

Infinite Game

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Finite and Infinite Games

Finite Games	Infinite Games
Known Players, defined rules, game ends with clear winners and losers.	New players can join, rules can change, no beginning or end, the objective is to perpetuate the game, no winners or losers.

Infinite games started with a vision towards a horizon that is interesting, journey starts with curiosity, the goal is not to reach the horizon but to find more vision. You never reach horizon you enjoy the journey.



Infinite Mindset to Investing

How to perpetuate the game?



Think long-term



Build a process



Minimize mistake



Journey of lifelong learning



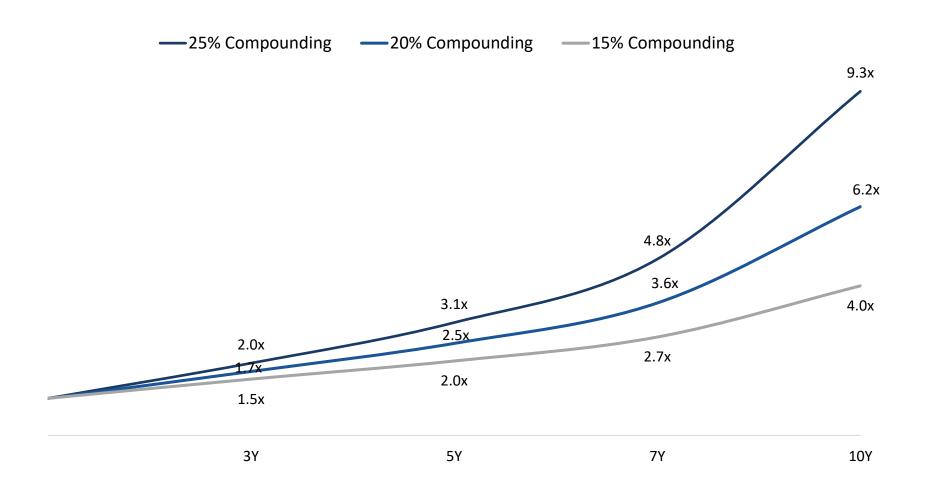
Think long-term

In the long run stock prices reflect underlying earnings

- Majority of fortune 500 billionaires built businesses which grew exponentially for years.
- Compounding does not require great returns but good returns over longer time horizon.
- Consistent 55% batting average will put you in top tier of performance.
- Long-term returns usually mirror the long-term earnings of the business



Compounding

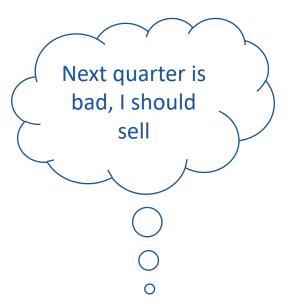




Myopic Loss aversion

• Losses over short-term dominate investor phycology – Myopic loss aversion is one the biggest phycological reasons observed which prevents investors for doing well in the stock markets.



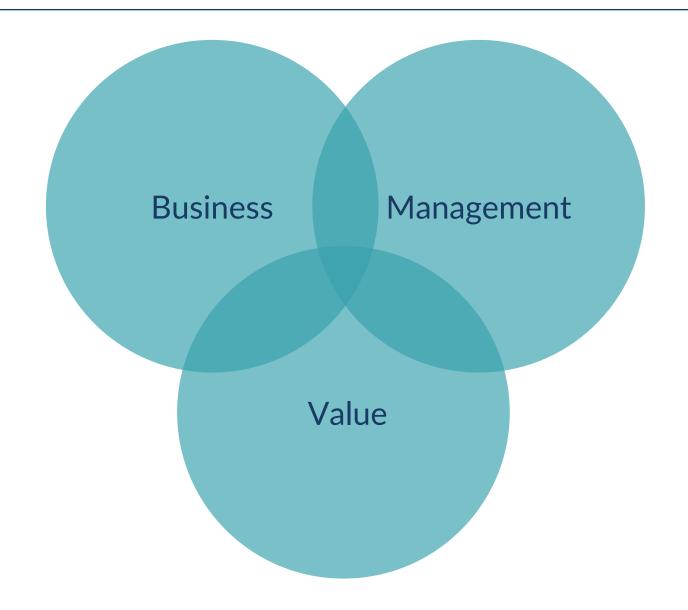






Investment Framework

Investment Process





Understanding the DNA of the business



Understand key drivers



Growth potential and cyclicality of earnings



Capital intensity



Understand the unit economics



Return on capital



Compare it to similar businesses



Understanding the DNA of the management

Management is the key ingredient



Intent & integrity



Capital allocation



Execution - scale, market share gains, cost leadership?



