

Value Migration



**Picking winners
in disruptive times**

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Value Migration



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(Author of the book
“Value Migration”)

Value Migration

Picking winners in
disruptive times



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Picking winners in disruptive times

As we launch our report on *Value Migration*, the Indian economy is undergoing major disruptions. Passage of the GST Amendment Bill and demonetization of high value currency notes mark the beginning of the next phase of India's evolution. The imminent tectonic shifts in the economic landscape will challenge established models of doing business and coax the emergence of business designs that are better able to satisfy customers' priorities. Through this report, we attempt to stock up on relevant tools to identify the significant investment opportunities that will emerge from the churn, and as Shakespeare puts it, *take the tide at the flood*.

Selection of winning business models paramount to investment success

Delivering investment outperformance in stock markets is the holy grail of investment managers. Outperforming is not an easy task. Success in investment management depends on the interplay of multiple factors – research, discipline, patience, emotional quotient, among others. Different approaches have worked in delivering outperformance. What is common to all the approaches, in a nutshell, is picking a winning business model. Picking a winning industry and then picking a winner in that winning industry is a strong combination for achieving investment success, we reckon.

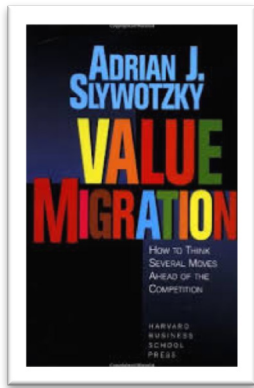
This report applies the framework of Value Migration, attempts to highlight the disproportionate returns generated by several business models, and also uncovers several potential winners.

What is Value Migration?

Value Migration is defined by **Adrian Slywotzky**, author of the book “Value Migration”, as a flow of economic and shareholder value away from obsolete business models to new, more effective designs that are better able to satisfy customers' most important priorities. The framework tries to identify industries where Value Migration is underway and can help pick potential winners early in the cycle.

Value Migration framework helps in picking winning business models

Through different case studies, we show that Value Migration is underway in India in several industries. A number of businesses have benefitted from Value Migration, delivering consistent stock returns. Businesses that have found themselves on the wrong side of the Value Migration equation have suffered and underperformed significantly. In this report, we have discussed in detail case studies in the Indian investment landscape across **Banking, Auto, Consumer, Metals, Pharma, Logistics, Telecom, Transportation, Capital Goods, and Information Technology**. These case studies amply demonstrate the power of Value Migration in delivering consistent business outperformance. We also highlight several potential long-term Value Migration winners, again, across sectors. In some case studies, we have also



highlighted global instances of Value Migration (*with references from Adrian Slywotzky's book*) in similar industries.

Where is your business residing in the Value Migration chain?

Typically, any business model exists in one of the three phases of Value Migration – Value Inflow, Stability or Value Outflow. Winning business models, as the name suggests, often find themselves in either inflow or stability phase. In the inflow phase, the industry or business captures value from other industries or businesses based on a superior consumer proposition. In the stability phase, the industry or business consolidates its position. In the value outflow stage, the incumbents witness share loss to businesses that are meeting customer needs more effectively. The report highlights case studies pertaining to all three phases of Value Migration.

The nitty-gritties

Identifying a prevalent trend of Value Migration is half the job done. The remaining half pertains to (a) understanding its causes, (b) fathoming the way it reflects in financials, and (c) understanding the duration of the trend. We discuss these aspects in detail in the report.

Common catalysts of Value Migration

Our study highlights that common causes of Value Migration in India are – cost, technology, convenience, innovation, lower switching costs. Public Sector to Private Sector Value Migration is a classic umbrella, encompassing several sectors – Banking, Telecom, Aviation. This is a multi-decadal trend, in our view, and will continue to play out. Another commonly observed trend in India is Value Migration from the Unorganized to the Organized Segment due to evolving consumer tastes and the increasing affordability, given rising disposable incomes and narrowing of taxation gap (should hasten with the implementation of GST, in our view) between unorganized and organized players. This is also a multi-year theme, which will benefit several companies belonging to consumption-oriented industries.

Value Migration also helps to avoid debilitating business models

Evolution of technology, consumer preferences, and ever-changing competitive landscape renders today's winners ineffective in confronting tomorrow's challenges. Through few case studies in this report, we also discuss the role of Value Migration in helping investors to avoid potential losers from the prevailing trend. We also discuss two case studies of Reverse Value Migration, which highlight that a business can make a comeback and drive the flow of value back towards itself even if it is a loser during the initial stage of Value Migration.

Four interesting themes of emerging value migration

Pace of value migration in today's times is rapid. Even before a new trend of value migration takes shape, the newer challenger is already on the heels of emerging winner. Interestingly, we note that unlisted players are posing strong challenge to listed ones in several segments. The report highlights four emerging but interesting themes on value migration which can disrupt the way businesses are done in those respective industries. Those four themes are:

- 1) Automobiles: Future of transportation- Shift from product to service?
- 2) BFSI: Payment banks and small finance banks - Dawn of new era in financials
- 3) FMCG: Shift towards traditional/herbal players
- 4) Telecom: Disruption by new players

Snapshot of value migration case studies

S.N.	Case Study	Industry	Driver
1A	Value Migration from Public to Private Sector	Banks	Technology, Efficiency
1B	Value Migration from Public to Private Sector	Insurance	Technology, Efficiency
2	Value Migration in Two Wheelers	Automobiles	Changing customer priority
3	International Value Migration	Information Technology	Cost
4	International Value Migration	Pharmaceuticals	R&D, Cost
5	Value Migration in Commodities	Cement	Demand supply equilibrium
6	Value Outflow in Conventional Energy	Capital Goods	Preference for new energy sources
7	Reverse Value Migration	Automobiles - Two Wheelers	Technology
8	Inter-Industry Value Migration	Transportation [Airline]	Convenience, Cost

Source: Company, MOSL

Unique disruptions: Unlisted players posing challenges to listed ones

S.N.	Sector	Theme	Unlisted players involved
1	Automobiles	Future of personal transportation: Shift from product to service	Uber, Ola
2	FMCG	Value Migration from traditional FMCG to Ayurveda/Herbal players	Patanjali
3	BFSI	Payment banks and SFBs: Dawn of new era in Financials?	Paytm
4	Telecom	The disruptor with big pockets	RJIO

Source: Company, MOSL

Value migration: Potential winners

S.N.	Theme	Sector	Winners
1	Value Migration from Unorganized to Organized Segment	Mortgages (Home Finance)	Repco, Gruh Finance
2	Value Migration from Unorganized to Organized Segment	Jewelry	Titan
3	Value Migration from Unorganized to Organized Segment	Logistics	Third party logistics players
4	Value Migration from Unorganized to Organized Segment	Adhesives	Pidilite
5	Value Migration from Unorganized to Organized Segment	Light Electricals	CG Consumer, Havells
6	Value Migration Unleashed by Technology	Telecom	Bharti, BHIN
7	Value Migration Unleashed by Technology	Media	Netflix, Eros, Star, Shemaroo, Zee
8	Value Migration Unleashed by Technology	E - commerce	Amazon, Flipkart
9	Value migration due to Lifestyle Changes	Transportation	Indigo
10	Value migration due to Lifestyle Changes	Apparel	Page, Arvind
11	Value migration due to Lifestyle Changes	Diagnostics	Dr. Lal, SRL
12	Value migration due to Lifestyle Changes	Multiplex	PVR
13	Reverse Value Migration	Logistics	Concor, GDPL
14	Value Migration in Commodities	Aluminum	Hindalco

Value Migration

An evergreen investment framework for picking winners

Role of investment frameworks in stock-picking: Investment frameworks are tools & techniques that are applicable across stocks, sectors, time horizons and even geographies. Various investment frameworks have proven handy and successful in identifying stock ideas. Some of the successful frameworks include Economic Moats, GARP (Growth at Reasonable price), QARP (Quality at Reasonable Price). One of the frameworks that has delivered consistently and helped in creating investment value is the framework of Value Migration.

What is value migration?

Adrian Slywotzky defines value migration as a flow of economic and shareholder value away from obsolete business models to new, more effective designs that are better able to satisfy customers' most important priorities. It reflects changing customer needs that will be satisfied by new competitive offerings. Value migration occurs when there is a disconnect between customer priorities and existing business designs. It has several advantages; prominent amongst them being – (a) Gaining and sustaining competitive advantage by outthinking competitors and (b) Creating new growth drivers ahead of fading of existing growth catalysts.

Essentially, value migration has three stages:

- A. **Value inflow:** In this phase, a company or an industry captures value from other industries or companies due to superior value proposition. The market share and profit margins of the company or industry expand.
- B. **Stability:** In this phase, competitive equilibrium is established. Growth rates moderate.
- C. **Value outflow:** Value starts to move away towards companies or industries meeting evolving customer needs. In this phase, market share declines, margins contract, and growth stops.

Value migration as an investment framework

The criticality of value migration in identifying investment opportunities is relatively less understood, in our view. In this report, we study the framework in detail, try to understand its role in driving investment returns, highlight several case studies, and attempt to identify investment-worthy stocks based on this theme.

Value migration is a universal concept

From global viewpoint, value migration has been evident in the Technology (rapid product development, shift towards new technologies), Commodities (low cost production), and Retail (low cost distribution) industries, to name a few. From an Indian perspective, the shift from public sector undertakings (PSUs) to the private sector has been very evident. Value migration from the unorganized to the organized sector as incomes and aspirations rise is underway in several industries.

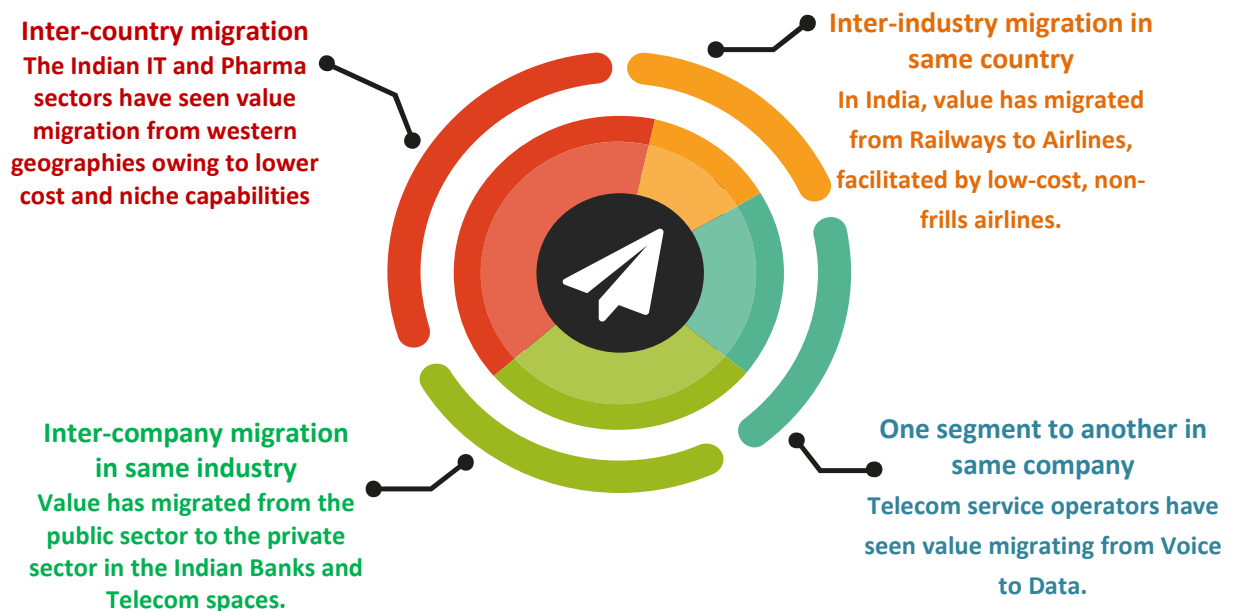
Types of value migration

Value migration can manifest in several ways.

- **Inter-country migration:** The Indian IT and Pharmaceutical sectors have seen value migration from western geographies owing to lower cost and niche capabilities.
- **Inter-industry migration in same country:** In India, value has migrated from Railways to Airlines, facilitated by low-cost, non-frills airlines.
- **Inter-company migration in same industry:** Value has migrated from the public sector to the private sector in the Indian Banks and Telecom spaces.
- **One segment to another in same company:** Telecom service operators have seen value migrating from Voice to Data.

Inter-country or inter-industry value migration is relatively rare, but wherever it occurs, the potential for value creation is immense.

Types of value migration



What drives value migration?

Some important drivers of value migration are: (1) technology, (2) cost, (3) convenience, (4) innovation, (5) easier access to funding, and (6) lower switching costs. Each of these has led to migration of value from incumbents to new players, creating investment opportunities along the way. By identifying such drivers early, one can create sizable wealth.

How do you measure value migration?

From an investment perspective, value migration can be measured/captured in terms of market capitalization, sales or profits. Value migration in terms of market capitalization is the earliest to show, followed by sales and then by profits. The market recognizes the potential beneficiaries of value migration much before the reflection in financials. We discuss this in details in our case studies in the context of value migration from public to private banks and public to private telecom companies where we saw migration in market cap much before it manifested in

financials. In the case of unlisted players, value migration can be measured in terms of profits, sales or market share.

How long does it take to play out?

After identifying the value migration drivers and measuring the same, the next critical factor is assessing the duration of value migration. Through various examples in this report, we show that value migration typically last for years/decades. Even if one identifies a value migration case a little late, the opportunity to make outsized investment returns is still available. For example, if one entered the value migration trade in private banks or private telcos or even in case of Titan a little later than when it commenced, investors would have still made good returns as these shifts were durable and continued for years. Instances of short duration value migration could be in technology-oriented sectors, where rapid evolution of technology results in constant value migration away from incumbents (unless the incumbent itself drives the value migration).

Value Migration plays: As we highlight in this report, India is characterized by multitude of value migration shifts given the infrastructure deficit, the rising aspiration of its middle class population, increasing disposable incomes and hence the desire to consume better as indeed the elevated competitive intensity in most of the industries. The strong growth potential of the economy fosters innovation, competition, creation of new categories and desire to wrest first mover advantage; ultimately resulting in value migration opportunities. We apply the framework of VM on our coverage universe and present select stocks as a potential beneficiary of VM. Our VM ideas are ***HDFC Bank, RBL, Titan Company, Arvind, Page, Repco Finance, Gruh Finance, Pidilite, Hindalco, Crompton Consumer, PVR, Bharti Airtel, Indigo.***



“

Adrian Slywotzky defines value migration as a flow of economic and shareholder value away from obsolete business models to new, more effective designs that are better able to satisfy customers' most important priorities. It reflects changing customer needs that will be satisfied by new competitive offerings. Value migration occurs when there is a disconnect between customer priorities and existing business designs.

”

06 Lower Switching Cost



01 Technology



02 Cost



05 Easier access to funding



VALUE MIGRATION DRIVERS

04 Innovation



03 Convenience



Value Migration – The nitty gritties

What is value migration?

The term, value migration was introduced by Adrian Slywotzky. He defines value migration as a flow of economic and shareholder value away from obsolete business models to new, more effective designs that are better able to satisfy customers' most important priorities. Value migration occurs when there is a disconnect between customer priorities and existing business designs. A universal concept, it helps explain the big successes/failures of underlying business trends in various markets.

Customer priorities keep changing and evolving. Businesses that identify this and take timely or pre-emptive action end up on the right side of the customer equation. Those that fail to do so stand on the wrong side of value migration equation, as we shall see in this report.

Three stages of value migration

Any business model exists in one of the following three stages of value migration.

Value Inflow

A] Value inflow: In this phase, a company or an industry captures value from other companies or industries due to superior value proposition. Market share and profit margins expand for the company. Naturally, this is the most desirable phase for any company. Early stage innovators, pioneers of new technology, companies offering unique value proposition are the habitants of the value inflow stage. In our view, the Indian Jewelry industry is in the value inflow phase, where value is migrating from the unorganized sector to brands. Also, Indian Pharma industry is witnessing value inflow, with the Chronic segment gaining at the expense of Acute. Even the Telecom industry is seeing value inflow for its Data segment.

Value Stability

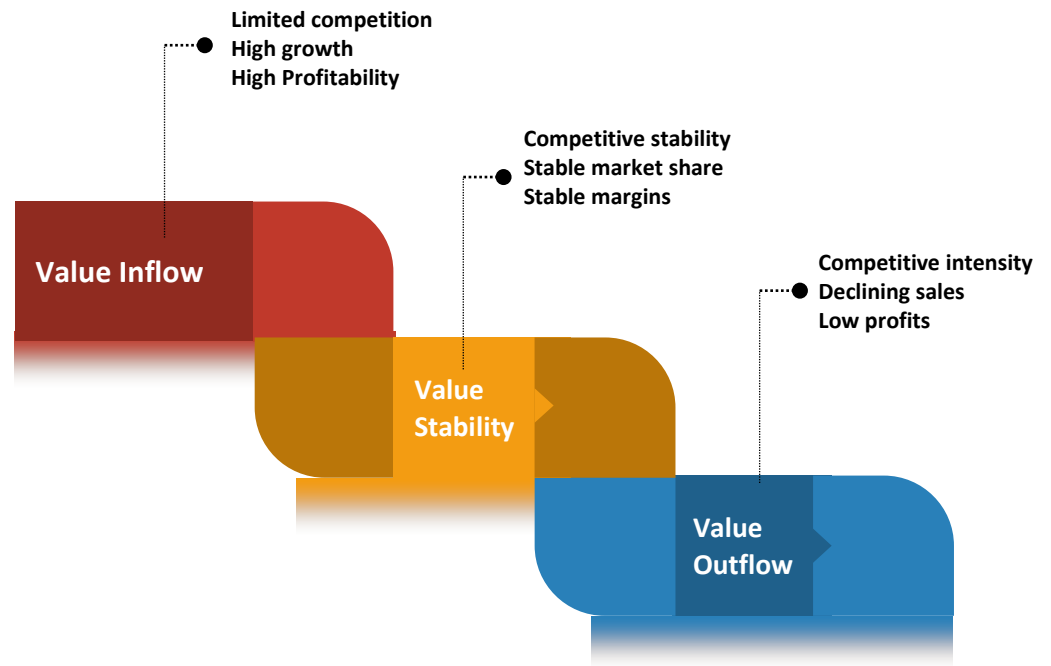
B] Stability: In this phase, competitive equilibrium is established. Growth rates moderate. Market shares also settle down and a certain comfort zone is established for incumbents. This typically paves way for the next phase. Bulk of the business models reside in this phase – well developed segments with limited penetration and per capita consumption opportunities, oligopolies, and industries with regulatory barriers. We believe the Indian IT and Pharmaceuticals industries is in stability phase now – incremental value migration will be a function of pace of innovation and new value propositions.

Value Outflow

C] Value outflow: Business value starts to move away from incumbents towards companies meeting evolving customer needs. In this phase, market share declines, margins contract and growth stops. Heavy competitive intensity with price wars and battles for customer retention characterize this phase. Mature business models with saturation, industries with stagnant innovation typically are in the value outflow stage. The two-wheeler industry in India is witnessing incremental value migrating towards scooters from motorcycles. In Telecom, there is value outflow from the Voice segment and value inflow to the Data segment. In Power, there is value outflow from conventional energy to renewables.

