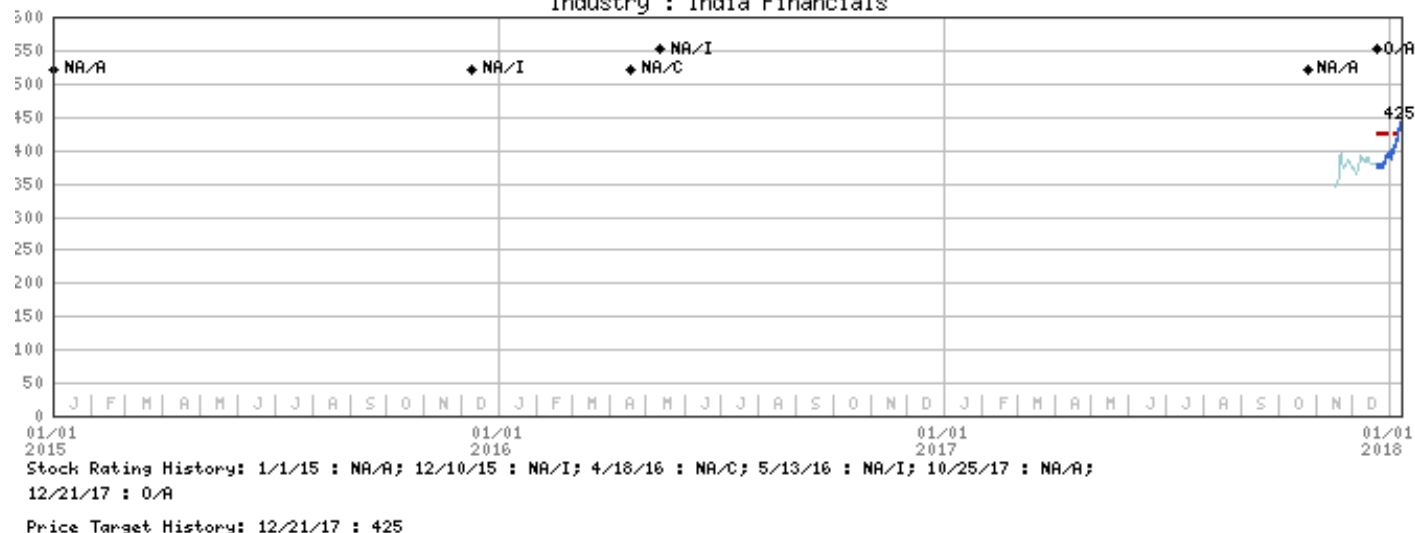
Price Target History: 5/18/14 : 1100; 1/5/15 : 1250; 2/16/15 : 1350; 6/18/15 : 1400; 9/3/15 : 1300;  
1/10/16 : 1350; 5/13/16 : 1450; 1/4/17 : 1425; 3/21/17 : 1515; 4/24/17 : 1525; 7/10/17 : 1675; 7/25/17 : 2000;  
9/27/17 : 2200; 12/20/17 : 2500

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target -- No Price Target Assigned (NA)  
Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) ■  
Stock and Industry Ratings (abbreviations below) appear as ♦ Stock Rating/Industry View  
Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)  
Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

Effective January 13, 2014, the stocks covered by Morgan Stanley Asia Pacific will be rated relative to the analyst's industry (or industry team's) coverage.

Effective January 13, 2014, the industry view benchmarks for Morgan Stanley Asia Pacific are as follows: relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

HDFC Standard Life Insurance Company Ltd (HDFS.NS) - As of 1/9/18 in INR  
Industry : India Financials



Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target -- No Price Target Assigned (NA)  
 Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) —  
 Stock and Industry Ratings (abbreviations below) appear as ♦ Stock Ratings/Industry View  
 Stock Ratings: Overweight (O) Equal-weight (E) Underweight (U) Not-Rated (NR) No Rating Available (NA)  
 Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

Effective January 13, 2014, the stocks covered by Morgan Stanley Asia Pacific will be rated relative to the analyst's industry (or industry team's) coverage.

Effective January 13, 2014, the industry view benchmarks for Morgan Stanley Asia Pacific are as follows: relevant MSCI country index or MSCI sub-regional index or MSCI AC Asia Pacific ex Japan Index.

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#### INDUSTRY COVERAGE: India Financials

COMPANY (TICKER)	RATING (AS OF)	PRICE* (01/09/2018)
<b>Anil Agarwal</b>		
Axis Bank (AXBK.NS)	O (10/25/2017)	Rs565.30
HDFC Bank (HDBK.NS)	O (07/25/2017)	Rs1,863.70
HDFC Bank (HDB.N)	O (07/25/2017)	US\$100.47
ICICI Bank (ICBK.NS)	O (10/25/2017)	Rs312.60
State Bank of India (SBI.NS)	O (10/25/2017)	Rs304.30
<b>Subramanian Iyer</b>		
Aditya Birla Capital Ltd (ADTB.NS)	E (12/05/2017)	Rs183.75
Bajaj Finance Limited (BJFN.NS)	O (07/29/2016)	Rs1,819.50
Bharat Financial Inclusion Ltd (BHA.F.NS)	++	Rs1,054.85
Edelweiss Financial Services Ltd. (EDEL.NS)	O (09/27/2017)	Rs290.40
HDFC (HDFC.NS)	O (01/09/2018)	Rs1,735.05
IDFC Bank (IDFB.NS)	U (03/21/2017)	Rs62.80
Indiabulls Housing Finance (INBF.NS)	E (06/22/2015)	Rs1,216.80
LIC Housing Finance Ltd. (LICH.NS)	O (04/26/2017)	Rs578.05
Mahindra and Mahindra Financial Services (MMFS.NS)	O (05/30/2017)	Rs482.65
Multi Commodity Exchange of India Ltd (MCEI.NS)	E (11/13/2017)	Rs938.90
PNB Housing Finance Ltd (PNBH.NS)	U (02/20/2017)	Rs1,332.90
Shriram City Union Finance Ltd (SHCU.NS)	E (11/13/2017)	Rs2,135.00
Shriram Transport Finance Co. Ltd. (SRTR.NS)	O (05/30/2017)	Rs1,515.80
<b>Sumeet Kariwala</b>		
AU Small Finance Bank Ltd (AUFI.NS)	O (11/02/2017)	Rs699.40
Bank of Baroda (BOB.NS)	E (10/25/2017)	Rs164.50
Bank of India (BOI.NS)	U (06/08/2015)	Rs170.25
Canara Bank (CNBK.NS)	U (09/19/2014)	Rs364.70
Federal Bank (FED.NS)	E (03/21/2017)	Rs115.15
HDFC Standard Life Insurance Company Ltd (HDFS.NS)	O (12/21/2017)	Rs435.50
ICICI Prudential Life Insurance (ICIR.NS)	O (11/01/2016)	Rs412.50
IndusInd Bank (INBK.NS)	++	Rs1,725.05
Kotak Mahindra Bank (KTKM.NS)	O (05/18/2014)	Rs1,009.75
Punjab National Bank (PNBK.NS)	O (10/25/2017)	Rs174.65
RBL Bank Limited (RATB.NS)	E (10/03/2016)	Rs538.90
Yes Bank (YESB.NS)	O (03/10/2014)	Rs341.35

Stock Ratings are subject to change. Please see latest research for each company.

\* Historical prices are not split adjusted.