Value - Theoretical Concept

Growth and returns determine the multiple

Scenario 1 - Consumer

Risk Free rate	7.0%
Beta	0.7
Equity Risk Premium	5.4%
Cost of Equity	10.8%
Years - Phase 1	5
Years - Phase 2	15
Growth - Phase 1	15%
Growth - Phase 2	12%
Terminal growth	5%
RoE - Phase 1	80%
RoE - Phase 2	75%
RoE - Long Term	70%
Target P/E	40

Scenario 2 - IT Services

Risk Free rate	7.0%
Beta	0.9
Equity Risk Premium	5.4%
Cost of Equity	11.6%
Years - Phase 1	5
Years - Phase 2	10
Growth - Phase 1	15%
Growth - Phase 2	12%
Terminal growth	5%
RoE - Phase 1	35%
RoE - Phase 2	25%
RoE - Long Term	25%
Target P/E	20

Scenario 3 - Industrial

Risk Free rate	7.0%
Beta	1.2
Equity Risk Premium	5.4%
Cost of Equity	13.5%
Years - Phase 1	5
Years - Phase 2	10
Growth - Phase 1	20%
Growth - Phase 2	15%
Terminal growth	3%
RoE - Phase 1	25%
RoE - Phase 2	20%
RoE - Long Term	15%
Target P/E	15



Reduce Mistakes



Allowing emotions not reasons to guide decisions



Thinking you know more than you do



Backing dishonest management



Choosing businesses prone to failure

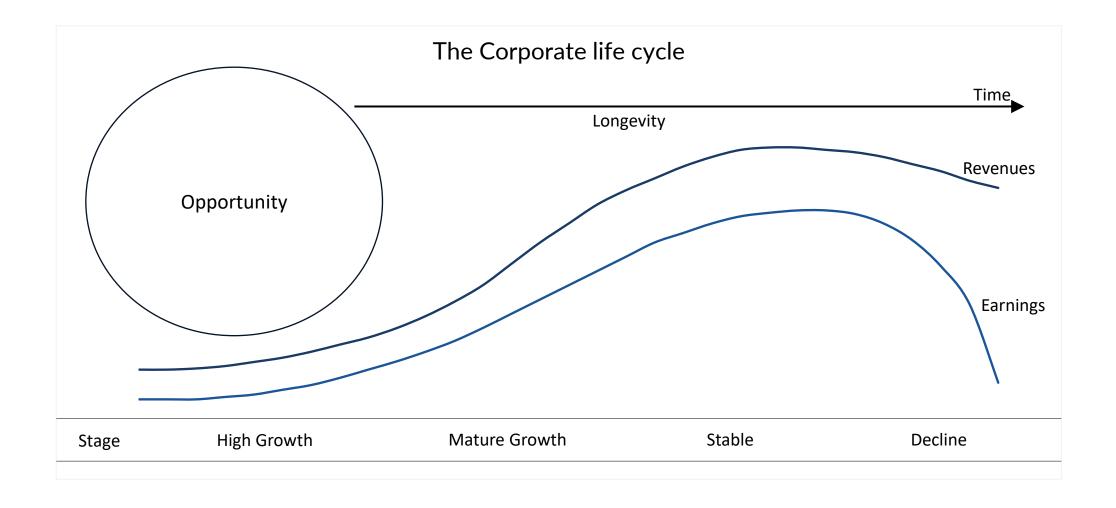


Over paying for stocks



Analysing Business Models

The Corporate life cycle





Avenue Supermarts (Market Cap US\$32bn)

Avenue Supermarts (DMART)							CAGR ,	/ Median
(Rs bn)	FY15	FY23	FY24E	FY25E	FY26E	FY27E	FY15-23	FY23-27E
Total Stores (nos)	89	324	374	424	479	539	18%	14%
Total Area (mn sqft)	2.7	13.4	16.0	18.5	21.3	24.4	22%	16%
Avg Revenue per sqft (Rs)	26,763	33,601	34,945	36,343	37,797	39,308	3%	4%
Revenues	64	418	513	626	752	898	26%	21%
Gross profit	9	61	73	89	108	129	26%	21%
EBITDA	5	37	43	53	64	77	30%	20%
PAT	2	26	28	35	42	51	37%	19%
Gross margin %	14.5%	14.5%	14.2%	14.3%	14.3%	14.4%	14.7%	14.3%
EBITDA Margin %	7.0%	8.7%	8.3%	8.4%	8.5%	8.5%	8.2%	8.4%
PAT margin %	3.3%	6.1%	5.5%	5.6%	5.6%	5.7%	5.1%	5.6%
RoIC %	11.9%	17.5%	17.1%	18.1%	18.5%	18.8%	17.5%	18.3%