As the business model travels from value inflow to stability to value outflow, significant value is created and then lost.

The three stages of value migration



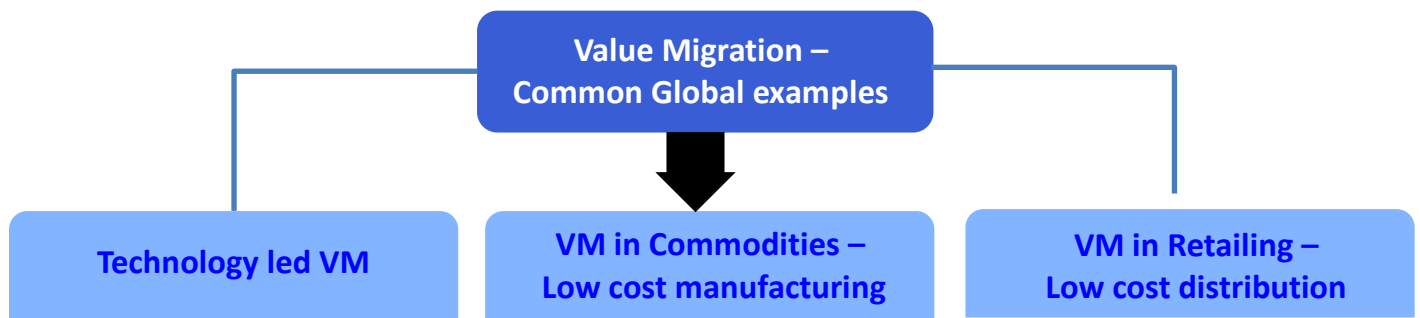
Value migration as an investment framework

The criticality of value migration in identifying investment opportunities is relatively less understood, in our view. From a business strategy standpoint, as competitive intensity goes up, innovation cycles constrict, capital availability becomes easier, product cycles shrink, and pace of evolution of technology goes up, the role of value migration becomes even more important to understand. In this report, we look at value migration from an investor's perspective – we try to understand its role in driving investment returns, highlight several case studies, and attempt to identify investment-worthy stocks based on this theme.

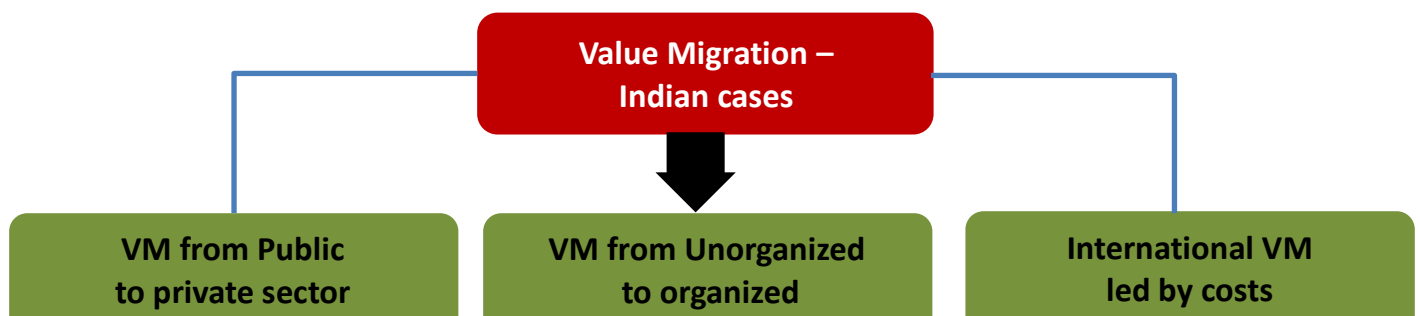
Value migration is a universal concept

Value migration is a universal concept and has played out across geographies. From global viewpoint, it has been evident in the Technology (rapid product development, shift towards new technologies), Commodities (low cost production), and Retail (low cost distribution) industries, to name a few. From an Indian perspective, the shift from public sector undertakings (PSUs) to the private sector has been very evident. Value migration from the unorganized to the organized sector as incomes and aspirations rise is underway in several industries.

VM in global context



VM in Indian context



Source: Company, MOSL

What causes value migration?

Customer priorities, an essential catalyst for value migration, change due to a multitude of factors. Hence, there could be several drivers of value migration. Some time-tested drivers are (1) technology, (2) cost, (3) convenience, (4) lowering of entry barriers, (5) lower switching costs, (6) easier access to capital, and (7) innovation.

For example, value migration from the public sector to the private sector in various industries in India is a consequence of better technology, greater convenience, lower costs (better value for money propositions). Combinations of these factors have resulted in market share erosion for public sector enterprises. As private participants gained share and scale, it enhanced their ability to invest and build the franchise.

Snapshot of value migration case studies

S.N.	Case Study	Industry	Driver
1A	Value Migration from Public to Private Sector	Banks	Technology, Efficiency
1B	Value Migration from Public to Private Sector	Insurance	Technology, Efficiency
2	Value Migration in Two Wheelers	Automobiles	Changing customer priority
3	International Value Migration	Information Technology	Cost
4	International Value Migration	Pharmaceuticals	R&D, Cost
5	Value Migration in Commodities	Cement	Demand supply equilibrium
6	Value Outflow in Conventional Energy	Capital Goods	Preference for new energy sources
7	Reverse Value Migration	Automobiles - Two Wheelers	Technology
8	Inter-Industry Value Migration	Transportation [Airline]	Convenience, Cost

Source: Company, MOSL

Value migration case studies



Drivers



• Banking

Value Migration from Public to Private Sector

Technology
Efficiency



• Insurance

Value Migration from Public to Private Sector

Technology
Efficiency



• Information Technology

International Value Migration

Cost



• Pharmaceutical

International Value Migration

R&D
Cost



• Capital Goods

Value outflow in conventional energy

Preference for
new energy
sources



• Jewellery

Value Migration from Unbranded to Branded segment

Trust
Brand



• Cement

Value Migration in commodities

Cost, Demand
supply
equilibrium



• Transportation (Airline)

Inter Industry Value Migration

Convenience
Cost



• Automobiles

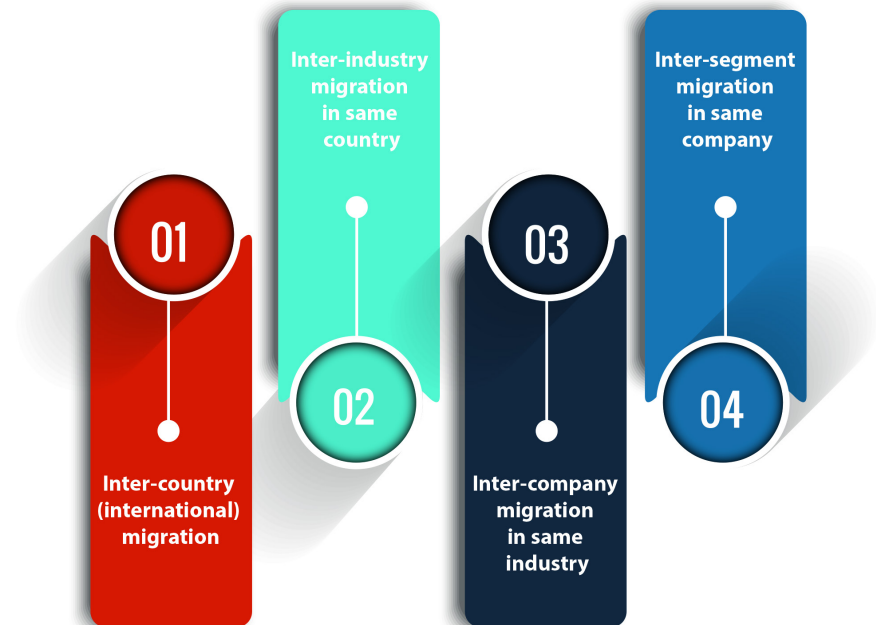
Reverse Value Migration

Technology

Types of value migration

Value migration can manifest in several ways. It can be segregated into four broad buckets:

- a. Inter-company migration in same industry
- b. Inter-country (international) migration
- c. Inter-industry migration in same country
- d. Inter-segment migration in same company



- Inter-country or inter-industry value migration is relatively rare, but wherever it occurs, the potential for value creation is immense. There are examples abound of inter-company value migration in India – from public sector companies to private sector entities, from the unorganized segment to the organized segment.
- In international value migration, the difficulty arises primarily from the fact that only limited services are geography agnostic. Not all industries are amenable to international value migration. Yet, there are multiple cases of international value migration. We discuss two such cases in this report – Indian IT and Indian Pharmaceuticals. The equation remains the same – identifying customer needs/priorities and creating a business design that successfully addresses these needs/priorities.
- The Indian IT industry has benefited immensely from global value migration, given its advantage of low cost skilled workforce. Over the last 20-30 years, the Indian IT industry has built sizable scale and created several local giants. Case III discusses the evolution of this phase.
- The Indian Pharma industry represents another fine example of international value migration induced by cost as well as niche capabilities. Unlike Indian IT, the advantage of low cost labor played only a supportive role. Enhanced spending on R&D and backward integration played a more important role. We discuss this in Case IV. International value migration to Indian IT and Pharmaceuticals.

Inter-company value migration in the same industry

Value migration from the public to the private sector has been a ubiquitous theme in India. This has spanned across sectors and created several winners in various industries. We highlight value migration from the public to the private sector in the Banking and Financial Services Industry (BFSI) in this section. Other industries that have seen value migration from the public to the private sector in India are Telecom and Aviation. Typically, the drivers for such migration have been quality of service, technology, and/or lack of innovation by the public sector (encumbered by bureaucracy and attendant rules/regulations that constrict innovation and creativity).



Case I: Value migration from public sector banks (PSBs) to private sector banks (PBs)

Industry: Financials – Banks and NBFCs | **Driver of VM:** Financial inclusion, Technology, Efficiency | **Play on VM:** HDFCB, RBL, EQUITAS, BAJAJ FINANCE, PAYTM

1. What is the value migration?

- Doors of value migration for the banking industry opened in 1995, and since then, it has been a one-way journey in favor of private sector banks. Focus on customer convenience, technology, new product introductions, and top management continuity facilitated the migration.
- Private sector banks (PBs) have gained 17-18% market share in loans and deposits from public sector banks (PSBs) in the past two decades.
- Focus on profitable growth helped PBs to get significantly higher share in the profit pool. Share of PBs (Top-6) in overall profit pool in the system has increased to 42% in FY15 (75%+ in FY16 due to losses of PSBs) from 16% in FY05, as per reported data. Aggregate MCAP of PBs is at USD127b as against USD46b for PSBs. As at the end of FY05, aggregate MCAP of PBs was USD13.7b as against USD26.3b for PSBs.
- The story of wealth creation is no different for NBFCs; their aggregate MCAP increased from USD18b to USD64b over the last decade.

2. What phase of value migration are we in currently?

- The current phase of migration is unique and threatening the entire spectrum of financial services. New players (prepaid wallet companies, payments banks, SFB, etc) with efficient technology, low cost acquisition, and deep pockets are fast making in-roads in this space.
- Highly profitable businesses like CASA, fee income, and monopoly over customer transactions once the bank becomes the primary bank are under pressure. GOI push to digitalization is likely to accelerate this phase of value migration. For example, PAYTM has 167m customers versus HDFCB's 365m. PAYTM is targeting to cover 500m+ customers by the end of 2020. Post demonetization, the pace of customer acquisition has accelerated.
- Existing banks are already reacting to changes in technology platform. New technologies like QR codes, UPI, Aadhar-enabled account opening within

minutes are increasing the level of competition and would make it extremely difficult for inefficient players to survive in the system.

- All banks have their e-wallets now and also offer credit cards to their customers; POS business is under pressure post the onset of QR technology and UPI. RBL Bank is building its business model on collaboration rather than fast expanding branch network whereas, DCBB is focused on fast expanding branch network to withstand the competition from SFBs.
- After every slowdown (product or economic), NBFCs have come up with strong business models, with niche offerings. NBFCs have been able to shift value from the unorganized to the organized sector and from banks for specific products.
- NBFCs have created strong loyalty amongst their niche customer bases. They have now started taking banks head-on in segments like SME and LAP (traditional loyal customer base of banking sector). Bajaj Finance, Bharat Financials, MMFS, SHTF, SCUF, CIFIC, etc are some of the recent successful franchises amongst NBFCs.
- Some MFIs with niche business models received small finance bank (SFB) licenses, which would not only start a shift from the unorganized to the organized segment but also challenge the strong foothold of PSBs in SME banking. Initial success factors are visible from players like Equitas, Ujjivan, AU Finance, Janlaxmi, etc. The recipients of SFB licenses have an aggregate loan book of INR346b, equivalent to $\sim 1/3^{\text{rd}}$ of the loan book of Yes Bank (more than a decade old bank).

3. What will be the catalyst for driving this value migration?

- Rapidly changing technology, increasing customer education (the government is making efforts to increase digital penetration post demonetization), regulators' favorable view on competition, and improving service levels are the key factors driving this value migration.
- PSBs have been unable to match the customer-friendly user interface offered by PBs and other challengers. With the young mobile-enabled customer base showing an increasing preference for digital solutions, PSBs will continue to lose deposit market share.
- PSBs have accumulated an unsustainable level of NPAs, resulting in extremely low capitalization ratios (CET-1). Most PSBs have CET-1 barely north of the regulatory minimum. This effectively means that PSBs do not have adequate capital to fund asset growth and will need to consolidate their balance sheets, resulting in loss of loan market share to PBs and new competition like payments banks and small finance banks. As loan growth opportunities reduce, PSBs will witness proportionate decline in their deposit market share.
- PSBs have already lost $\sim 8\%$ market share to PBs over the last decade.

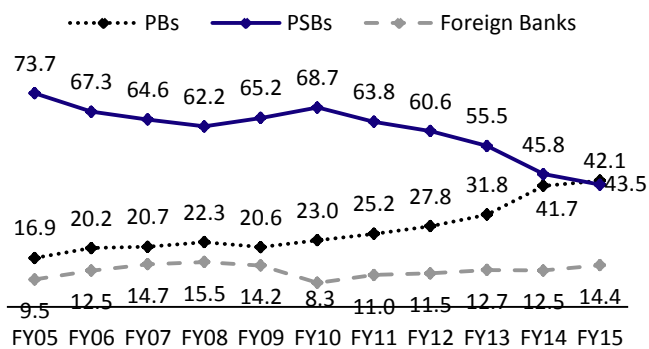
4. What if this value migration plays out? Who wins and who losses?

- Across the spectrum of financial services, most large private players are likely to be the key beneficiaries of this value migration. We expect the banking sector to grow at 14-15% – 1.3x nominal GDP growth, led by

expected increase in penetration levels. Private sector players are likely to outgrow the sector by 5-10%. Thus, PBs could grow at 20-25%.

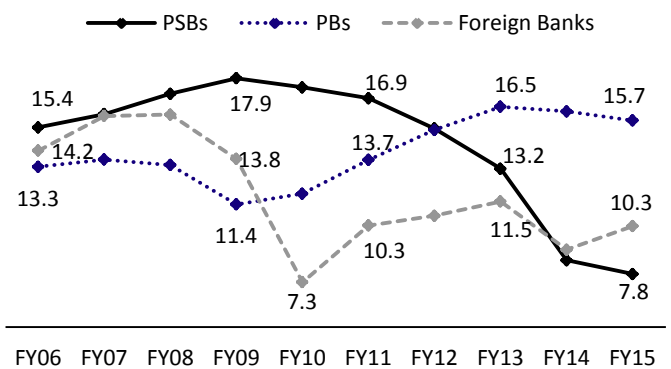
- PBs focused on strong branch expansion (without much dent on profitability) and diversification, having strong retail customer base and increasing hinterland presence are likely to be key beneficiaries. Within PBs, **HDFCB and RBL** remain our preferred plays for this theme.
- NBFCs, payments banks and SFBs are also likely to be on strong growth trajectory. Amongst listed players, we prefer **BAJAJFIN and EQUITAS**.
- Among the challengers in payments banks, we see PAYTM coming up with distributive technology that can challenge even leading PBs.

Exhibit 1: PAT market share (%)



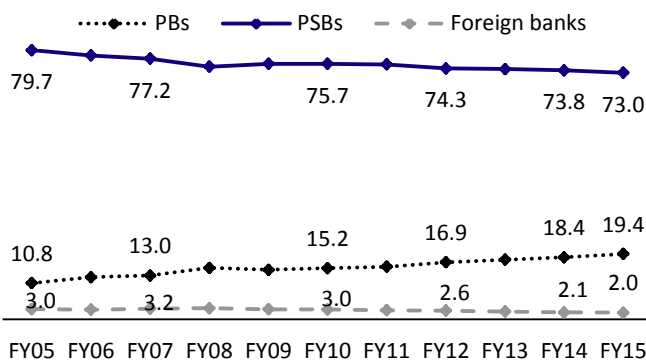
Source: RBI, MOSL

Exhibit 2: ROE (%)



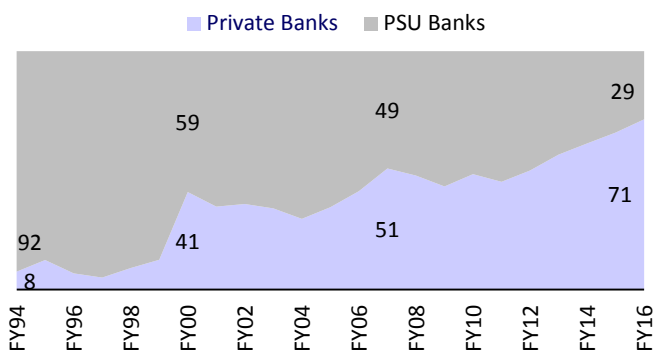
Source: RBI, MOSL

Exhibit 3: SA market share (%)



Source: RBI, MOSL

Exhibit 4: Market cap shift towards private banks (%)



Source: RBI, MOSL



Case I (B): Value migration from Public (LIC) to Private sector Insurance companies

Industry: Financials – Insurance | **Driver of VM:** Technology, Efficiency | **Play on VM:** HDFCLIFE

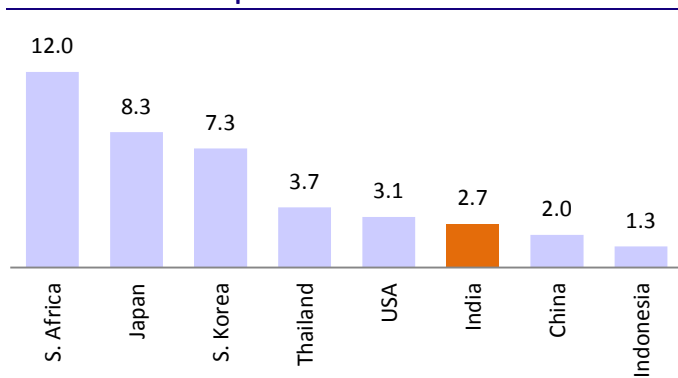
1. What is the value migration?