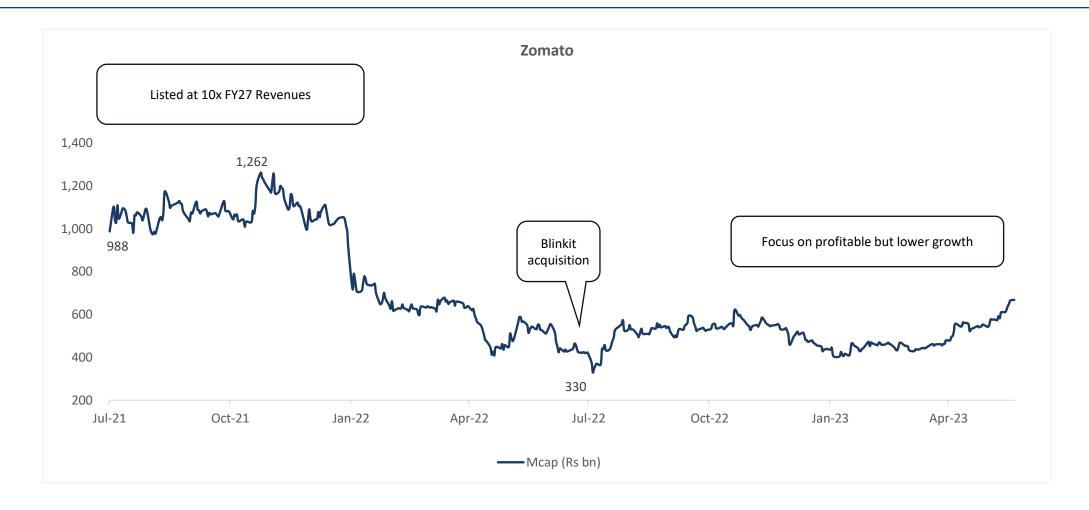


Avenue Supermarts

DMART									
Per Store Economics									
Revenue (Rs mn)	1,400	Current Stores (nos)	324						
EBITDA (Rs mn)	140	Current EV (Rs bn)	2,657						
EBITDA margin (%)	10%	EV/Store (Rs bn)	8.2						
PAT (Rs mn)	96								
Capex (Rs mn)	287	Derived value per store (Rs mn)	1,696						
Net Working Capital (Rs mn)	70	Stores reflected in current price (nos)	1,566						
Capital Employed (Rs mn)	357								
ROCE%	27%								



Zomato (Market Cap US\$7.6bn)





Zomato

Zomato - Food delivery						CAGR	Ca	se 1	Ca	se 2
(Rs bn)	FY19	FY20	FY21	FY22	FY23	FY19-23	3 Years	CAGR %	5 Years	CAGR %
Average MTU (mn)	5.6	10.7	6.8	14.7	17.1	32%	21.5	8%	25.1	8%
Avg Orders per customer (nos)	2.8	3.1	2.9	3.0	3.2	3%	3.7	5%	4.0	5%
No of Orders (mn)	191	403	239	535	646	36%	954	14%	1,202	13%
AOV (Rs)	282	278	397	398	407	10%	432	2%	449	2%
Commission & other income to GOV %	14.0%	16.4%	15.9%	16.0%	17.2%		18.0%		18.0%	
Delivery cost paid by Zomato %	24.7%	18.7%	5.5%	8.5%	8.1%		8.0%		8.0%	
Discounts to GOV %	10.6%	7.8%	2.1%	5.8%	4.2%		2.5%		2.5%	
Contribution margin % of GOV	-24.8%	-11.0%	5.2%	1.7%	4.5%		7.3%		7.3%	
Other Overheads to GOV %	12.1%	6.2%	7.1%	5.2%	4.6%		3.5%		3.0%	
Gross Order Value	54	112	95	213	263	49%	412	16%	540	15%
Adjusted Revenue	9.1	23.6	21.6	47.6	61.5	61%	99.3	17%	130.2	16%
Adjusted EBITDA (Rs bn)	-19.9	-19.3	-1.8	-7.7	-0.1		15.7		23.3	
Adjusted EBITDA margin %	-218.7%	-81.8%	-8.3%	-16.1%	-0.2%		15.8%		17.9%	

Source: Company



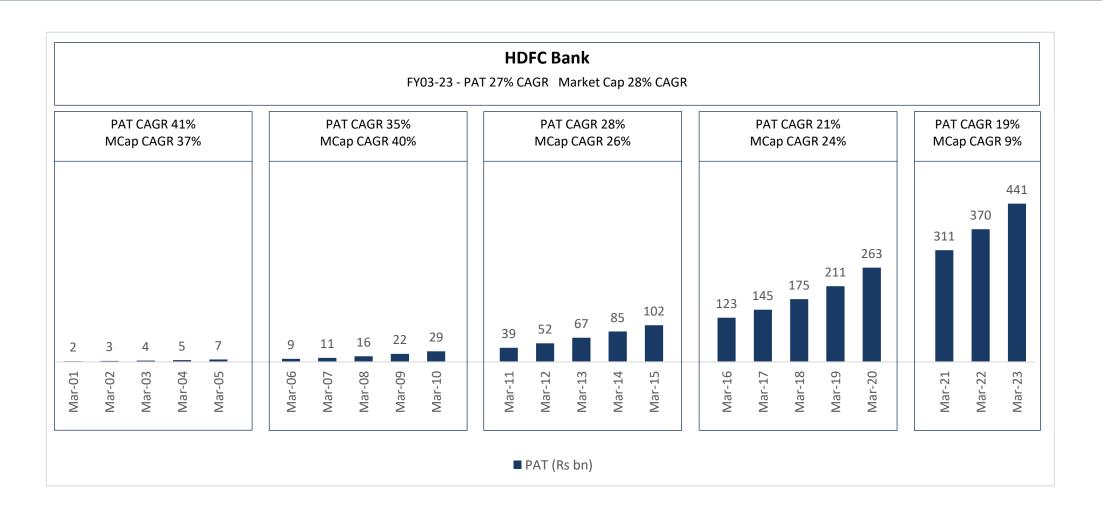
HDFC Bank (Market Cap US\$109bn)

HDFC Bank	Mar-03	Mar-08	Mar-13	Mar-18	Mar-23	CAGR / Median			
(Rs bn)	FY03	FY08	FY13	FY18	FY23	20 Years	15 Years	10 Years	5 Years
Branches (nos)	231	761	3,065	4,787	7,821	26%	17%	10%	10%
NIM %	3.3%	4.9%	4.6%	4.4%	4.1%	4.4%	4.4%	4.4%	4.1%
Fee & other income Total Assets %	1.7%	2.0%	1.9%	1.6%	1.4%	1.7%	1.7%	1.6%	1.5%
Cost to Income %	45.4%	49.9%	49.6%	41.0%	40.4%	44.6%	44.3%	40.7%	38.6%
PPOP Margin %	54.6%	50.1%	50.4%	59.0%	59.6%	55.4%	55.7%	59.3%	61.4%
Credit costs %	1.5%	2.7%	0.8%	1.0%	0.8%	1.3%	1.0%	0.9%	1.2%
RoE %	18.4%	17.7%	20.3%	17.9%	17.0%	17.8%	17.0%	17.4%	16.6%
Net Advances	118	634	2,397	6,583	16,006	39%	24%	21%	19%
PAT	4	16	67	175	441	37%	25%	21%	20%
EPS (Rs)	1.4	4.5	14.1	33.7	79.1	31%	21%	19%	19%
BVPS (Rs)	8.0	32.4	76.1	204.8	502.2	32%	20%	21%	20%

Source: Company, ACE Equity



HDFC Bank





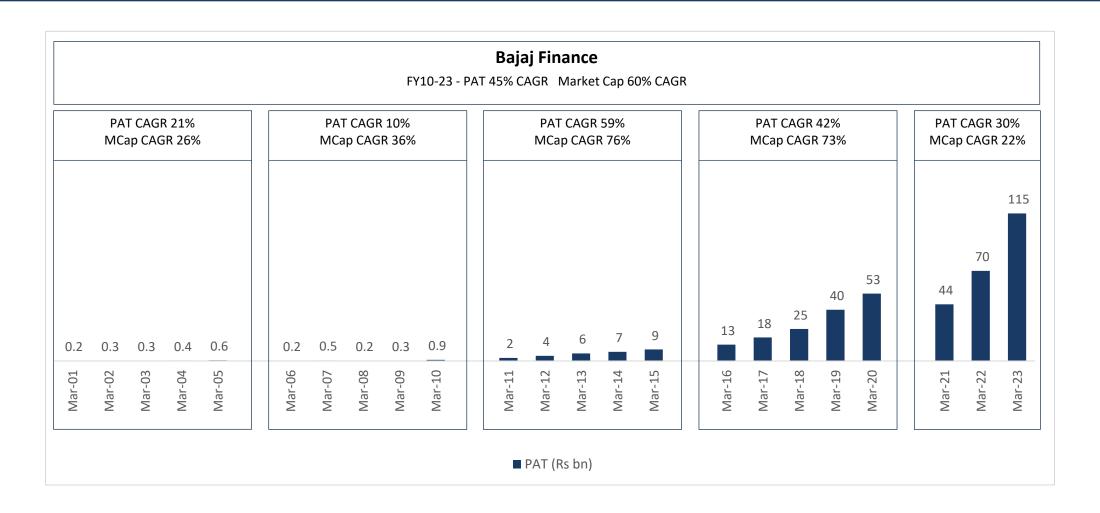
Bajaj Finance (Market Cap US\$53bn)

Bajaj Finance	Mar-13	Mar-18	Mar-21	Mar-22	Mar-23		CAGR / Median	
(Rs bn)	FY13	FY18	FY21	FY22	FY23	10 Years	5 Years	3 Years
Branches & franhisee (nos)	91	1,332	2,988	3,504	3,733	45%	23%	16%
Distribution network (nos)	7,000	64,300	1,10,300	1,33,200	1,54,650	36%	19%	11%
Customer Franchise (mn)	8.1	26.2	48.6	57.6	69.1	24%	21%	18%
NIM %	11.4%	10.1%	9.2%	9.7%	9.7%	10.1%	9.7%	9.7%
Fee & other income to AUM %	1.5%	1.6%	2.3%	2.5%	2.6%	2.0%	2.5%	2.5%
Cost to Income %	44.7%	40.1%	30.7%	34.7%	35.1%	37.7%	34.7%	34.7%
PPOP margin %	55.3%	59.9%	69.3%	65.3%	64.9%	62.3%	65.3%	65.3%
Credit cost %	1.3%	1.5%	4.1%	2.8%	1.5%	1.5%	2.8%	2.8%
RoE %	22.0%	20.1%	12.8%	17.4%	23.5%	20.3%	20.2%	17.4%
AUM	175	824	1,529	1,975	2,474	30%	25%	19%
PAT	5.9	25.0	44.2	70.3	115.1	35%	36%	30%
EPS (Rs)	23.9	43.4	73.5	116.5	190.4	23%	34%	29%
BVPS (Rs)	135.3	275.5	613.7	724.6	899.5	21%	27%	19%