- Private Insurance companies have rapidly gained market share post opening up of the sector in 2000-01. Of the new individual retail business, they have more than 50% market share. They could manage to create the market for ULIPs, capitalizing on the need for high savings requirement.
- Strength of strong and growing distribution network of parent and group companies, trained agents (insurance being a Push product), technology, new product addition satisfying consumer needs are some of the key factors which drove this migration.
- Most of the insurance companies are likely to list over next two years. Back of the envelope estimate suggest top four private insurance companies valuation of USD 25B vs. invested capital of ~USD 2B.

2. The penetration opportunity is huge

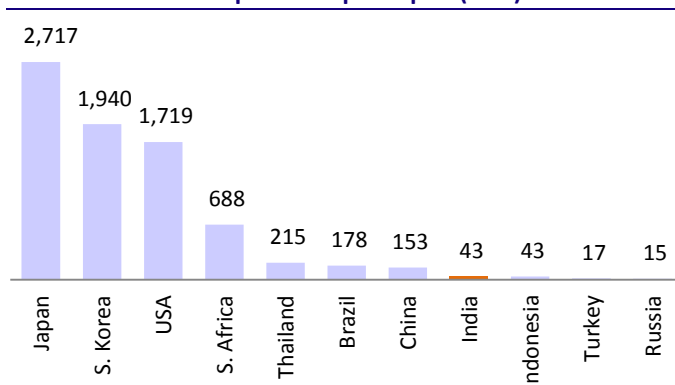
- The Indian Life Insurance industry is largely underpenetrated compared to global peers. While the share of household savings in financial assets has increased from 31% in FY12 to 41% in FY16, the share of life insurance in overall financial savings declined from 21% to 18% over the same time period. Additionally, life insurance in India has largely been a savings/investment product rather than a protection product. This is evident from the low Sum Assured to GDP ratio of 0.6x compared to 1.0x+ for developed market peers. Insurance density is low with per capita premium of \$43 versus global average of \$662, as per a study by Swiss Re. Insurance penetration, as percentage of GDP, is ~2.7% as compared to global average of 3.5% and 5%+ for most developed markets. We believe drivers are in place for structural long-term growth of the life insurance sector.

Exhibit 5: Insurance premium as % of GDP



Source: Company, MOSL

Exhibit 6: Insurance premium per capita (USD)



Source: Company, MOSL

3. What phase of value migration are we in currently?

- Post strong growth and dominance in ULIP products, private players have started focusing on traditional high margin protection products as well. These products as of now constitute 3-7% share in overall product mix of companies.
- Post regulatory intervention share of private players in new business premium had come down to 37% in FY14. However, with stabilizing distribution and product mix, share of private players has increased back to 54% as of FY16. We expect share to go up further strengthening banca channel and increased focus on agency channel by some large players.

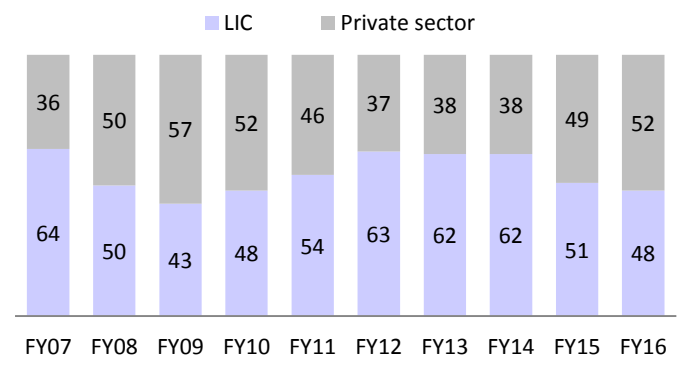
4. What will be the catalyst for driving this value migration?

- Within Insurance space, aggressive marketing, strong and growing distribution network of Banca partners, increasing brand acceptance and stabilizing product mix will drive market share gains for private players. In the new business we expect private players to have more than 60% market share.

5. What if this value migration plays out? Who wins and who losses?

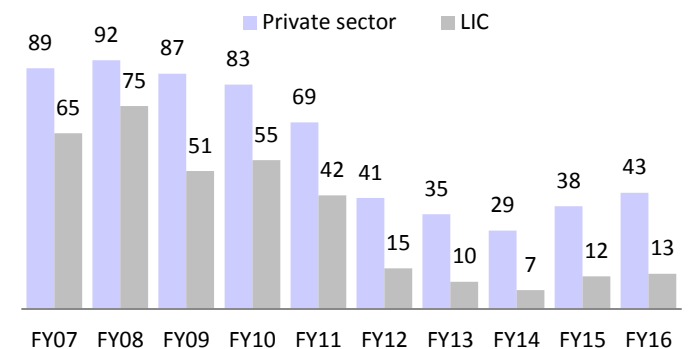
- We expect insurance sector to grow at 14-15% - 1.3x of nominal GDP growth led by expected increase in penetration levels. Private sector companies are likely to outgrow sector by at-least 3-5% hence, private players growth is likely to be 18-20% - depending upon the share in overall system.
- Amongst Insurance companies top three private players HDFC (incl. MAX), SBI LIFE and ICICI PRULIFE are likely to be key beneficiaries. These players have the share of over 70% of the new business premium of private players and they also enjoy 75% of the profits of private players.

Exhibit 7: Market share (RWRP basis) - %



Source: RBI, MOSL

Exhibit 8: Linked business share (New business premium) %



Source: RBI, MOSL



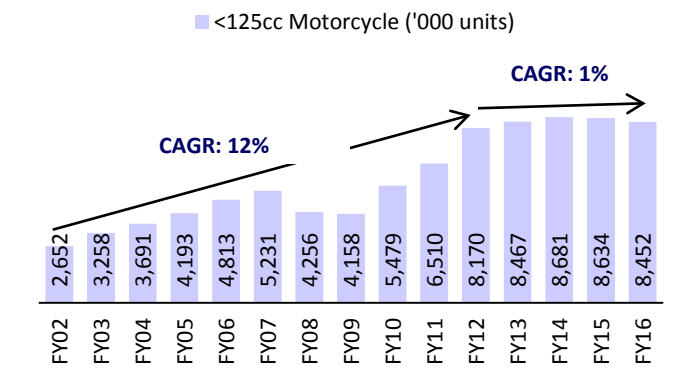
Case II: Value Migration in Two Wheelers: From 100cc Motorcycles to Premium motorcycles

Indian Two Wheeler industry saw premiumization led value migration as customer priorities shifted and resulted in significant value creation. Eicher Motor's story of disproportionate wealth creation in last five years is a consequence of this changing customer priority and Eicher's ability to nurture and serve the priority. From being less than 5% of Hero's market cap in 2010, Eicher's market cap is now ~98% of Hero's market cap!!

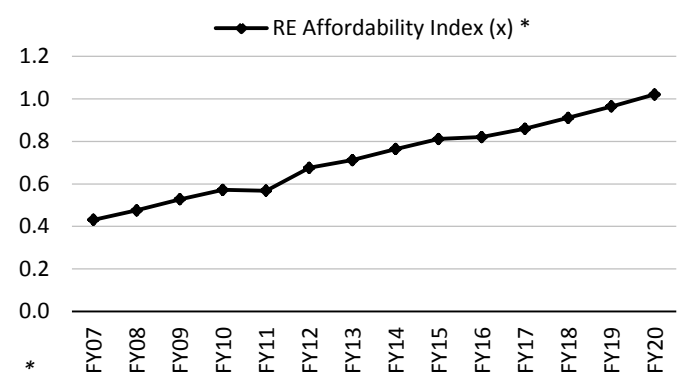
Industry: Two Wheelers | **Driver of VM:** Changing customer priorities | **Beneficiaries:** Eicher | **Potential Loser:** Bajaj Auto, Hero MotoCorp

Stylish differentiated product with improved quality addresses unmet need of commuting in style

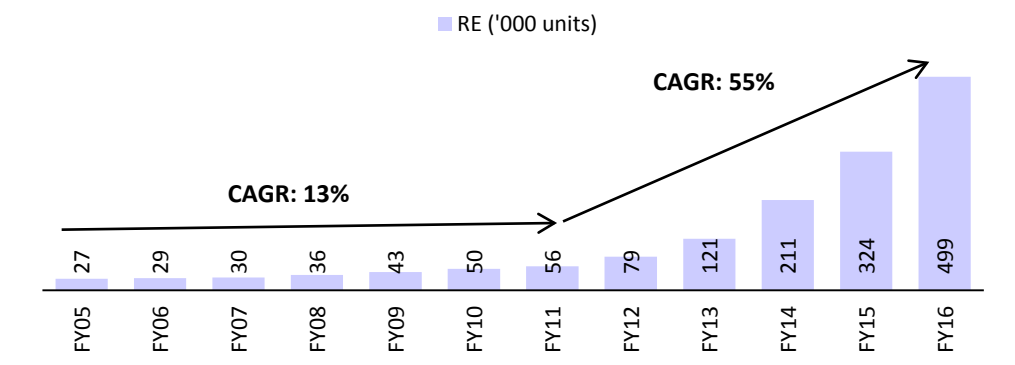
- Domestic motorcycle volumes witnessed strong growth of 12% CAGR during FY02-12 (FY02-07: 14.5% CAGR), creating motorcycle population ready for replacement from FY08 onwards.
- While Royal Enfield has been in market since 1955, it failed to win customers due to higher cost, unreliable product quality and lower mileage despite being charismatic brand. As a result, RE volumes grew by ~10% CAGR over FY02-10 (in-line with the industry growth).
- However, launch of UCE engine (2008) and RE Classic (in FY10) addressed product quality issues and improved mileage.
- This coupled with increasing affordability for RE bikes, it has benefited from replacement demand of motorcycle sold in during FY02-07.
- As a result, Royal Enfield volumes grew by ~55% CAGR over FY11-16 (v/s 5% CAGR for 125cc segment).
- Royal Enfield benefitted from differentiated positioning of its motorcycle and enjoyed cult following of the brand due to its heritage and retro look. With improved quality and mileage, RE's acceptance as a replacement for basic commuter motorcycle increased significantly.
- This value migration from mainstream 2Ws to RE is reflected in market cap for these companies – EIM's market cap in FY10 was ~INR17b, as compared to HMCL's ~INR388b and BJAUT's ~INR292b. This compares with current market cap for EIM/HMCL/BJAUT at ~INR664b/675b/819b!

Exhibit 9: Strong growth for <125cc motorcycle during FY02-12...

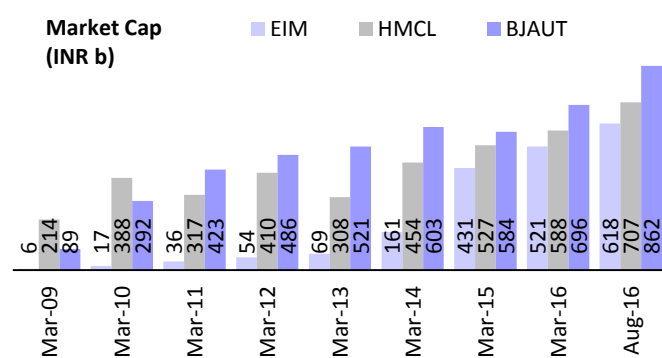
Source: Company, MOSL

Exhibit 10: ...coupled with improving affordability of Royal Enfield bike...

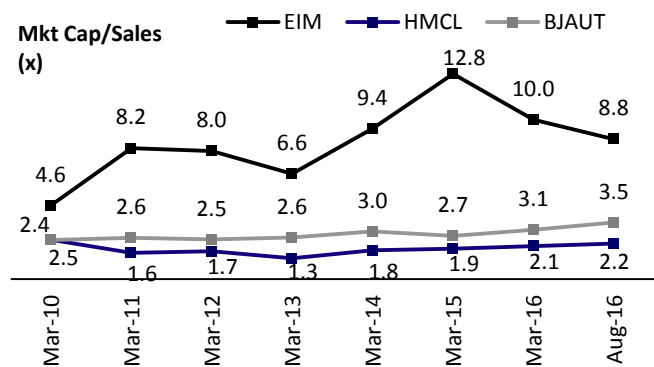
Source: Company, MOSL

Exhibit 11: ...drove strong demand for RE from FY11 onwards as owners of <125cc upgraded to RE...**Exhibit 12: ...reflecting in continued market share gain for RE...**

	FY10	FY11	FY12	FY13	FY14	FY15	FY16
BAJAJ	24.3	26.8	25.5	24.4	19.8	16.5	17.8
HMCL	58.5	54.6	55.9	53.2	51.9	53	52.4
TVS	6.7	7	6.2	5.5	5.6	6.2	6.7
HMSI	6.2	7.3	7.7	11.8	15.8	16.3	14
Royal Enfield	0.7	0.6	0.8	1.2	2	3	4.7

Exhibit 13: ...and value migration from mainstream 2W companies to Eicher

Source: Company, MOSL

Exhibit 14: Eicher enjoyed significant premium to peers on relative valuation multiples

Source: Company, MOSL



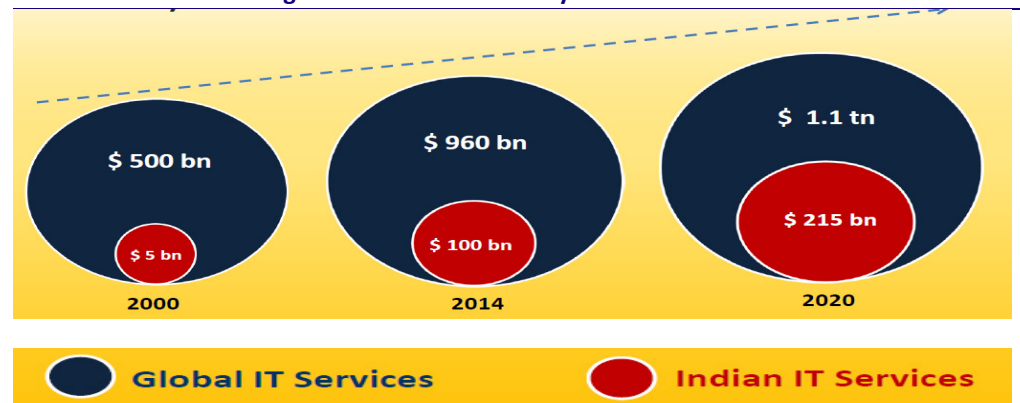
Case III: International value migration in Indian IT sector

Industry: Information Technology | **Driver of VM:** Cost | **Beneficiaries:** Large-cap IT companies

From western MNCs to India-origin providers (IOPs)

India has attained a leadership position in sourcing of IT-BPM solutions, with a market share of ~56% in 2015. Its growth story started in the 1980s, when the industry had annual revenue of less than USD1m. It has gone on to become USD143b in FY16. The industry now directly employs 3.7m people, contributes 9.3% of the GDP, and accounts for over 45% of the country's total exports. In the last decade alone, the Indian IT industry has grown 6x in revenue terms.

Exhibit 15: Indian IT has grown 20x in last fifteen years!!



Source: Company, MOSL

1. Emergence of labor arbitrage and its evolution to offshoring

- In the 1970s, Indian companies began exploiting opportunities in personnel placement. While in the US and Europe, there was growing shortage of engineers for the expansion of the IT industry, in India, there was an oversupply of engineers relative to domestic demand. Indian companies began sending engineers overseas to do software programming onsite, mostly in the US, for billable projects.
- The industry, however, matured over time and the trend moved to software development work by Indian firms for US clients from India – offshoring.

2. Value pillars – process excellence, cost optimization and human capital leadership

- Indian IT's global penetration saw sustained momentum in the last couple of decades in the internet era, as the supply situation continued to play out, laying the foundation for continued growth. The industry also ensured: [1] world class processes in delivery, led by Mr. Narayana Murthy's Infosys, and [2] increased flexibility for clients, which was a refreshing change from the limited room to maneuver in clients' existing contracts.
- A key factor that has helped strengthen India's position in the global sourcing market is its large employable talent pool. India is expected to churn out 6.2m graduates and postgraduates in FY16.

3. Concentration of value in the hands of select large players

- As the industry grew, top-tier IT companies like TCS, INFO, CTSH, WPRO and HCLT gained disproportionate share. These five companies together account of ~50% of the industry compared to ~37% 10 years ago. Growth was being driven by large deals, and among the largest criteria for vendor selection was the number of references. This led to the big getting bigger and the mid-tier companies struggled to match, despite their base advantage.

Exhibit 16: 18% CAGR in export revenue of Indian IT over FY05-16

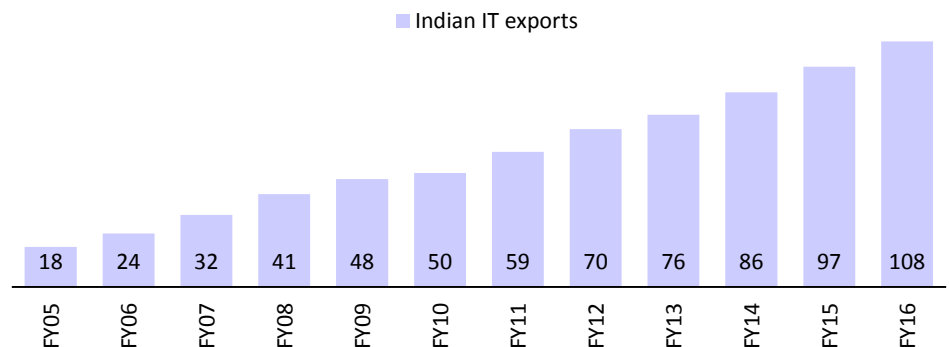


Exhibit 17: Top-5 gained ~100bp every year till FY14 in the overall exports pie

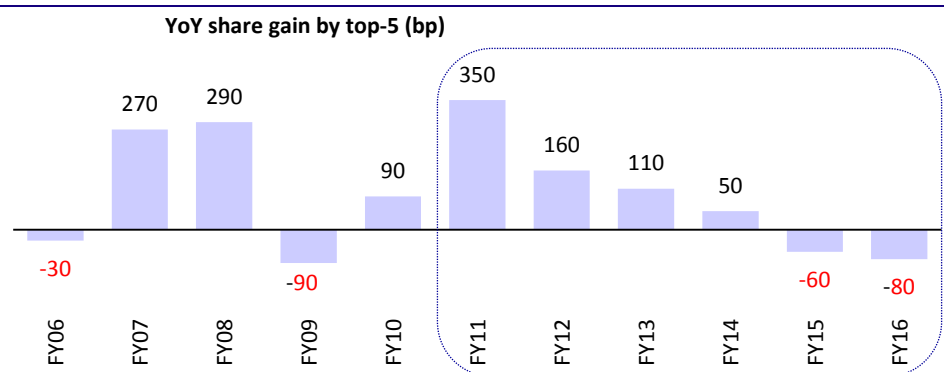
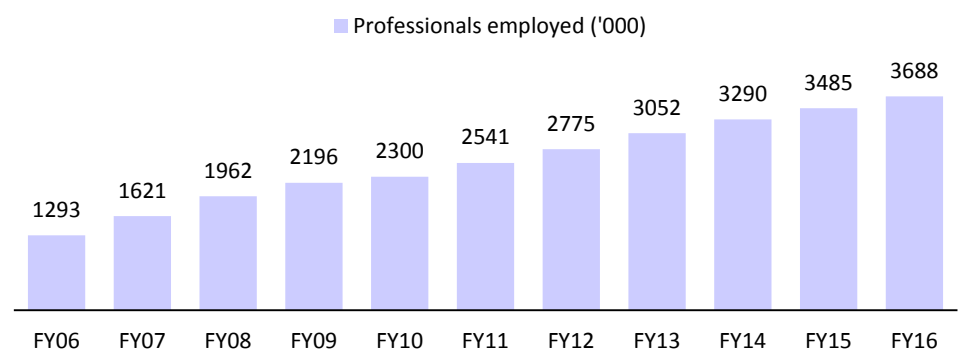


Exhibit 18: Headcount CAGR of 11% over FY06-16



Source: Nasscom

Global Computing: Three-phase value migration in IBM

Value migrated from business models built around mainframes and minicomputer systems to business models built around (a) workstations and PCs, and (b) elements of computing functionality valued by customers – processor chips, operating systems, low cost distribution, communications software and systems integration. Change in customer priorities drove value from giants like IBM and DEC to the likes of Intel, Microsoft, Novell and EDS, among others.