Source: Company, ACE Equity



Bajaj Finance



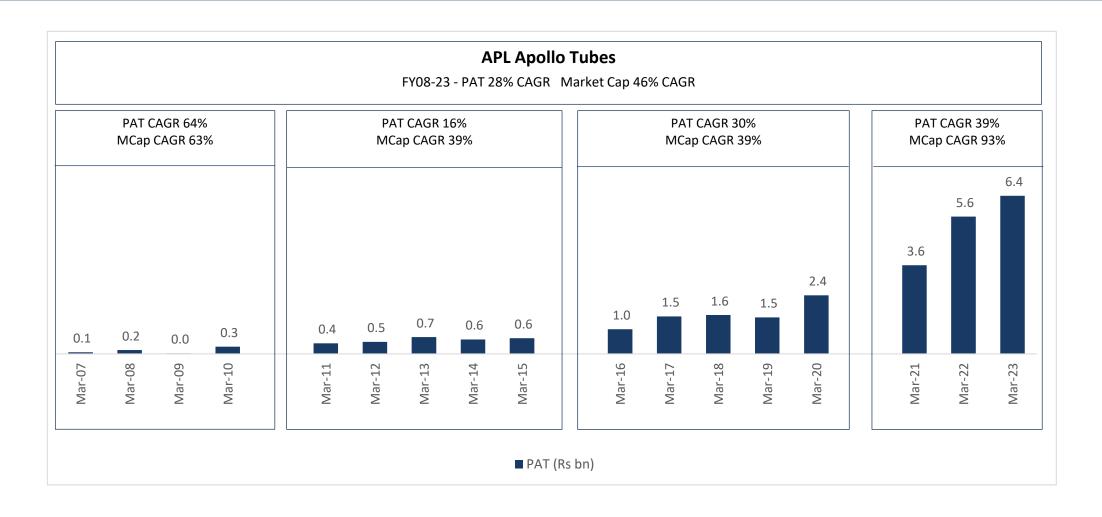


APL Apollo Tubes (Market Cap US\$4.4bn) – Small to Large

APL Apollo Tubes	Mar-08	Mar-13	Mar-18	Mar-23		CAGR / Median	
(Rs bn)	FY08	FY13	FY18	FY23	15 Years	10 Years	5 Years
Capacity (KTPA)	198	600	1,750	3,600	21%	20%	16%
Sales Volume ('000 MT)	76	426	1,130	2,280	25%	18%	15%
Revenues	2.8	20.1	53.3	161.7	31%	23%	25%
EBITDA	0.3	1.6	3.7	10.2	26%	20%	22%
EBITDA per MT (Rs)	4,279	3,749	3,283	4,481	0%	2%	6%
PAT	0.2	0.7	1.6	6.4	28%	25%	32%
PAT margin %	5.8%	3.4%	3.0%	4.0%	3.4%	3.0%	4.0%
RoIC %	19.8%	13.1%	13.2%	22.0%	13.2%	14.0%	19.4%
NWC % of Sales	40.6%	24.9%	14.9%	2.0%	14.9%	11.4%	3.1%
Net debt/ EBITDA (x)	2.3	2.7	2.1	0.2	2.3	2.0	0.2