Exhibit 19: Value migration in the US Computing industry

Tabulation

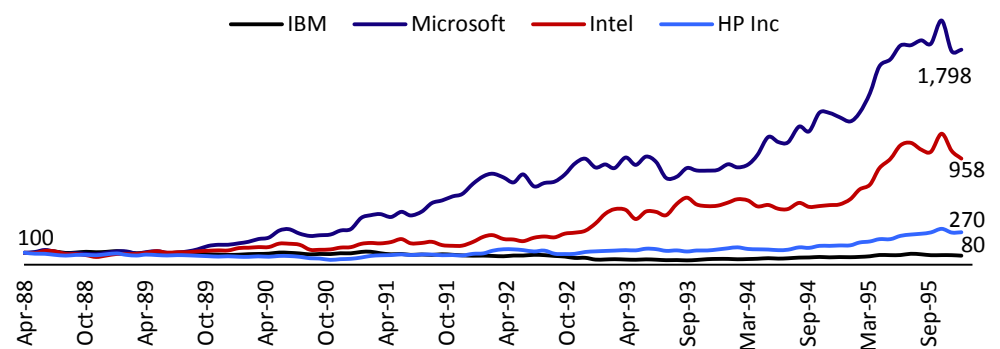
Computing (IBM)

Integrated business design (DEC)

Specized business design (Microsoft, Intel, Compaq, Dell, HP etc.)

In the open architecture era of personal computers, integrated computing companies like IBM and DEC could not hold on to their customers. Over time, both the institutional and individual customers deserted the integrated business design, as open architecture provided more choices for basic hardware, software, support and peripherals. Specialist service providers gained market share, generating cash and raising capital for future growth targets. Companies like Microsoft, Intel, Compaq and Novell created tens of billions of dollars in market value.

Exhibit 20: IBM saw value migrating towards specialized payers from mid-80s onward (index stock price)



Source: Company, MOSL

Amazon's disruption of the traditional providers of Tech stack

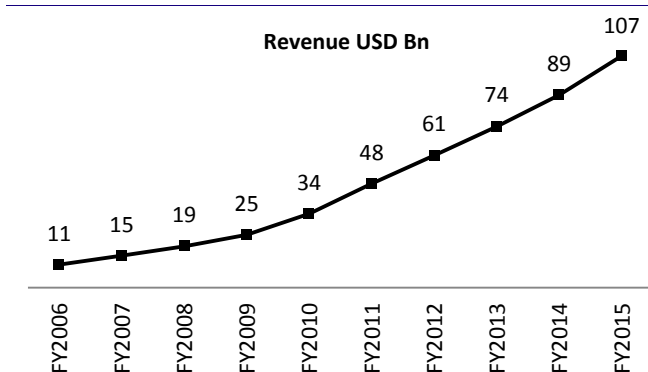
The meteoric rise: AWS launched in 2006 and is forecast to surpass the \$10 billion revenue mark on its 10th anniversary next year. By comparison, it took nine years for Google to hit \$10 billion and 10 years for Facebook. Oracle and Microsoft each took 23 and 22 years, respectively, to pass the \$10 billion milestone. Measured by revenues, AWS is approximately 6x larger than its biggest rival Microsoft Azure and is arguably the greatest disruptive force in the entire enterprise technology market today.

How it got there: Amazon has been able to leverage the e-commerce business's massive investments in datacenters around the globe, and in essence fund the development of AWS out of the company's e-commerce operations. AWS is highly profitable: [1] partly as a result of operating at much larger scale than any competitor by a mile, [2] partly through its mastery of datacenter design and provisioning, and user experience design, and [3] partly through its rapid and relentless pace of innovation. Amazon is to cloud as has been the case of Google in ad-based search, Oracle in relational databases, Microsoft in Windows and Office, SAP in client/server ERP, Cisco in network switches and routers, and IBM in mainframe computers.

The waning relevance of traditional players: Traditional incumbents such as HP, IBM, Cisco, Dell, and EMC (now acquired by Dell) are all trying to stem the decline of their traditional businesses and get onto the cloud in a meaningful way. The shift from mainframe to client/server caused the downfall of major companies such as DEC, Data General, McCormick & Dodge and many others. In contrast, the shift from the on-premise perpetual license culture and business model to the consumption model is far more challenging for incumbents to deal with. This dramatic set of changes is unlikely to take place without its share of shakes and tremors, as we're seeing with the struggles that IBM, HP, and Dell are experiencing.

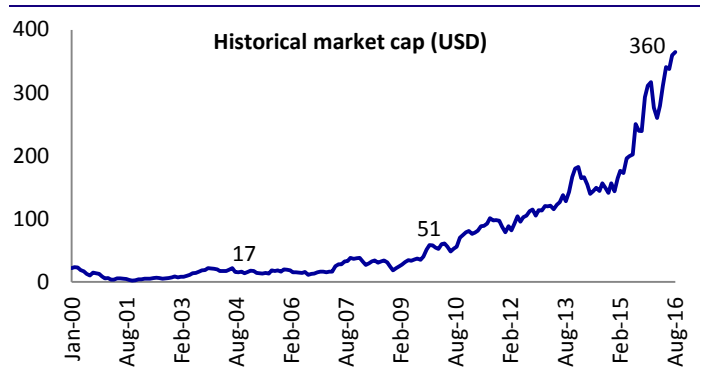
Amazon's exponential pace of value creation

Exhibit 21: Amazon's revenues grew 10x in nine years



Source: Company, Bloomberg

Exhibit 22: Value creation by Amazon



Source: Company, Bloomberg



Case-IV: International value migration to Indian Pharmaceutical sector

Industry: Pharma | **Driver of VM:** Cost, R&D | **Beneficiaries:** Select Pharma companies

1. Indian pharma companies expanding presence in US generics market

US generics have been at the forefront of growth for Indian companies. The US is the world's largest generics market (>USD65b) and India has been a key beneficiary of 'genericization' of the US pharma market over the last decade. Indian companies have increased their market share in US generics from 16% in 2008 to 22-25% (total prescriptions – TRx), still leaving scope for further inroads. Indian companies have benefited from a wave of patent expirations in the last 5-7 years as well as a favorable base, resulting in 25-30% growth over FY09-16.

2. Increase in R&D spend and ANDA filings key growth driver for Indian Pharma

The share of ANDA approvals/annum for Indian pharma companies has increased from mid-single digits in early 2000 to >40%. Apart from this, enhanced thrust on R&D has been a key contributor to growth. Total R&D investment from key Indian generic companies has increased from ~5% of sales in 2010 to 8-10%.

3. Strong backward integration and cost arbitrage key facilitators

Production costs for generic drug makers in India are 65% less than in the US and 50% less than in Europe. Also, due to the low-cost advantage, India is also quickly becoming an attractive destination for clinical trials. Apart from this, strong backward integration places Indian players favorably to address the likely pricing pressure from channel consolidation in the US (at distributor level).

4. Inorganic route adopted to add capabilities

Owing to the complexity involved in development, the gestation period for acquiring certain skillsets/capabilities in complex generics has become longer. Several Indian companies have adopted the inorganic expansion route, identifying assets or companies that have a differentiating technology or portfolio. Interestingly, most of these acquisitions earlier used to be low ticket size (sub-USD200m). However, in the recent past, bigger companies like Sun, Cipla and Lupin have entered into large ticket size acquisitions to gain scale and enhance product mix.

5. Focus on complex generics to enable sustainable growth

Indian pharma companies have been cognizant of (a) reduced number of new generics opportunities due to tapering of patent expirations for small molecules, and (b) expanded scale of operations, rendering incremental growth challenging. Over the last 3-5 years, most of their incremental R&D efforts have been towards complex generics opportunities such as injectables, oral contraceptives, transdermals, and NDDS-based products. Complex generics account for ~50% of the US generics market, exhibiting 2x the growth rate compared to the overall market growth rate. However, Indian companies derive only 15-20% of their current US sales from these product segments. Incrementally, we expect over 40% of sales to emanate from differentiated products or complex generics, which would help Indian

companies to grow at a healthy pace and improve their profitability. We believe SUNP, LPC, DRRD, and ARBP are best positioned to tap growth in these niches or complex generics.

Exhibit 23: Contribution of US to total sales increasing consistently

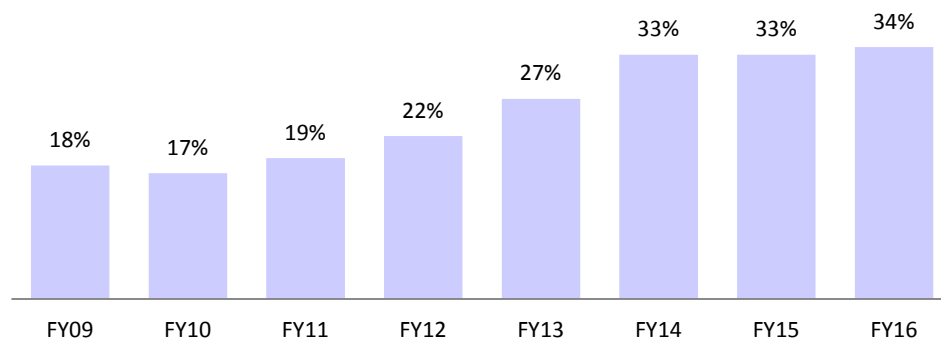


Exhibit 24: Rising share of Indian players in US generics market

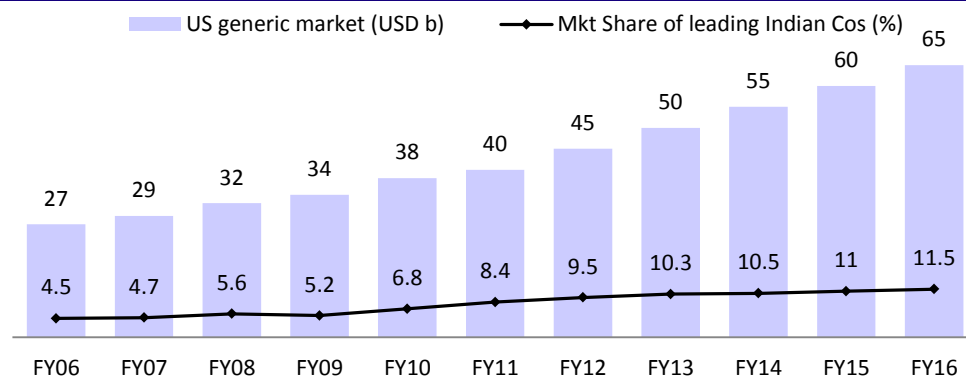
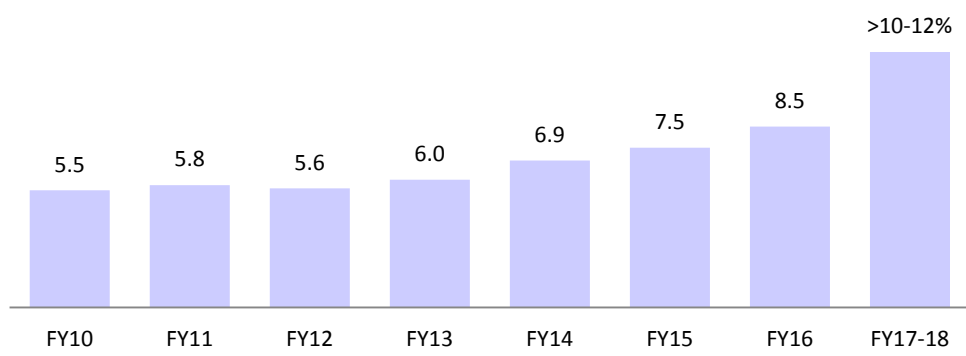


Exhibit 25: Increase in R&D spend by key Indian companies driving growth in US



How do you measure value migration?

- In his book, Value Migration, Adrian Slywotzky points out that value flows into and out of business designs. A key approach to measure that flow of value, he suggests, is price-to-sales ratio (market cap/trailing 12 months' revenue). A ratio greater than two suggests value inflow phase, a ratio between one and two suggests stability phase, and a ratio lower than one indicates value outflow stage.

The ratio allows one to measure and compare value migration in several ways:

- Value migration between companies in an industry
- Value migration between companies in different industries

Estimating value migration for companies with multiple business models is trickier.

How does value migration manifest?

Our analysis of past instances of value migration suggests that value migration in terms of market capitalization is the earliest to show, followed by sales and then by profits. The market recognizes the potential beneficiaries of value migration much before reflection in financials. When value migrated from public sector banks to private sector banks, the rate at which the market capitalization of private sector banks expanded was much higher than the rate of growth in their profits in the earlier years (Exhibit 29).

Exhibit 26: While market cap shifted in favor of private sector banks in FY07, profit, NII and income salience remain in favor of public sector banks (excluding FY16)

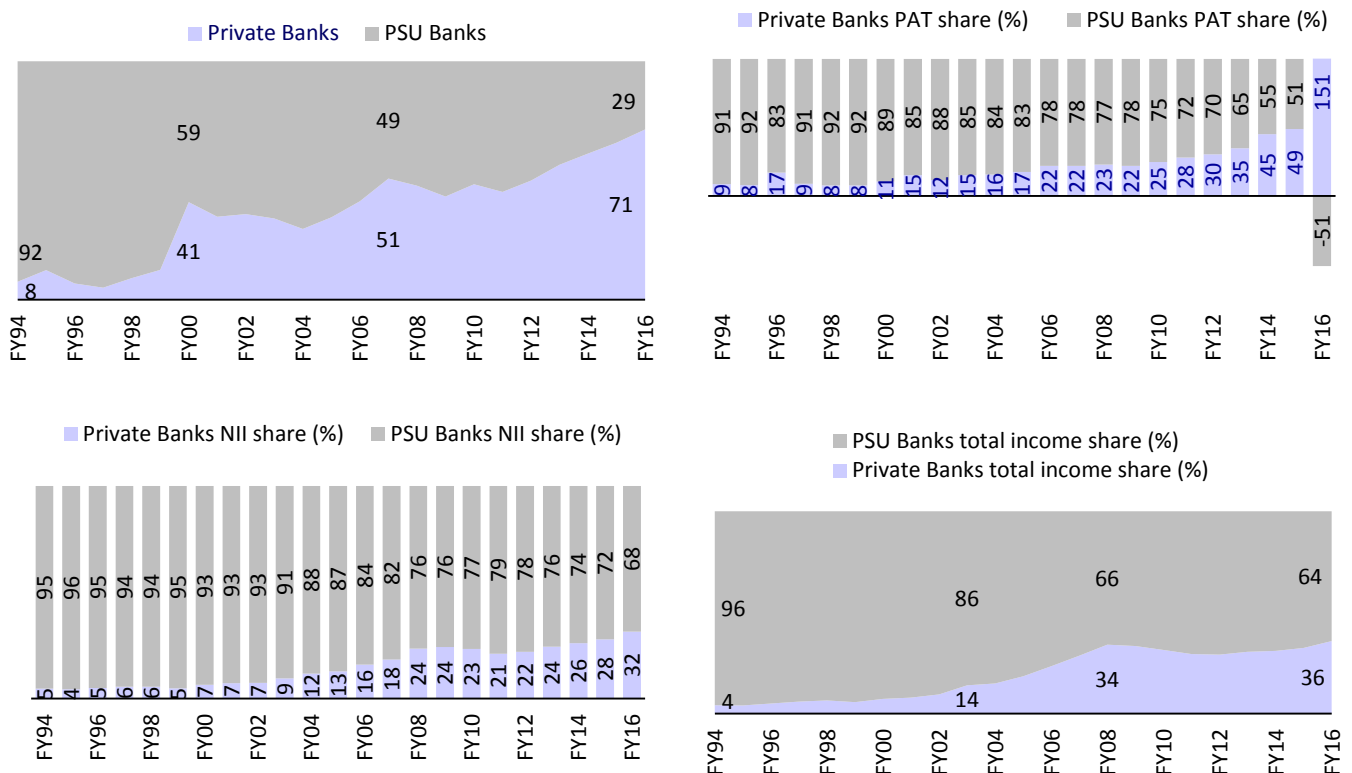
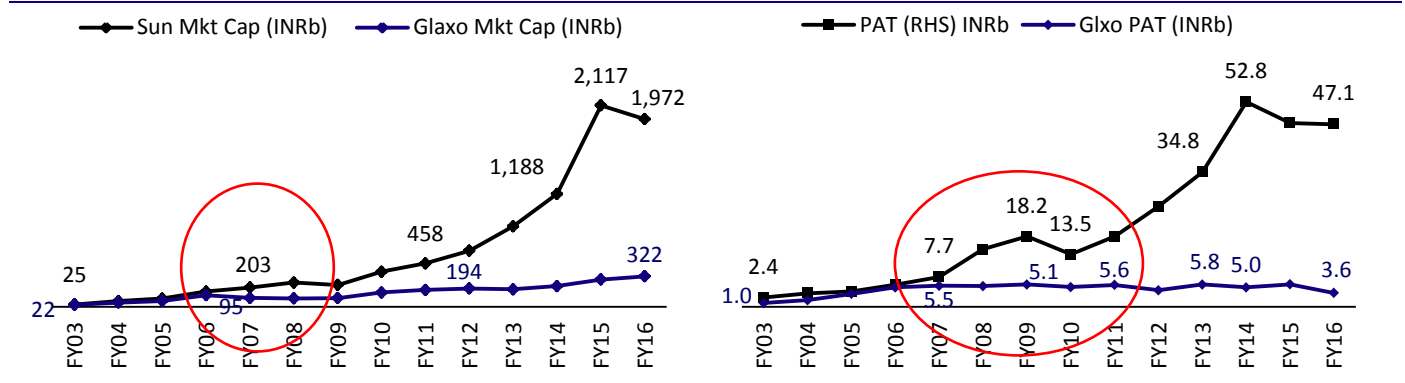
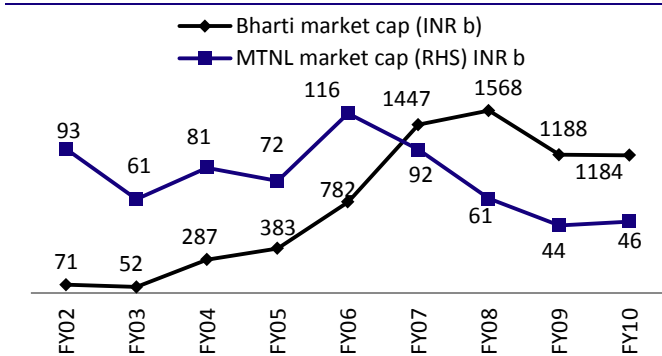


Exhibit 27: Gap between Sun Pharma's and Glaxo's market cap started widening in FY06; similar trend in profits became evident later in FY08



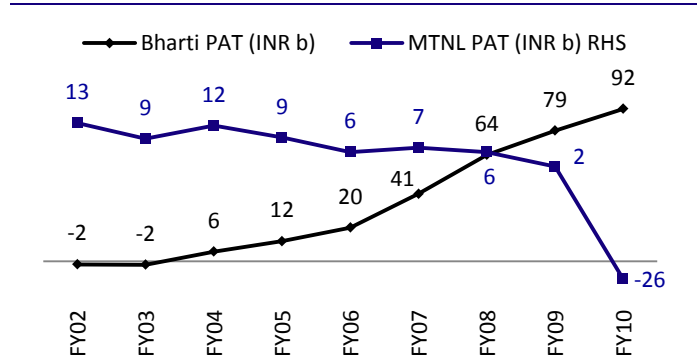
Similarly, in the case of value migration in Telecom, the rate of growth of market cap for private players was much higher than the rate of growth of profits (Exhibit 25, 26). Bharti Airtel, the key beneficiary of value migration, reported losses even while the shift in market cap was underway. In the IT sector too, when outsourcing was in its embryonic stages, growth of market cap of IT players was way ahead of profit delivery.

Exhibit 28: Market cap: Bharti's marketcap crossed MTNL in FY07 (INR b)....



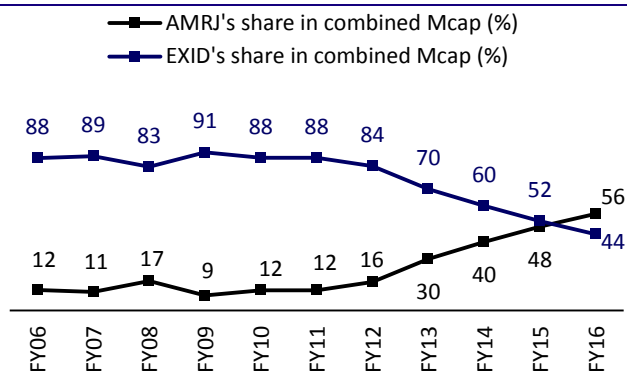
Source: Company, MOSL

Exhibit 29: ..while profits overtook only in FY09 (INR b)

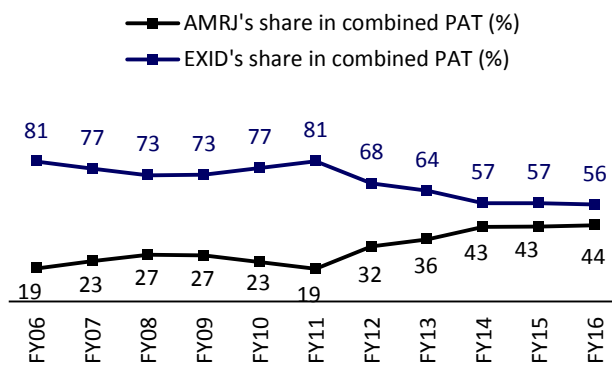


Source: Company, MOSL

The same trend was observed in Batteries industry. Value migration towards Amara Raja was reflected in the market capitalization first. As shown in Exhibit 27 and 28, value migration in terms of market capitalization towards Amara Raja started conclusively in FY13 and it crossed the market cap of Exide in FY15 whereas profits of Amara Raja are yet to cross Exide. Gap between profits and market caps of Amara Raja and Exide has been consistently narrowing in the last ten years.

Exhibit 30: AMRJs share in market cap overtook Exide in FY13

Source: MOSL, Company

Exhibit 31: However profits yet to cross Exide's profits

Source: MOSL, Company

The above examples in Banks, Pharma, Telecom and Batteries industries underscore an important point. Once the trend of value migration is detected, the market moves very swiftly and rewards the potential beneficiaries much before the benefits are actually reflected in financials.

How do you detect value migration?

- Early identification of value migration trends helps in maximizing the investment gains. Naturally, this leads to a critical question – how does one detect value migration early?
- Detecting value migration is difficult even for a company/management totally involved in running its business and driving strategies. In the value inflow phase, most of the organization's energies and resources are concentrated towards meeting consumer demand. In the stability phase, complacency creeps in and prevents early detection of migration. Lastly, in the value outflow phase, the focus is on preventing losses.
- The initial phases of value migration are quite subtle, gradual, and hence, difficult to understand. Also, when value migration is driven by new competition (and not the incumbents), it is difficult to detect. For example, in the Two Wheeler industry, Eicher's Royal Enfield did not create any concern initially, as it was not a traditional competitor. The impact became evident only after few quarters/years of tangible market share gain by Eicher Motors.
- Nonetheless, early detection of migration provides an edge in gaining early exposure to potential winners as well as avoids players on the wrong side of the equation.

Some of the factors which can help investors in earlier detection of value migration, in our view, are:

A] Market share movements provide a very strong signal of value migration. Consistent share gain trends are usually a harbinger of bigger trends at work. E.g. Indigo's consistent market share expansion in Airlines, Private Bank's share gain in savings deposits or Eicher's rising equities in premium two wheeler space all underscore a distinct value migration shift in the underlying businesses.

B] Innovation leadership is another metric to identify potential beneficiaries of value migration. Players that drive innovation and create new categories/sub-categories enjoy tremendous first mover advantages and trigger value migration. In Decorative Paints, Asian Paints is well- entrenched as an industry leader, with 55-56% market share. However, it is innovation leadership that has cemented its position as industry leader and ensured continued share gains over the years (gained 1,500bp market share in ~15 years). It has been a pioneer in introducing several new practices in the industry – tinting machines, home solutions, color ideas etc. Similarly, Shree Cements switched to petcoke as preferred fuel about a decade ago, a trend which the rest of the industry has adopted in only last 2-3 years. Incrementally Shree cement is graduating to Waste Heat recovery for its power requirement in order to reduce its power and fuel cost.

C] Customer satisfaction scores, while subjective, can act as a good starting point to understand whether customers are happy. Declining satisfaction scores should alert investors about impending value migration. Value migration in Public Sector Banks

and Public Sector Telecom companies in India was triggered by dissatisfaction with the incumbents' services when the industry was witnessing rapid changes triggered by private players.

D] Policy changes: In a regulated industry (Aviation, Power, etc) changes in policy provide a trigger for value migration. While these are difficult to anticipate, close monitoring assumes critical importance in detecting any migration trends. Broad policy changes like GST implementation will hasten value migration from the unorganized to the organized sector.

The key question that now arises is, how does value migration manifest in the case of unlisted players? In our view, one should look at market share movement. Market share data is typically readily available with industry syndicates or the media. More often than not, gains in market share are followed by gains in profitability.

Duration of Value Migration

How much value is created depends on the duration of value migration – the longer the value inflow stage, the greater the value creation. Typically, once the value migration begins, it lasts for several years, even decades. Duration of value migration is a function of three factors:

1. Strength of the value migration driver
2. Ability of the incumbent to innovate and meet ever-changing consumer needs/priorities
3. Sustainability of the competitive advantage

The stronger the driver, the longer the value migration continues. In the IT sector, for instance, the driver of value migration is low cost and a skilled workforce, advantages of which have long shelf life. The value migration has sustained for decades and the drivers haven't yet faded.

Through various examples in this report, we show that value migration lasts for years/decades. Even if one identifies a case of value migration a little late, the opportunity to make outsized investment returns might still be available. The value migration in the Indian Banking and Jewelry is still underway, despite having already lasted for over a decade. Of course, the earlier one identifies the value migration, the larger is the opportunity to earn outsized returns.

Instances of short-duration value migration could be in technology-oriented sectors, where rapid evolution of technology results in constant value migration away from incumbents (unless the incumbent itself drives the value migration).

In this report, we highlight the case of value migration in the Jewelry industry, which began over a decade ago, but is still in the works, as the share of organized players is still low. There are several more such examples – migration towards generics in Pharma, from PSU to private sector banks and migration in cement industry.

Value Migration in Cement

Value migration has happened even in the commodity sectors. Change in manufacturing process necessitated by various considerations (cost, speed to market, technology evolution) has driven value migration. Companies exhibiting nimble-footedness in adapting to technological changes have reaped benefits from such value migration while those not capitalizing on such changes have lost out. We highlight one such example from the Indian Cement sector.



Case-VII: Value migration in Cement towards Shree Cement

Industry: Cement | Driver of VM: Cost, Supply demand equilibrium | Play on VM: Shree Cement

1. What was the value migration in Shree Cement?

- **Value creation:** Shree's market cap has increased by 16.5x over FY06-FY16 far outpacing the marketcap accretion by its peers. Ultratech has been second best where in its market cap has increased by 10x over the same period. Ramco and Ambuja have seen market cap increasing by 3.6x and 3.1x over the same period with ACC being the laggard where in its market cap has increased by only 1.65x in last decade.
- **Superior volume growth:** Shree cements volume has increased at CAGR of 19% over FY06-FY16 led by aggressive capacity addition and market share gains. The combined volume of other top 4 players increased at CAGR of 8% over the same period with ACC, Ambuja and Ramco registering volume growth at CAGR of 6%, 5% and 4% respectively. Ultratech's volume increased at CAGR of 12% over FY06-FY16.
- **Strong operational performance:** Shree cements EBITDA has increased at CAGR of 23% over FY06-FY16 led by volume growth and margin expansion as against ACC and Ambuja cements EBITDA which increased at CAGR of 8% and 5% respectively over the same period.

2. What drove the value migration?

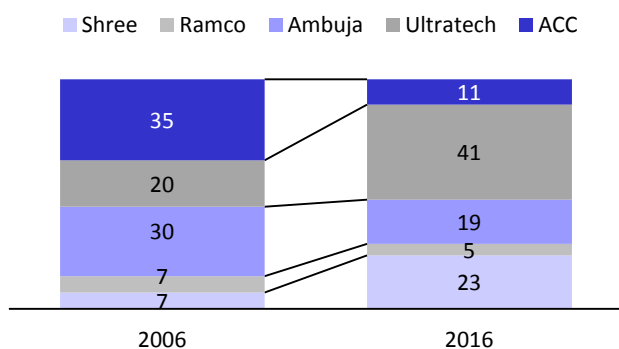
- **Capacity ahead of Industry:** Shree cement's capacity increased at 21% CAGR over FY06-FY16 to 27mt at present as against industry capacity increased at 10% CAGR over the same period.
- **Localized operations:** Shree cement supplies 80% of its total cement capacity from only two mother clinker units thus making it extremely cost competitive compared to other peers.
- **Asset creation at lower cost:** Shree cement's cost of setting up a capacity is ~30-40% lower than industry standards because of its efficient design, standardization of plants and superior execution.
- **Efficient methods of production:** Shree cement way back in 2006 had adopted 100% usage of alternate fuel for its kilns as it was cheaper by ~30-40% compared to conventional sources of fuel. Other players transitioned to alternate fuel in meaningful manner only in FY12-FY13.

- **Aggressive pricing in newer markets:** Shree cement in order to garner higher market share in newer markets resorts to pricing its products at discount. Despite lower pricing Shree cements profitability and return ratios are far superior to peers due to cost competitiveness and efficient asset creation.

3. Shree's preparedness for next leap?

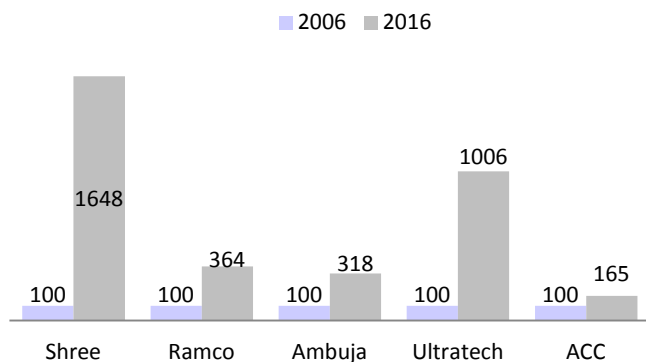
- **Pan India presence:** Shree cement is transforming itself from being a regional player to PAN India by adding capacity in East and south markets over next 2-3 years.
- **Scaling capacity:** Shree cement is likely to add ~10mt of capacity over next 2-3 years which constitutes ~25-30% of India's total capacity addition. This will enable it to gain market share on a sustained basis.

Exhibit 32: % share of SCRM of the total market cap has increased 3x in 10 years



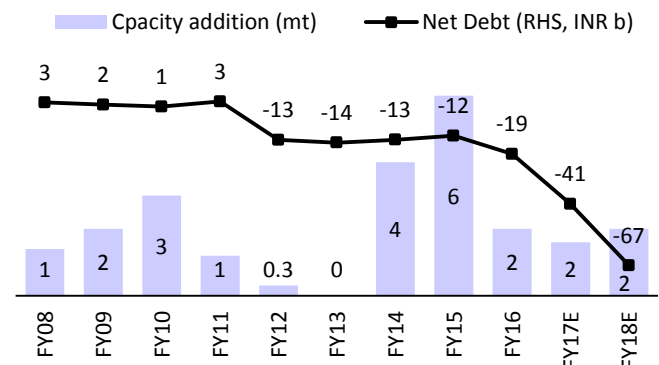
Source: Company, MOSL

Exhibit 34: Market cap (Rebased to 100) of cement companies



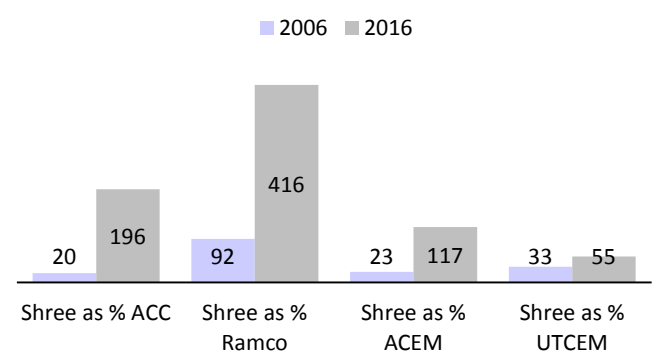
Source: Company, MOSL

Exhibit 33: Added capacity(mt) without hurting B/S

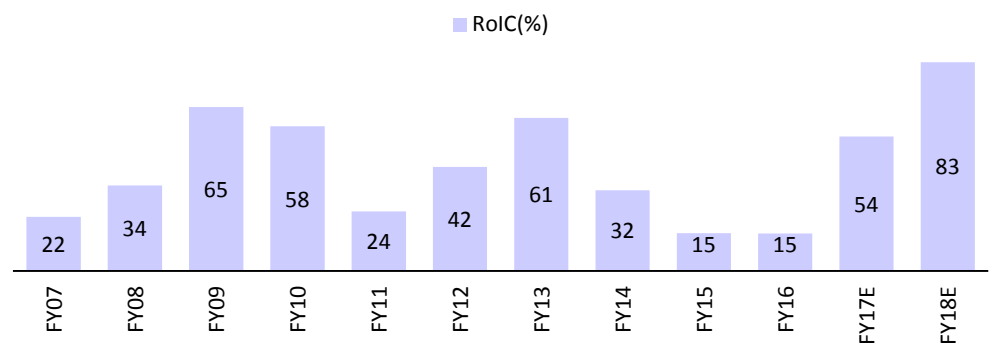


Source: Company, MOSL

Exhibit 35: Shree's market cap as a % of other cement companies



Source: Company, MOSL

Exhibit 36: Trend in RoIC(%)

Source: Company, MOSL

Global value migration in commodities

In the US, value migrated from integrated steel mills to four different business designs, including to different industries like Aluminum and Plastics.

The integrated business model of US Steel companies generated material value in the 1950s and 1960s. Integrated mills enjoyed bargaining power, as their customers had no alternative to domestic supplies. Through vertical integration, the mills achieved low unit costs at higher utilization rates. The success of this model blinded steel producers and they did not worry about any non-traditional competitors.

Meanwhile, Japanese steelmakers were gaining some traction in the US. However, the heavy tariffs on higher quality steel nullified the Japanese price advantage and the grip of US integrated mills on automotive players remained firm. The Japanese steelmakers were able to offer lower prices despite high transport cost, as they focused on reducing cost at every stage of the supply chain (large-scale shipping, ore costs, coal costs, adopting new production process to cut costs). This gave Japanese mills 30% cost advantage vis-à-vis their US competitors, helping them to offset transport costs. By early 70s, Japanese production was bridging the gap with American production rapidly. The Japanese adopted a new production process, continuous casting, which eliminated ingot making and reduced costs significantly. They then aggressively converted their capacities to continuous casting.

Also, in the US, mini-mills were gaining traction with construction companies. They offered competitive prices on low-end bar steel (rebar) due to unique advantages of their business model – used electric arc furnaces meant lower investment, rural locations helped cut labor costs by 30-40%, overheads were low, proximity to construction areas cut transport time and cost. Since mini-mills were small, integrated steel companies did not take their threat seriously. Nucor was rapidly emerging in the mini-mills arena.

Integrated steel companies found more competition from alternate materials like Aluminum and Plastics. In cans, the relative ease of using aluminum appealed to manufacturers. Aluminum makers focused their resources on driving steel out of the beer can market and achieved success. Value migration from integrated steel business design to aluminum-based business design was gaining pace. By late the

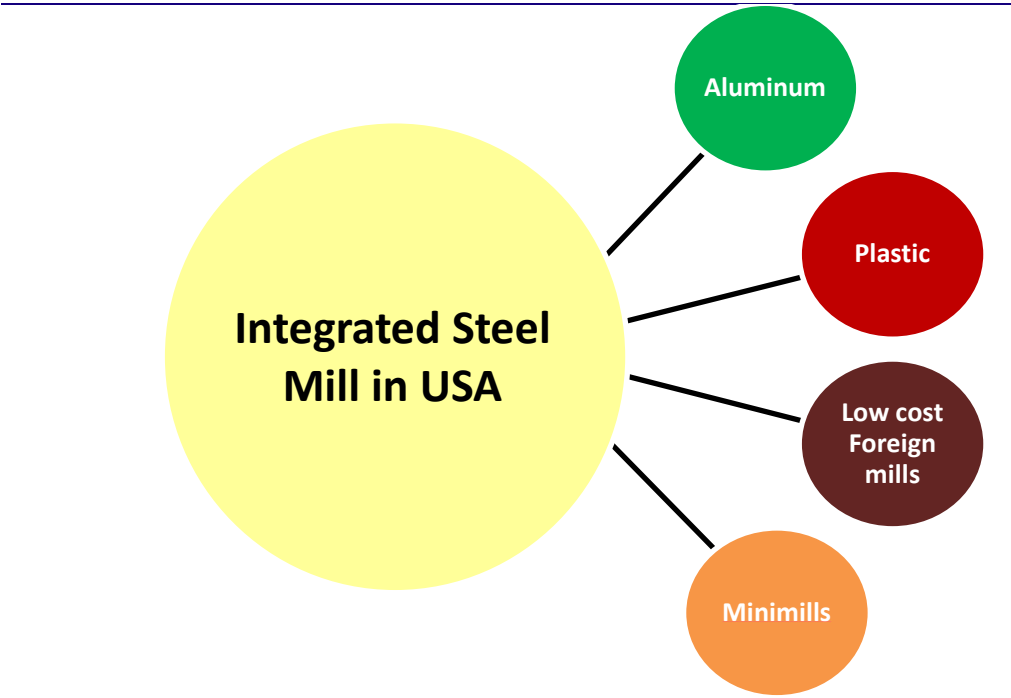
60s 20% of the beer cans were made of aluminum. This number went up to 50% by 1973.