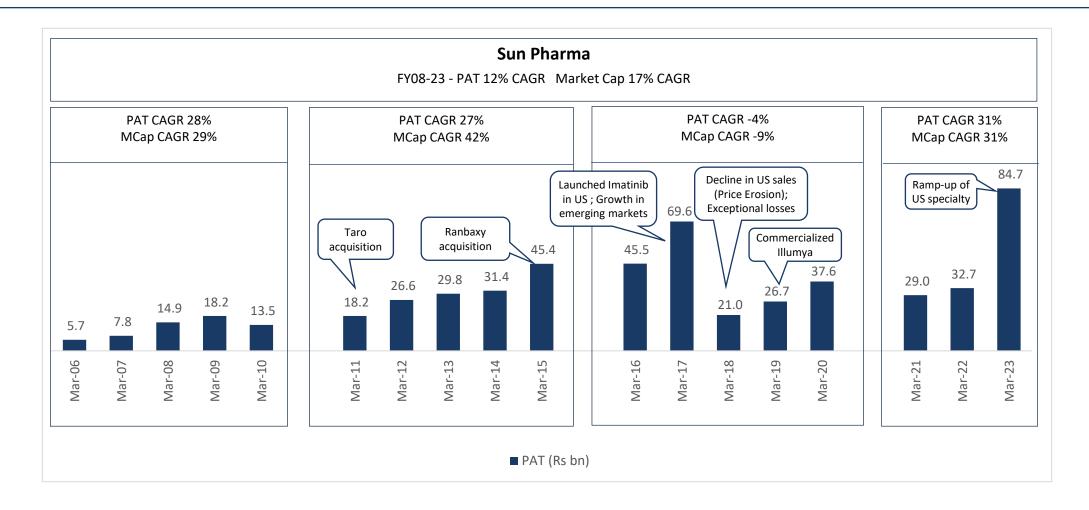


APL Apollo Tubes



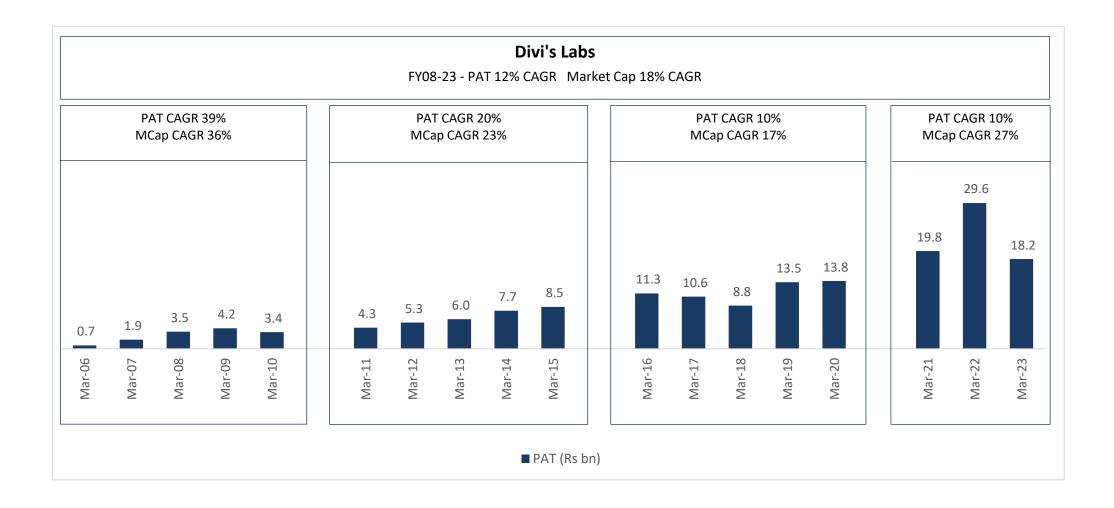


Sun Pharma (Market Cap US\$29bn)





Divis Laboratories (Market Cap US\$11.6bn)





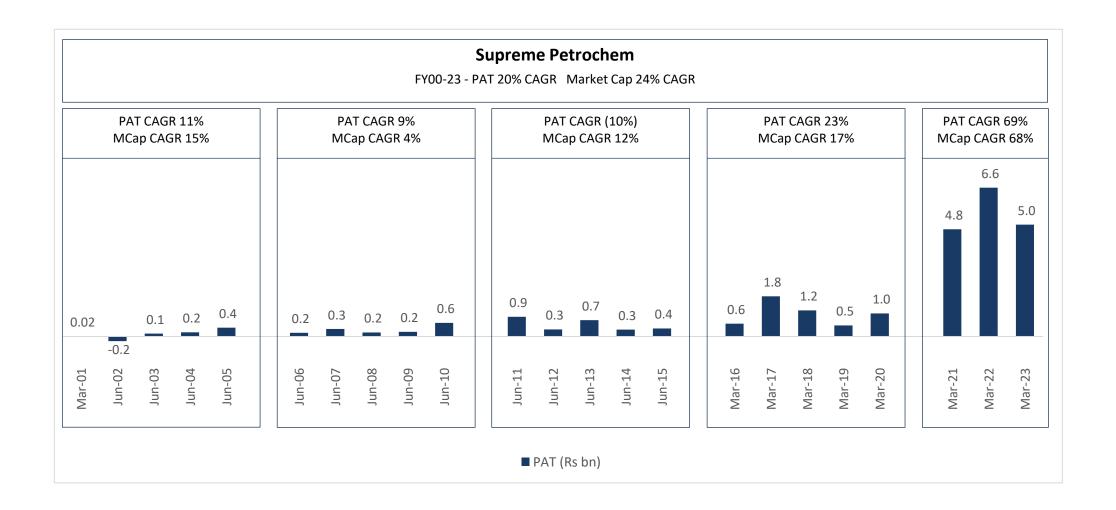
Supreme Petrochem (Market Cap US\$940mn)