The oil shock of 1973 pushed up gasoline prices, creating demand for fuel-efficient vehicles. Plastic manufacturers detected the change in consumer priorities towards fuel-efficiency and reacted quickly. Plastics began to compete with steel by the end of the decade. Plastics gained because of light weight, rust resistance, and lower factory retooling costs. Use of plastics reduced body weight and increased fuel efficiency. Big steel players did not take the threat of plastics seriously.

Thus, value migrated from integrated steel mills towards four different directions: Japanese mills, US mini-mills, aluminum producers, and plastic makers.

What is also interesting to note is the way Nucor managed to reinvent its business model when it detected a threat to its mini-mills, which worked well in the 70s and the early 80s. But it faced challenges, as competition had increased and prices of its raw material, scrap, were rising rapidly. Nucor realized the shifting equation and redesigned its model – built iron carbide plant to lower dependence on scrap, expanded product lines, and included upmarket flat-rolled steel products. This enabled it to pull back from the value outflow stage to the value inflow stage.

Exhibit 37: Four-phase VM in US steel industry in 70s and 80s



Source: Value Migration by Adrian Slywotzsky

Value outflow led by emerging preference for new sources of energy

Value outflow happens when ***business value starts to move away from current business design towards others meeting evolving customer needs. In this phase, market share declines, margins contract and growth stops.***

Companies that lag on the innovation curve or ignore the evolving market trends tend to be at the receiving end of the value outflow stage. At times, complacency blinds an organization to the evolving threats. Such threats or new trends build up with time and assume bigger proportions. By the time the organization realizes it is in the value outflow phase and takes corrective actions, the competition has upped the ante.

We discuss the case of BHEL, which is experiencing value outflow due to the shift from conventional energy to renewable sources.



Case-IX: Value Migration: Shift from conventional energy to renewables

Industry: Capital Goods | **Driver of VM:** From Conventional Power to Renewables | **Play on VM:** Negative for BHEL

1. What's the potential value migration?

- To meet its target under the Conference of the Parties (COP21) Agreement on Climate Change by 2030, the Government of India targets to increase renewables capacity to 30% of total generation. For the medium term, the stated target is to increase renewables capacity from the current 43GW to 175GW (100GW solar and 75GW wind) in FY22.

2. What phase of value migration are we in currently?

- In the last two years, the Indian government has increased focused on renewables. 7GW of renewable capacity was added in FY16 – the highest ever in a year. The target for FY17 is more ambitious – 10-12GW of solar and 4GW of wind capacity, implying renewable capacity addition of 14-15GW, higher than the thermal capacity addition target. The government intends to maintain this pace over the next few years, spelling doom for thermal capacity addition in the country.

3. What will be the catalyst driving this value migration?

- To promote renewable power generation, the government warrants strict adherence to the implementation of the RPO and RGO obligations. Under the renewable purchase obligation (RPO), state electricity regulatory commissions (SERCs) are obligated by law to buy a certain percentage of electricity from renewable energy sources. The guidelines issued in 2010 by Central Electricity Regulatory Commission (CERC) recommended a

standardized RPO target of 5% in every state, with linear increase of 1% annually till 2020 to achieve the NAPCC target of 15%.

- The Power Ministry plans to amend the Electricity Act to introduce renewable generation obligation (RGO), whereby conventional power plant developers would be obligated to generate ~10% power from renewable energy sources. Successful inclusion and implementation of the RGO norms can help the wind market to expand from 2.3GW in FY16 to 4-5GW per annum in the medium term.

4. What if this value migration plays out?

- Focus on renewable energy sector will dent incremental thermal capacity addition. Current capacity utilization for thermal plants stands at 54%. In our view, even if the current capacity utilization is increased to 60% over FY18-22, with the additional renewable/thermal power capacity expected to come up during the period, India would remain power surplus. This does away with the need to order new thermal capacity over the next 2-3 years.
- From a power generation equipment perspective, BHEL, market leader in the thermal fuel fired market, would be a key loser. It derives ~85% of its revenue from coal-fired plants, which are in a structural decline.

Exhibit 38: India's installed capacity shifting to renewables

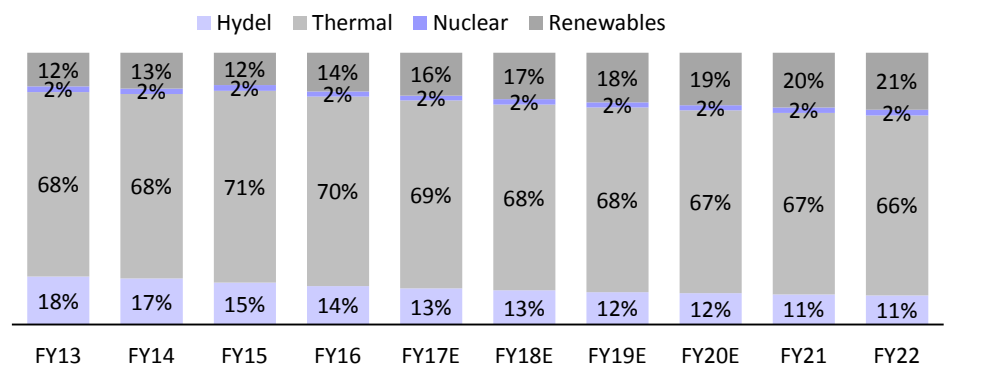


Exhibit 39: Base power deficit to remain negative, as existing capacity sufficient

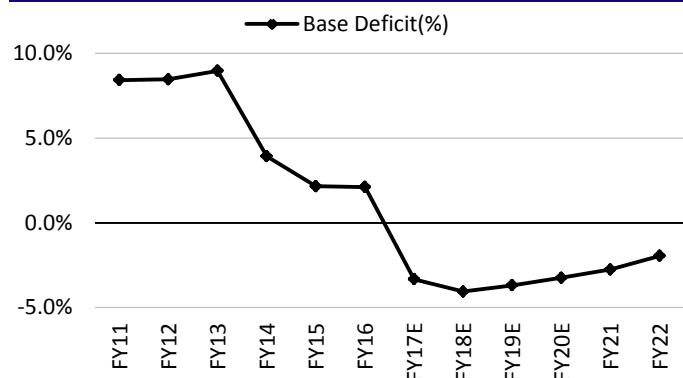
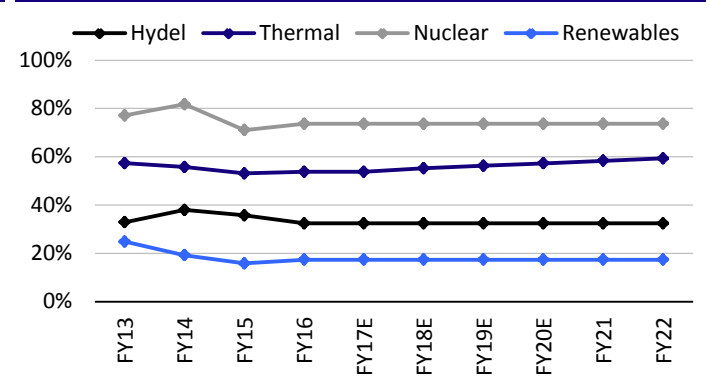
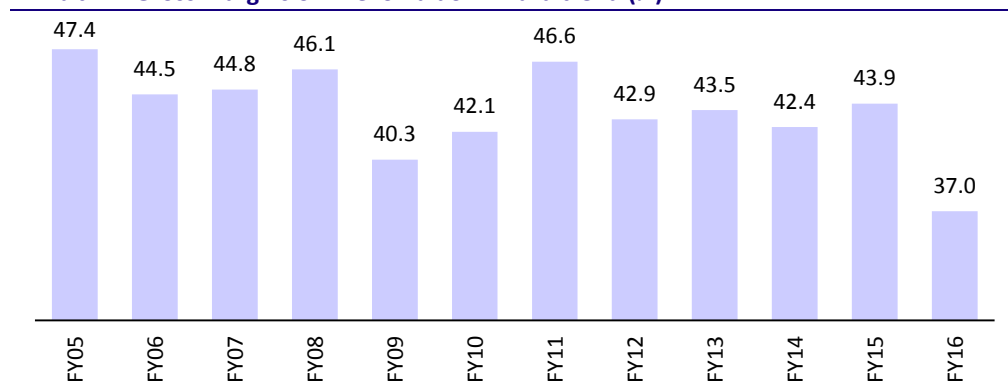


Exhibit 40: Improvement in capacity utilization of thermal power plants to take care of incremental demand



Over capacity in BTG and a resultant fall in pricing and margins for BHEL. The BTG industry has been facing an over capacity over the past 5 years – total industry capacity is upwards of 20GW while industry level ordering has fallen to 10GW during FY12-16. This has led to severe pricing pressures with BHEL taking the lead to cut prices to retain its market leadership. While it has been able to sustain market share at ~74-75%, this has come at the cost of margins. Gross margins which have averaged 44-45% over the past decade (FY05-FY15) have fallen to 37% in FY16 – a sharp dip of 700bps.

Exhibit 41: Gross margins of Bhel on a downward trend (%)



Reverse Value Migration

Possible to wrest “Value” back

After discussing the concept of value migration as an investment framework and highlighting several drivers/examples in the previous section, we now look at the possibility of reverse value migration in this section. In simplistic terms, reverse value migration can be defined as the flow of value back to the point of its emanation. For example, if value has migrated from industry A to industry B, then reverse value migration is the flow of value back to industry A.

Customer priorities keep changing, which poses challenges to incumbents. However, we believe incumbents do not have to lose the game of value capture/migration as such priority shifts also open up significant opportunities. With a responsive business design, incumbents can sustain their positioning in the market and create new value proposition that addresses changing priorities.

Thus, value migration is relocation of underlying value – rather than disappearing of value – to product/business design, which helps address changing customer priorities.

Reverse value migration highlights that it is possible to wrest back value after initially having been at the receiving end of the value migration process. However, it requires combination of factors to work, prominent among them being the ability to drive relevance of the product segment back in customers’ mind after having suffered in the first phase of value migration. Second, we believe it also requires innovation skills to bring a product back to the center stage and ensure customer satisfaction.

Indian two-wheeler Industry is the most prominent exponent of reverse value migration, where we saw the flow of value from scooters to motorcycles and now back to scooters. Another case of reverse value migration is being witnessed in the transportation sector, where the value first migrated from road to rail to then again to road. However, it is now migrating back to rail as constraints are being addressed. Here, we discuss the case study of reverse value migration in the Indian two-wheeler industry.



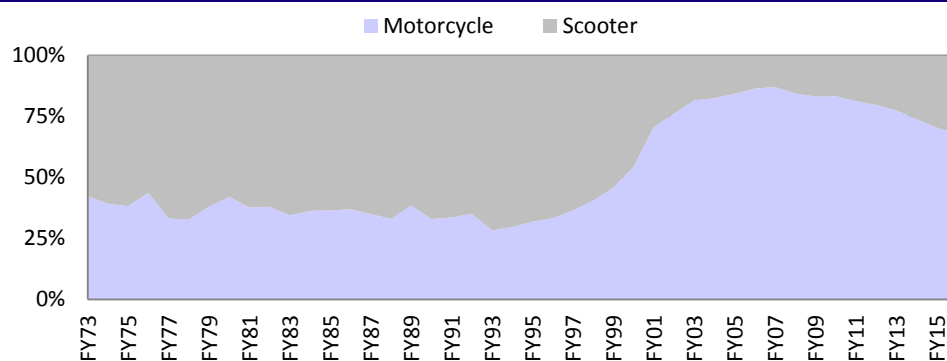
Case-X: Reverse Value Migration: From Scooters to Motorcycles to Scooters

Industry: Two Wheelers | **Driver of VM:** Technology | **Beneficiaries:** TVS, HMTI | **Potential Loser:** Hero MotoCorp

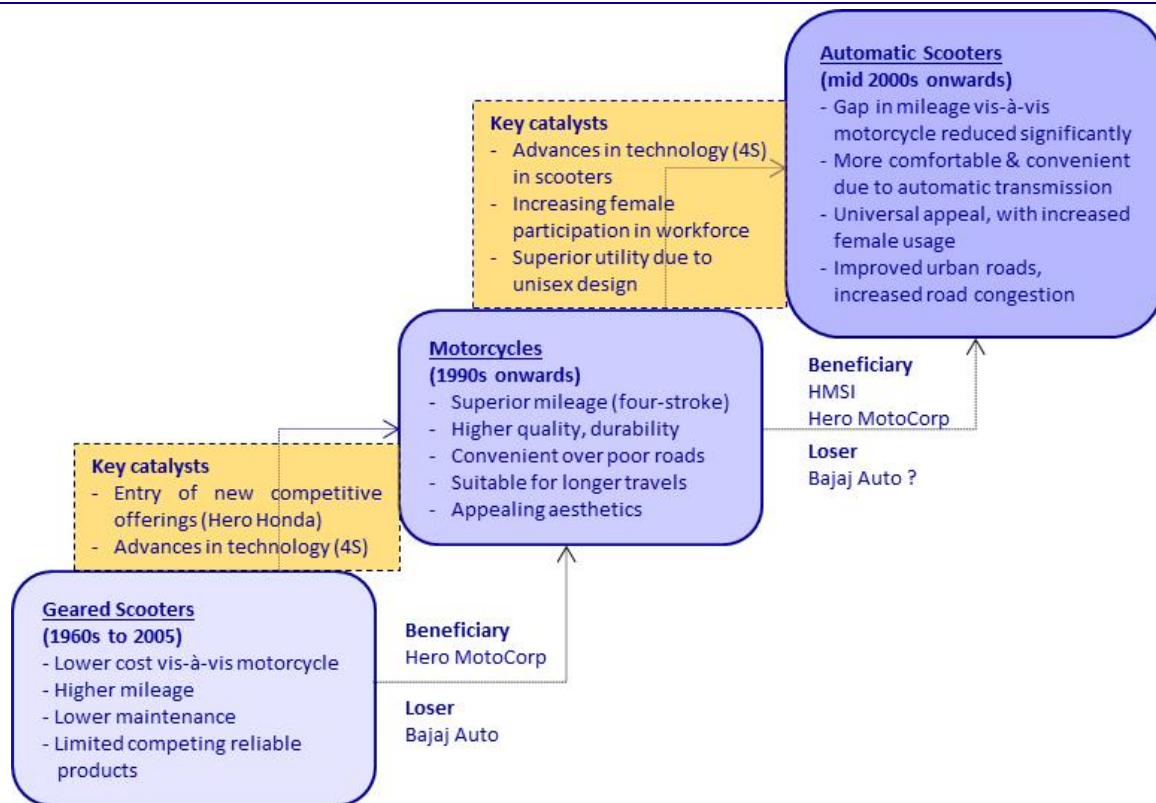
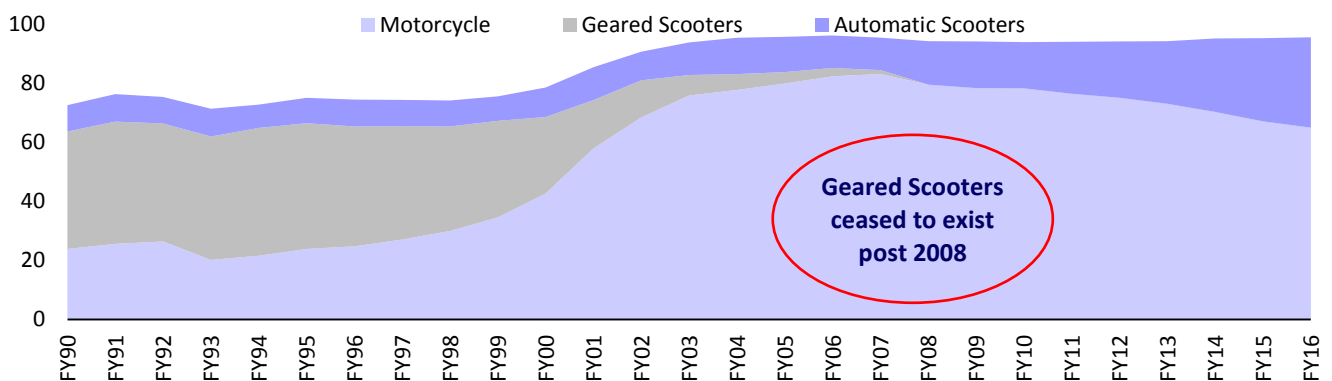
Value Migration: From Scooters to Motorcycles to Scooters

- Indian two-wheeler industry has evolved over the last four decades, with value migrating from geared scooters to motorcycles, and now to automatic scooters, driven by changing customer preferences and availability of new products.
- Geared scooters dominated 1960s to mid-1990s due to low cost, high mileage and low maintenance as compared to then available motorcycles, reflecting in ~14% CAGR in scooter volumes. However, higher economic growth and urbanization saw increasing dominance of four-stroke fuel-efficient, sturdy motorcycles from Japanese players with features/specs meeting customers' changing priorities. This resulted in a rapid decline in demand for geared scooters with preference shifting to motorcycle and automatic scooters. Bajaj Chetak's (synonym for geared scooters in India) production was stopped in 2005.
- While Japanese players launched reliable and fuel efficient four-stroke technology in 1985, it took almost 10 years and an oil shock for them to find acceptance among Indian consumers. Indian motorcycle industry grew at ~22% CAGR from FY93-FY08, overtaking scooters in FY2000. Motorcycles benefited from value migration away from scooters, as customers' priorities were on better mileage, superior quality (product and ride) and aesthetics.
- Automatic scooters have been in the market since mid-1980s (Kinetic DX, Bajaj Sunny, etc.) and grew at ~14% CAGR from FY93-FY03. However, automatic scooters gained traction with the launch of Honda Activa, the first four-stroke automatic scooter, in 2001. Automatic scooters started gaining acceptance, especially in urban markets, driven by narrowing fuel efficiency gap, improvement in urban roads and unisex appeal. Indian automatic scooter industry grew at ~22% CAGR over FY08-FY13.