Supreme Petrochem	Jun-03	Jun-08	Jun-13	Mar-18	Mar-23		CAGR / Median			
(Rs bn)	FY03	FY08	FY13	FY18	FY23	20 Years	15 Years	10 Years	5 Years	
Effective Capacity (KTPA)	221	278	350	350	428	4%	3%	2%	4%	
Sales Volume ('000 MT)	145	164	180	202	286	5%	4%	5%	7%	
Contribution per KG (Rs)	8.2	9.1	19.1	20.2	34.6	10%	9%	14%	28%	
Power & fuel per KG (Rs)	0.8	0.9	2.3	2.0	2.3	8%	7%	10%	17%	
Freight cost per KG (Rs)	0.9	1.9	2.5	2.7	3.7	10%	6%	7%	20%	
Employee & other costs per KG (Rs)	2.0	3.1	5.6	5.8	5.6	7%	6%	6%	10%	
EBITDA per KG (Rs)	4.5	3.2	8.7	9.7	23.0	11%	14%	10%	19%	
Revenues	7.4	14.8	29.7	30.3	52.9	14%	9%	6%	12%	
EBITDA	0.7	0.5	1.6	2.0	6.6	17%	18%	15%	27%	
PAT	0.1	0.2	0.7	1.2	5.0	28%	25%	21%	34%	
PAT margin %	1.7%	1.2%	2.5%	3.8%	9.4%	2.6%	3.8%	3.8%	9.4%	
RoIC %	7.4%	8.5%	18.8%	23.1%	60.3%	14.7%	18.8%	23.3%	60.3%	
NWC % of Sales	0.1%	5.0%	1.7%	3.7%	5.3%	4.1%	2.5%	2.1%	1.8%	
Capex % of Sales	0.0%	1.9%	0.8%	0.5%	3.1%	1.0%	1.1%	0.9%	2.2%	
Payouts %	0.0%	54.5%	33.2%	37.4%	34.0%	38.3%	37.4%	38.3%	39.2%	

Source: Company, ACE Equity



Supreme Petrochem





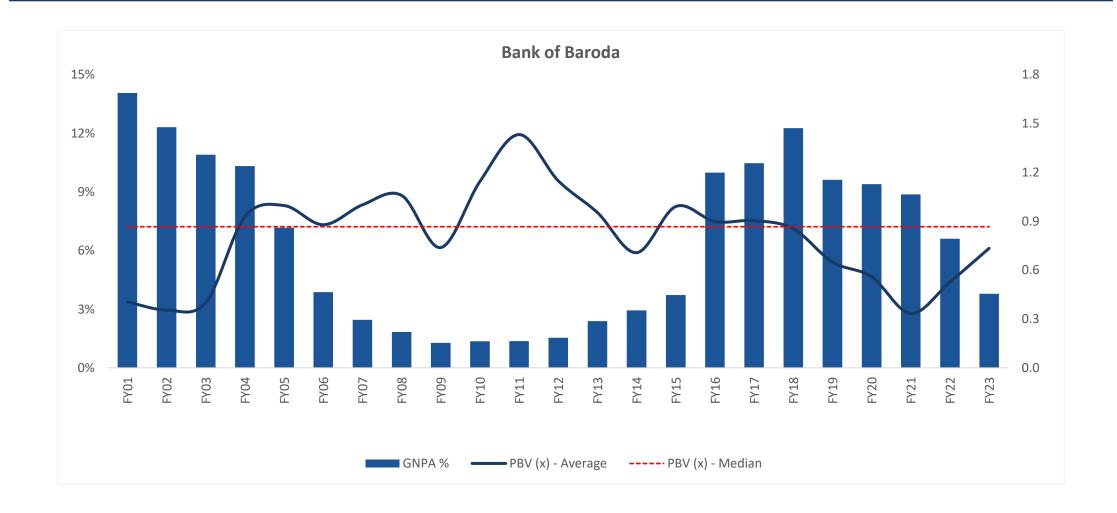
Bank of Baroda (Market Cap US\$11.9bn)

Bank of Baroda	Mar-03	Mar-08	Mar-13	Mar-18	Mar-23	CAGR / Median			
(Rs bn)	FY03	FY08	FY13	FY18	FY23	20 Years	15 Years	10 Years	5 Years
Branches (nos)	2,715	2,853	4,276	5,467	8,368	8%	7%	7%	9%
NIM %	3.1%	2.6%	2.3%	2.3%	3.2%	2.6%	2.6%	2.5%	2.8%
Fee & other income Total Assets %	1.7%	1.3%	0.7%	0.9%	0.7%	1.0%	0.9%	0.9%	0.9%
Cost to Total Income %	49.0%	51.1%	40.0%	45.9%	47.7%	45.9%	45.6%	46.8%	49.2%
PPOP Margin %	51.0%	48.9%	60.0%	54.1%	52.3%	54.1%	54.4%	53.2%	50.8%
Credit costs %	1.6%	0.7%	1.3%	3.7%	0.8%	1.5%	1.3%	2.2%	2.2%
RoE %	18.8%	14.6%	15.1%	-5.8%	15.3%	12.5%	9.0%	2.3%	1.1%
Net Advances	353	1,067	3,282	4,274	9,410	24%	16%	11%	17%
PAT	8	14	45	-24	141	21%	16%	12%	nm
EPS (Rs)	5.3	7.9	21.2	-9.2	27.3	12%	9%	3%	nm
BVPS (Rs)	29.8	60.4	151.3	163.6	189.7	13%	8%	2%	3%

Source: Company, ACE Equity

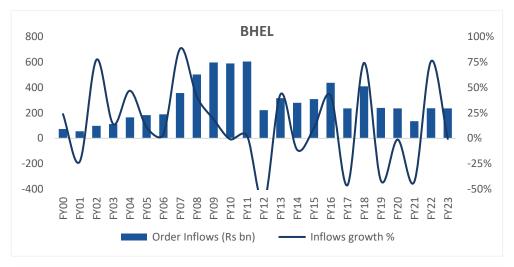


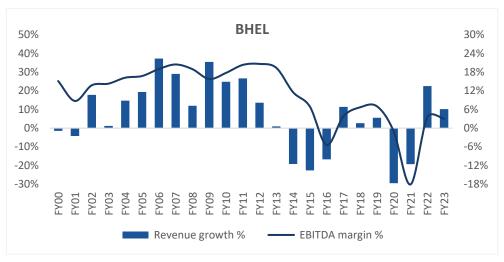
Bank of Baroda

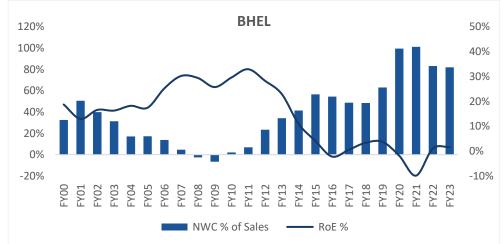


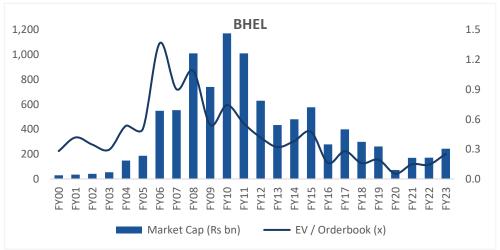


BHEL (Market Cap US\$3.7bn)





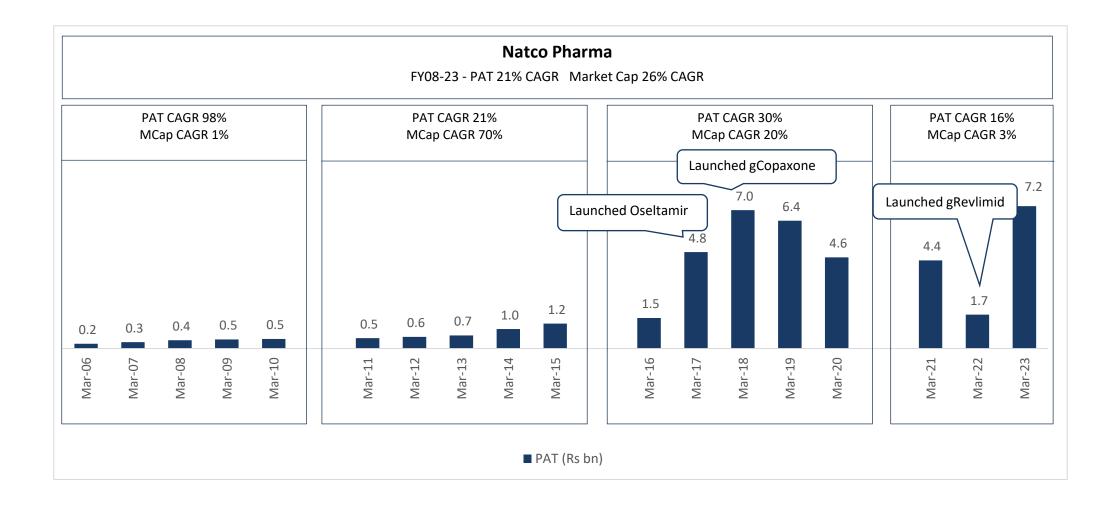




Source: Company, ACE Equity



Natco Pharma (Market Cap US\$1.4bn)





Learning a life long journey

We learn through recognising patterns

Learning is a process of trial and error in which favorable responses to new situations (stimuli) actually alter the neural connections between brain cells. That is, the process of learning affects the synaptic connections between neurons, which are continually adjusting as they recognize familiar patterns and accommodate new information.

Edward Thorndike

Theory of Connectionism

Neural Network Just like the brain, neural networks ability to recognize complex patterns, classify new information into patterns, and draw associations between the new data.

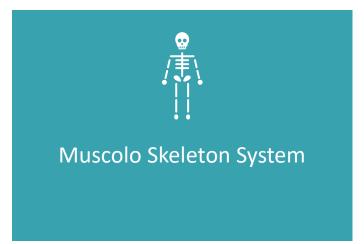
The more models you have—the bigger your toolbox—the more likely you are to have the right models to see reality.

Mental Models



Training for endurance









Learning resources

Podcasts







Blogs





Books