Exhibit 42: Changing customer priorities drove value flow from scooters (geared) and mopeds to motorcycles from 1990s to mid-2000s



Source: Company, MOSL

Exhibit 43: Changing consumer priorities drive value migration in 2W industry**Exhibit 44: Value migration from Geared Scooters to Motorcycles to now towards Automatic Scooters**

Source: Company, MOSL

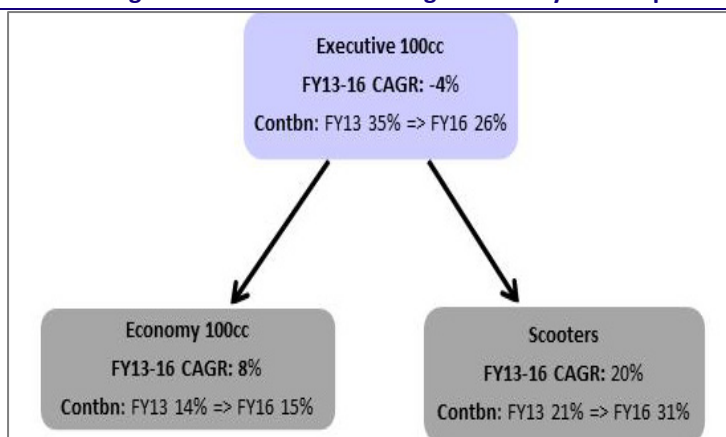
Hero MotoCorp: Structural value migration or cyclical impact?

- Executive 100cc segment (~56% of HMCL's volumes) is witnessing potential value outflow towards a) scooters, b) premium and c) economy segment, reflecting in ~9.5% CAGR decline in the segment volumes over FY14-16. We believe that part of outflow toward economy segment is also due to two consecutive poor monsoon seasons, which should get corrected in FY17/18.
- HMCL has been trying to gain market share in scooters through two new launches in 2HFY16, which has helped it to gain lost market share. However, it is still much behind market leader HMSI.
- It has successfully captured value outflow toward executive 125cc segment, as reflected in ~16pp market share gain in this segment since FY14 (~23% CAGR in

volumes). However, it has seen virtual wipe-off of market share in premium segment (>150cc), with ~16pp loss in market share to ~3.3% since FY12.

- We recently downgraded stock to **Neutral**, as despite factoring in strong volume growth (8.5%/11.5% in FY17/18), stable EBITDA margins (at 16.5% for FY18E) and resultant strong EPS growth (~18% in FY18E), valuations at ~18.9x/16.1x FY17E/18E appear fairly valued considering it would lose excise benefit from FY19. We have a target price of INR3,666 (18x FY18E EPS adjusted for loss of excise benefit— at ~15% premium to LPA).

Exhibit 45: Executive segment: Structural value migration or cyclical impact?



Source: Company, MOSL

Value migration driven by Unlisted players

Unique business models of unlisted players posing a threat to incumbents

We have discussed various themes on value migration in the preceding section – themes which have been in play for some time and also themes which are expected to play out in the future.

In this section, we attempt to highlight themes which are yet to gain significant traction and are still in embryonic stages relative to themes we have discussed in earlier sections. The common thread around these themes is the challengers are unlisted and are posing threats to incumbents. Nonetheless, these are trends which are disruptive in nature and have the potential to cause serious dislocation in the existing order of things. Needless to say, it will take time to play out and maybe create new winners or dislocate existing winners. Giving the rapid change of pace in technological evolution, the trends in today's age are rather short lived. Even before a new trend takes shape and its success is judged, it is threatened by a newer trend and has to start worrying about its survival. In essence, the pace of value migration is rapid in today's world. In the past, value migration was about meeting unmet needs of consumers. Today it is about creating needs which doesn't exist. In this section, we discuss four interesting themes which, in our view, will create disruption going forward and challenge the existing frameworks of businesses. These themes need not necessarily be a play on stocks but nonetheless will have an impact on the way of doing business.

Exhibit 46: Unique disruptions: Unlisted players posing challenges to listed ones

S.N.	Sector	Theme	Unlisted players involved
1	Automobiles	Future of personal transportation: Shift from product to service	Uber, Ola
2	FMCG	Value Migration from traditional FMCG to Ayurveda/Herbal players	Patanjali
3	BFSI	Payment banks and SFBs: Dawn of new era in Financials?	Paytm
4	Telecom	The disruptor with big pockets	RJIO

Source: Company, MOSL

Theme 1: Future of personal transportation: Shift from product to service?

- Introduction of shared mobility services like Uber and Ola have brought about a revolution in the transportation industry. These taxi aggregators developed a smartphone app that allows users to hail private cars for travel, as well as allowing drivers to earn money from picking up rides in over 425 cities in 72 countries worldwide.
- While new generation taxis had been making in-roads in India since 2008 in form of radio-taxis like Meru, EasyCabs, TabCabs etc, these services were primarily targeting users of normal taxis. These radio-taxis were expensive than normal taxis and owned car. Value migration from normal taxis to radio-taxis had just begun around 2009-10, emergence of shared mobility service like Ola, Uber disrupted both radio-cabs and normal service due to cost and convenience.
- Three major drivers for shared mobility services:
 - **Price:** It offers chauffeur driven rides at a great price, cheaper than regular taxis as well as owned car.

- **Convenience:** It is convenient (using app), easy to use and having multiple payment options.
- **Quality and Safety:** Cars operated under shared mobility services are well-maintained. Also, one can track her journey along with details of the drivers and the car.
- While these shared mobility apps have disrupted normal taxi business, it has potential to influence car buying patterns (if not eliminating need to own a car).
- Currently shared mobility accounts for <4% of all miles driven globally. UberX is almost 50% cheaper than owning a car in city like New York. Autonomous cars might be 40% cheaper UberX and 70% cheaper than owning car!
- Similarly in India, Ola/Uber offers one of the cheapest mode 4W transportation. More importantly, these services offer local solutions for the India markets like Uber Moto, Ola Shuttle, UberPool, Ola Corporate, Ola Autos etc.
- The ease, convenience and luxury provided by these services without having the hassle of driving in congested roads and worrying about the parking their cars at a lower cost have made people reconsider their plans of owning a car.
- **Potential drivers of faster adaption of shared mobility apps in India**
 - **Road congestion:** With four Indian cities featuring in top10 congested cities in the world, self-driving is increasingly painful in the top-10 India cities.
 - **Poor public transportation:** Urban public transportation infrastructure hasn't kept pace with urbanization, putting more pressure on the road networks.
 - **Regulations:** Increasing pollution levels in tier-1 cities would force regulators to adopt strict measures to curb pollution (for eg Delhi/NCR has witnessed several measures like ban on 10yrs/15yrs diesel/petrol vehicle, odd-even policy, Green levy on diesel vehicle above 2ltrs etc). These kinds of regulatory oversight could end up scaring first time buyers (over 40% for the industry).
 - **Ride sharing:** Ride sharing services from Ola/Uber drives down costs for user, congestion on the road and curtails pollution.
 - **Autonomous vehicle:** Autonomous vehicle can bring down cost of shared mobility services by upto 20% in India, widening cost advantage for these services.
- **What could be potential impact of shared mobility services on Auto/Auto Ancs**
 - Given India's low penetration of car, and convenience and aspiration of owning a car would weigh over rationality, shared mobility apps wouldn't impact demand for car significantly in the medium term. In fact, in the medium term car sales could see boost from additional demand from these service providers.
 - We don't expect demand from First Time Buyers getting impacted meaningfully, though on margin few such buyers might defer their purchase.
 - However, increasing usage of these services would put at risk car demand from replacement (~28%) and 2nd car buyer (~27%).
 - While demand for cars in India would not decline, pace of growth in the long term would be lower than what was estimated prior to emergence of shared mobility. Hence, the challenge for OEM would be to produce car which are unique, aspirational and yet affordable.

- More importantly, these services could have bigger influence on car ownership patterns in the global markets. In US, age of young people with driver's licenses has been steadily decreasing. In 2014, 77% of 20 to 24-year-olds had driver's licenses (v/s 92% in 1983). As per one survey, a millennial today is 30% less likely to buy a car than someone from the previous generation.
- Lower pace of growth in India and in global markets would influence auto component suppliers who are focused on PV OEM segment viz Motherson Sumi, Mahindra CIE, Bosch (which could also be impacted by shift towards Electric Vehicles) etc.

"The age of access is here. There is going to be increasing number of people who would want access to transportation and not own object of transportation. Today, one lives in a world where the Olas and Ubers of the world are stating that a person doesn't need to own a car, for them transportation is commodity." **Mr Anand Mahindra, M&M**

Exhibit 47: Shared mobility trumps owned car in per Km cost

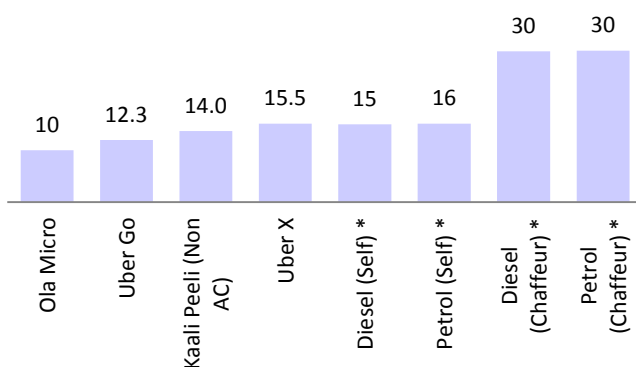


Exhibit 48: High share of First Time Buyer (% of Maruti's sales)

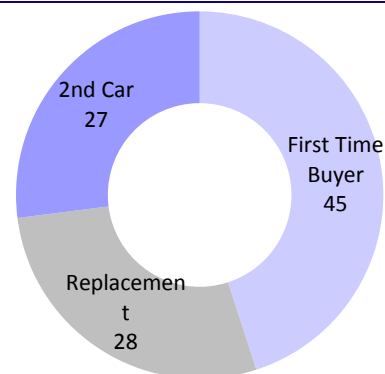


Exhibit 49: Policies adopted by various countries and cities around the world to reduce car ownership and usage

	Reduced use	Reduced ownership
Regulatory	Low Emission Zones 226 cities in the E.U. Restriction by license plate number Latin America, China	License plates lottery Beijing, Guiyang
	Congestion charge Singapore, U.K., Sweden) Parking Europe, Japan, Singapore, U.S.	License plates quota/ auction Singapore, Shanghai, Guangzhou
Pricing		

Source: World Resource Institute

Theme 2: Value Migration from traditional FMCG to Ayurveda/Herbal players [Patanjali Ayurved]

Industry: FMCG | **Driver of VM:** Niche positioning and cost | **Beneficiaries:** Patanjali and broader Naturals space

Patanjali – the disrupter

Indian FMCG industry has seen the emergence of a new unconventional player which has made rapid strides in the last 4-5 years and is now the most commonly discussed threat for the business models of incumbent FMCG players. Patanjali, founded by Baba Ramdev (Yoga guru) as a pharmacy store in 1997, flew below the radar of industry incumbents for the first fifteen years and then over the next four years its revenues went up 10x. The conventional wisdom of entrenched FMCG players having established an unbreakable moat of distribution reach coupled with brand strength through decades of presence has been challenged by Patanjali.

Exhibit 50: Patanjali's niche positioning based on Ayurveda has been its key USP



What is Patanjali's secret sauce?

So what explains Patanjali's success? What has driven the value migration from traditional FMCG players towards Patanjali which resulted in sharp spurt in revenues from INR 4.5b in FY12 to INR 50b in FY16?

- In our view, the single biggest factor which drove value towards Patanjali was its success in making Ayurveda mainstream. It smartly capitalized on the consumer's acceptance of Ayurveda/Herbal/Natural products driven by health and lifestyle considerations. Core competence of Patanjali lies in manufacturing products with Ayurveda positioning and making it available to consumers through its vast network of Patanjali Chikitsalayas at a price discount of 15-30% vs. existing products. The product basket of Patanjali expanded rapidly with presence from Food to Grocery, Home Care, and Personal Care. It successfully

identified the need of consumers and fulfilled the same by creating a product basket with strong Ayurveda lineage.

- It also leveraged the brand Patanjali, popularized by Baba Ramdev through his Yoga camps. The umbrella branding helped it save money on advertising and promotions vs. other FMCG players and pass on the savings to customers through reduced prices.
- Having gained significant size, it has then focused on widening its reach by expanding the distribution network and making its products available in mom and pop outlets.
- Last but not the least, it also benefitted from its positioning as a “Swadesi (domestic) player” with an explicitly avowed goal of replacing MNC’s.
- Thus, combination of positioning, brand equity, distribution reach and Swadesi angle helped Patanjali establish its presence and pose a meaningful threat to several FMCG players.

Exhibit 51: Patanjali product basket spans several categories



Patanjali in numbers

Patanjali’s revenue jumped from INR4.5b in FY12 to INR50b (reportedly) in FY16. There was a particularly sharp spurt from INR20b in FY15, partly because its products started becoming available not just in 10,000-odd franchisee-run small *chikitsalayas* (100-300sf health centers) but also across leading modern retail chains like Big Bazaar, Reliance Retail and Star Bazaar. It has dedicated shelves to exhibit its products in these stores.

Exhibit 52: The exponential rise in Patanjali’s revenues; up 10x in four years

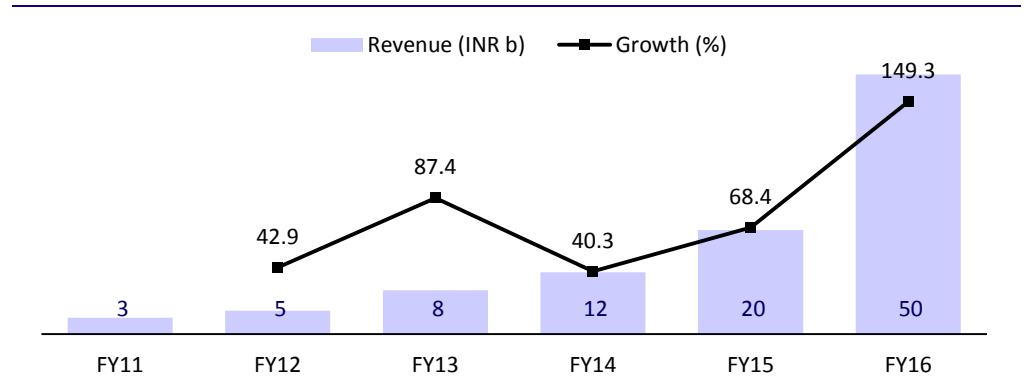
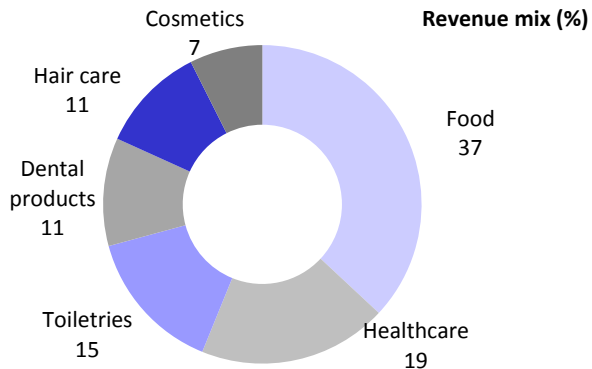
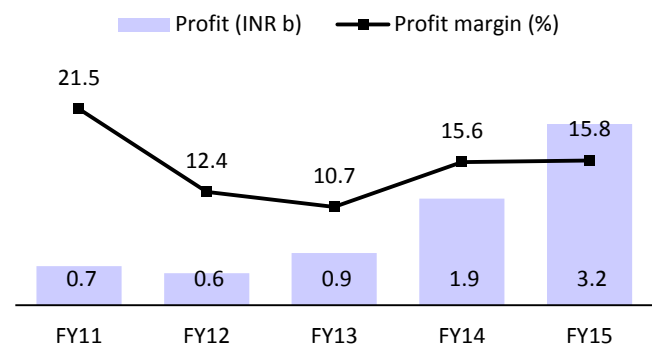


Exhibit 53: Diversified category basket**Exhibit 54: Profits up 5x in three years**

The game is not over yet

Over the next few years, Patanjali intends to focus on six areas: natural medicine, natural cosmetics, natural dairy products and food, natural cattle feed and feed supplements, bio-fertilizers and bio-pesticides, and natural indigenous seeds. It intends to quadruple revenue to INR200b by FY20. It has three factories currently and it plans to set up six more in the next few years.

Challenges in the offing

Limited distribution, stock-outs, and capacity expansion could pose challenges. Patanjali's products only reach ~200k outlets compared to the 6-7m outlets reached by larger FMCG players like Hindustan Unilever, ITC and P&G, and 3-4m outlets reached by mid- tier FMCG players.

Exhibit 55: Patanjali's distribution reach

Distribution type	Distribution reach
Distributors	4,000
Company owned outlets	10,000
Mega-marts	100

Low-cost Retail revolution in USA and Europe in the 80s

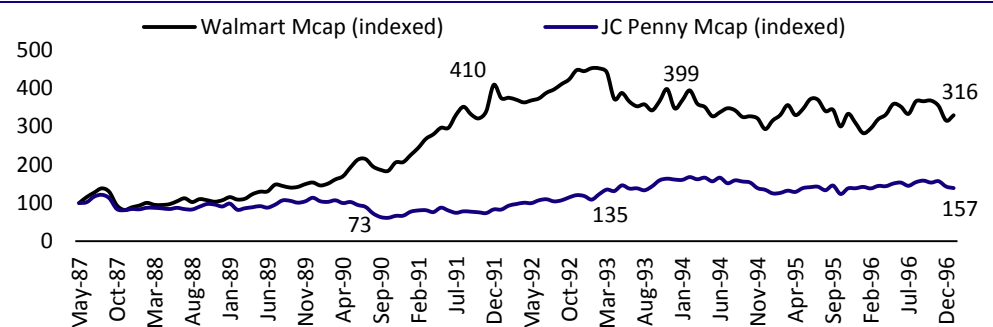
The disruption caused by Patanjali in India finds an uncanny parallel in the Retail industry in the US and Europe in the 1970s and 1980s. Wal-Mart in USA and Aldi in Europe, benefitted by satisfying the customer priority of low cost and convenient shopping experience.

Wal-Mart

Wal-Mart took advantage of the shifting priority of American consumers towards cost consciousness and hassle-free shopping in an environment where customers were pressed for time and money in an era of declining purchasing power for middle-income families (1970-1990). It capitalized on these trends by providing low cost access to a wide range of branded goods. It built big stores, where scale and volumes enabled it to offer lower prices than traditional stores. The sheer availability of multiple categories of goods ensured a better shopping experience and saved consumers' time.

Wal-Mart's focus on logistics, purchasing and flexibility to evolve its business model to match changing customer priorities reshaped the landscape of the Retail industry. Traditional retailers like Sears and JC Penney bore the brunt of stagnation even as Wal-Mart prospered.

Exhibit 56: Walmart expanded the gap with rest of the retailers



Source: Company, Bloomberg

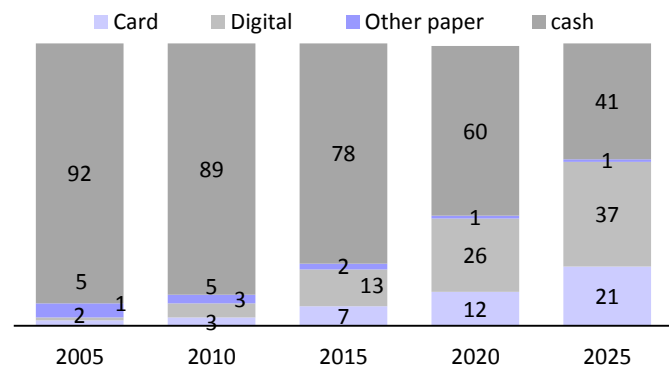
Aldi

In Europe, in the 1970s and the 1980s, traditional grocery/food shops were facing the challenge of economic obsolescence from hypermarkets. Hypermarkets created value by satisfying the new customer priorities of low cost and convenient one-stop shopping experience.

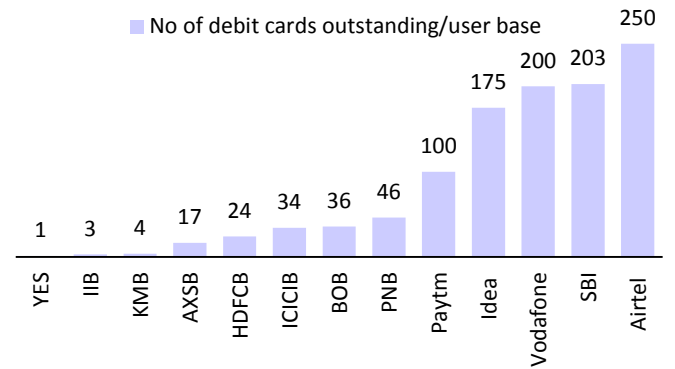
Aldi offered acceptable quality food staples at rock bottom prices. Variety offered was limited but emphasis was on convenience. Unlike hypermarkets, Aldi stores are small with no-frills furniture and primarily located in cities. It offered limited variety of non-perishable, fast moving staples (high inventory turnover). It had strong controls on overheads, with employees performing multiple duties. Customer service was minimal, which helped control labor cost. Advertising was mostly word-of-mouth. All this resulted in average sales per employee hour being 35% higher than supermarkets.

Theme 3: Payment banks and SFBs: Dawn of new era in Financials

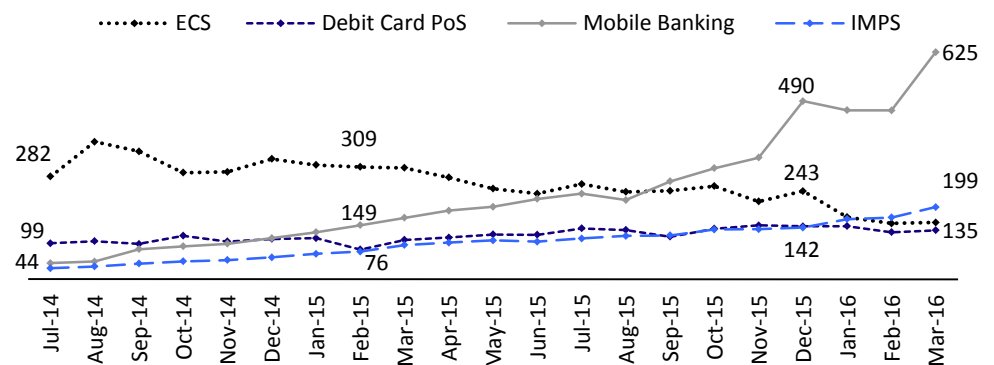
- After two decades of new private banks entering the banking system, RBI and GOI announced a new set of financial services companies, namely Small Finance Banks (SFB) and Payments Banks. With no legacy issues, focus on cost reduction with the use of technology and an established customer base in most cases, both these categories are likely to be strong competition, in a decades to come, for incumbents especially state owned banks.
- Of the 10 players who received the SFB license, 8 are NBFC-MFIs. Upon conversion to SFB, their focus will be on diversification, especially into the SME business done by banks. At the same time, they would look to reduce cost of funding by building a strong CASA franchise over the medium term, with most customers being the MFI customers they serve. As such, they will compete with large banks not only on loans but also on deposits. They will look into tapping the vast areas of unbanked or under-banked population at sustainable costs with the use of technology.
- Payment banks licensees come from a variety of sectors. Most companies already have a large customer base in place and are likely to pose a big threat to incumbents. For example, Airtel (250m+), Vodafone (200m+), Idea (175m+) and One97 Communication (Paytm, 100m+) already have a large customer base in place. As such, the cost of acquiring a new customer will be minimal, hence, payment banks should be able to maintain profitability. For example, if Airtel were to raise INR1,000 in deposits per customer, it would translate into INR250b of low-cost deposits at minimal acquisition cost. In addition, since payment banks are not allowed to lend, their primary focus would be on fee income. This would pose a threat to private and public sector peers with a large share of retail fees.
- State owned banks have already lost market share in traditional lines of business to private sector banks. With lower efficiency compared with peers and development of a corporate bond market, we expect spreads to remain under pressure. Bank will have to focus on niche business and high cross sell to maintain respectable ROEs. Companies with higher share of retail business and ability to cross sell will be able capture higher share in growing profit pool.
- Private banks (ability to cross sell, no legacy issues), SFBs (diversification, creating niche for themselves) and payment banks (companies with high customer base, focus on fee income, low cost distribution) are well placed to capture this opportunity. State owned banks market share loss is likely to accelerate whereas, NBFCs will continuously need to innovate to maintain to keep the growth rate healthy.

Exhibit 57: Digital and cards likely to be a key source of payment in India

Source: BCG

Exhibit 58: Airtel and Vodafone customer base is higher than/equal to largest bank in the country – Payment bank license can leverage on this customer base

Source: MOSL

Exhibit 59: Mobile banking transaction value overtook traditional banking channels in FY16 (INR B)

Source: MOSL

Exhibit 60: Incumbents have the cost advantage over infrastructure heavy banks**Cost of a customer transaction across channels**

Channel transaction cost	Cost (INR/txn)
Branch	40 to 50
ATM	13 to 17
Call center	8 to 10
Offline BC model	4 to 6
Online BC model	2 to 4
Internet	0.2 to 0.5
Mobile	< 0.2

Source: MOSL

Theme 4: RJIO: The disruptor with BIG pocket in Indian Telecom industry

How has the technology development brought by a new player changed the industry landscape?

- The telecom market has been at the forefront of value migration from voice/low speed data to high speed 4g data, accelerated by the launch of new operator – RJio. India has typically lagged developed market by 8-10 years for technology advancement viz., 2g launched towards 2000s, 3g launched towards 2010. However, RJio's 4g launch has triggered a reduction in this cycle to about 4-5 years. As the Indian telecom market moves towards high speed data, the ecosystem development has accelerated to create the right user experience.
- The ecosystem led by smartphone base, data network, pricing and digital content have accelerated to support RJio led data growth. The smart phone base has reached about 280-300mn, nearly 30% of the overall active subscriber base. Broadband coverage has reached 55% of the 2g coverage. Smartphone content has also improved drastically, with large part of the entertainment, utility, news and banking services provided online. The key driver to all these factors is the data pricing which has been reduced to about INR 12/mb by RJio, a fall of over 60-70% compared to the data pricing four years back.

We expect RJio to drive overall data subscriber penetration of over 50% in the next 1-2 years. RJio's aggressive marketing of value added digital entertainment services like movies, videos, and other applications like Mobile banking should promote data usage across consumers. We expect the data to drive growth for the next five years with over 40% traffic growth and 30% revenue growth.

Exhibit 61: Telecom Industry Snapshot: 2017 resembles 2002 period

	2001-02	Five years Post 2002	2016-17	Next five years...
	Voice		Data	
Network Coverage	✓	↑	✓	↑
New Operator Launch	✓ (RCOM)	✓	✓ (RJIO)	✓
Pricing	↑	↓	↑	↓
Subscriber penetration	↓	↑	↓	2017 resembles 2002 – Can new operator and price decline, trigger data traffic led growth and profitability
Traffic growth	↓	↑	↓	
Usage/sub	↓	↑	↓	
Profit and ROCE	↓	↑	↓	

Application of value migration framework

Picking the winners

Having discussed the concept of value migration and its nuances as well as brief case studies of several VM examples, we now proceed to apply the concept of VM to identify investment plays.

As we highlight in this report, India is characterized by multitude of value migration shifts, given the infrastructure deficit, rising aspirations of its middle-class population, increasing disposable incomes and hence the desire to consume better and indeed the elevated competitive intensity in most of the industries. The strong growth potential of the economy fosters innovation, competition, creation of new categories and desire to wrest first-mover advantage, ultimately resulting in value migration opportunities.

Some of the VM opportunities highlighted in this section have been in play already; some are at nascent stage, while others have shown partial demonstration. However, common thread across the ideas highlighted in this section is – Value Migration at work!

Value migration as a tool to identify solid and compounding franchises

We expounded on the various facets of value migration in this report. We believe it serves as a great tool to identify potential winners in our universe from a three-year perspective. As discussed in this report, value migration is underway in several sectors, and in a market like India – which is characterized by resourceful entrepreneurs, evolving technologies and its material implications for various sectors, under-penetration and low per capita consumption across categories – the process of value migration is unending, in our view. Beneficiaries of value migration will be able to exhibit sustainable earnings outperformance, given the competitive advantages they possess.

Anticipating value migration in various spaces and combining it with traditional investment approach provides us with a set of stock ideas. In this section, we apply the framework of value migration and identify some of the potential winners based on our understanding of this tool.

Varied sources of value migration

Our hunt for VM beneficiaries in our coverage universe has revealed several sources of value migration. Some of the key sources of VM, in our view, stem from technological changes, change in consumption habits, change in lifestyle habits of consumers, infrastructure development and reforms undertaken by policymakers in various fields.

Common characteristics of VM beneficiaries

Our extensive analysis of VM thesis suggests that players that benefit from VM tend to have certain common traits. Naturally, the DNA of VM winner will be significantly different vs. also-ran, me-too players. Some of the common traits of VM winners are: **a) Leaders in the respective space; b) innovation as key organization focus area; c) healthy cash flow dynamics; and d) nimble footedness in adapting to change if they are not leading the change.**

Exhibit 62: Value migration: potential winners

S.N.	Theme	Sector	Winners
1	Value Migration from Unorganized to Organized Segment	Mortgages (Home Finance)	Repco, Gruh Finance
2	Value Migration from Unorganized to Organized Segment	Jewelry	Titan
3	Value Migration from Unorganized to Organized Segment	Logistics	Third party logistics players
4	Value Migration from Unorganized to Organized Segment	Adhesives	Pidilite
5	Value Migration from Unorganized to Organized Segment	Light Electricals	CG Consumer, Havells
6	Value Migration Unleashed by Technology	Telecom	Bharti, BHIN
7	Value Migration Unleashed by Technology	Media	Netflix, Eros, Star, Shemaroo, Zee
8	Value Migration Unleashed by Technology	E - commerce	Amazon, Flipkart
9	Value migration due to Lifestyle changes	Transportation	Indigo
10	Value migration due to Lifestyle changes	Apparel	Page, Arvind
11	Value migration due to Lifestyle changes	Diagnostics	Dr. Lal, SRL
12	Value migration due to Lifestyle changes	Multiplex	PVR
13	Reverse Value Migration	Logistics	Concor, GDPL
14	Value Migration in Commodities	Aluminum	Hindalco

We apply the framework of VM in our coverage universe and present select stocks as potential beneficiaries of VM.

We select VM winners based on our analysis of various Value Migration trends unfolding in India. We believe combination of De-monetization and GST will accelerate the **shift from unorganized to organized** sector across various consumer facing sectors in India. Rising cost of doing business for unorganized players, enhanced compliance requirements, broadening of tax net and better monitoring mechanisms are some of the factors which will pose significant challenges to unorganized players in our view. This should, in our view, drive the shift towards organized segment. We highlight our potential winners in Mortgage, Jewelry, Adhesives, Consumer Electricals and Logistics space.

Second theme we pick is the value migration unleashed by **Technology**. Rapid changing technology is not allowing incumbents to breathe easy. While this theme can encompass many sectors, we highlight winners from Telecom, Media and E-commerce space in this section.

Lifestyle changes are also driving value migration in several spaces. Changing consumer habits, rising aspirations and bulging middle class are some of the underlying catalysts responsible for these changes. This forms the bedrock of third theme. Here, we highlight winners from Transportation, Apparels, Multiplex and Diagnostics space.

While listed players comprise the majority of our Value Migration winners, we have not refrained from highlighting the unlisted winners.

Our VM winner ideas are **HDFC Bank, RBL, Repco Finance, Gruh Finance, Pidilite, Titan Company, Page, Arvind, Crompton Consumer, PVR, Hindalco, Indigo, Bharti Airtel**.

Value migration from unorganized to organized segment

A theme spanning multiple sectors; GST and Demonetization to hasten the shift

- As incomes rise and aspirations take shape, customers' choice/preference shifts toward branded/organized goods. Various categories and sectors in India have high salience of unorganized sector (paints, batteries, jewelry, electrical goods, adhesives, processed foods, etc.). We believe value migration from unorganized to organized trade is a very durable and long-term shift, which can span for decades and create material value for organized players over a period of time.
- Implementation of GST and Demonetization will aid the shift from unorganized traded towards organized segment in the medium to long term. As the cost of doing business goes up for un-organized trade (coming into the tax net) their price competitiveness vis-à-vis organized trade will shrink, in our view.

We highlight three sectors where this theme will be prevalent.

1. **Mortgages (Home Finance):** India with a population of 1.3b, with over 250m households, has an acute shortage of housing with 50m new housing requirement. Favourable demographics, rising income, increasing urbanization, strong support from government/regulator, puts the mortgage finance space in sweet spot. Mortgage finance sector has seen phenomenal growth in last 15 years. The outstanding housing loan of HFCs at the start of 2000 was INR253b and SCBs were INR183b with a total of INR438b. The same has grown exponentially to over INR 14t combined for banks and HFCs. i.e. 14% of banking system. While the growth during last 1.5 decades has been driven by top 10 cities, incremental growth will be driven by geographical penetration in tier II, tier III cities. Over 50% of HFCs' disbursements are concentrated in three states, indicating large untapped potential in the country. Top 10 cities contribute ~45% of disbursements.
2. **Jewelry:** Indian Jewelry sector is characterized by the presence of thousands of un-organized, regional and mom & pop jewelers. The wide prevalence of under-caratage and rising aspirations of Indian consumers has ensured a decisive and durable shift towards organized trade. The government has imposed several restrictions on cash purchase of jewelry with mandatory PAN card requirement, imposition of excise duty et al. De-monetization coupled with implementation of GST augurs quite well from the perspective of branded organized players like Titan, in our view. These two big reforms will increase the cost of doing business for un-organized trade.
3. **Logistics:** Indian Logistics industry is typified by high fragmentation, inefficiencies and complexity. Implementation of GST will drive consolidation in warehousing space and a shift from unorganized to organized sector. Manufacturing and sourcing decisions which are currently dependent on tax considerations will henceforth be driven by supply chain perspectives. GST will drive outsourcing in the Logistics industry and benefit the third party logistics providers, in our view.



Case-III: Value Migration in Housing Finance: From Unorganized/Untapped to Organized

Industry: NBFCs | **Driver of VM:** Unorganized/Untapped to Organized | **Play on VM:** RHFL, GRUH FINANCE

1. What's the potential value migration?

- Housing shortage was estimated at 18.8m units in urban India and at 44m units in rural areas. Even if 22m houses (50% of required houses) need funding with average ticket size of INR0.6m, this could be an INR9t+ opportunity over the next decade.
- Self-employed segment accounts for 34% of the workforce, but ~10% of loans. Banks and HFCs have ignored self-employed segment in tier II and tier III areas due to difficulty in credit appraisal, lack of proper documents, KYC checks and NPL volatility.
- While growth in the past 1.5 decades has been driven by top 10 cities, incremental growth will be driven by geographical penetration in tier II and III cities. New growth segments have emerged like self-employed segment (1/3 of India's workforce).

2. What phase of value migration are we in currently?

- Current landscape of mortgage penetration indicates huge concentrated geographical presence for both banks and HFCs.
- Top 5 states contribute ~60% of banks' outstanding home loans; the concentration is even more in case of HFCs, with top 5 states contributing ~70% of disbursements.
- The trend is no different when looked into districts/cities concentration—top 10 cities constitute 43% of banks' outstanding books.

3. What will be the catalyst for driving this value migration?

- **Young population:** India has one of the youngest populations among major countries, with median age at 26 years. Moreover, the average age of owning a house, which stood at +45 years in 2000 (as the major source of funding was personal savings), has now gone down to 34 years and is expected to go down further.
- **Increasing urbanization:** Despite a steady increase in urbanization, India's urban population stands at 31%, which is far lesser than other developing countries.
- **Increasing penetration of housing finance:** Finance penetration in urban areas stood at 35% and is expected to grow to 50% in next 5-7 years. On the other hand, finance penetration is lower in rural areas at 9%, primarily due to inadequate lender branches because of higher cost of operations, absence of large salaried class and challenges in valuing collateral in rural areas. These low levels of penetration provide massive opportunity, in our view.

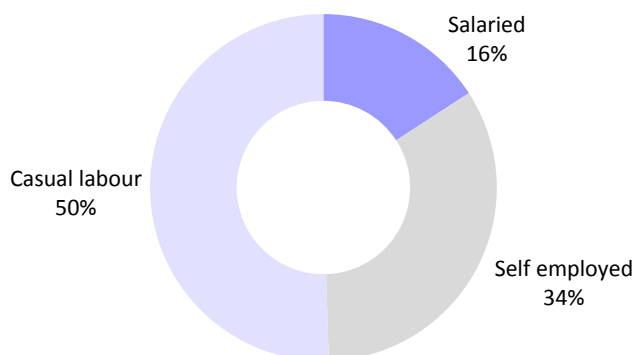
4. Government and regulatory support and expanding pie

- **‘Housing for All’ by 2022 and 100 smart cities:** As part of its focus toward affordable housing, the government has planned for 20m new housing units in 500 towns and cities in seven years in partnership with the private sector. 100 smart cities will also be developed over the next decade.
- **Lower risk weights:** RBI/NHB has reduced risk weights for lending below INR7.5m to 35% from earlier 50%. This measure will help to significantly lower capital consumption.
- **NHB refinance:** The Government of India via NHB offers refinance to entities offering lower ticket size loans to low-income group customers. This is a big incentive for companies to cater to this segment.

5. What if this value migration plays out? Who wins and who loses?

- Value migration from unorganized to organized in housing finance space would drive faster loan growth of over 30% for players targeting the untapped segment, as against 18% overall mortgage growth.
- Moreover, focusing on this segment has dual benefits: a) Access to cheaper refinance from NHB which helps reduce cost of funds. b) Since there is virtually no competition in this segment and the pie is huge, companies operating in this segment enjoy better pricing power.
- We find Repco and Gruh Finance as a clear beneficiary of the same.

Exhibit 63: Self-employed workforce is 34%; share in loans is ~10%. Salaried workforce is 16% but gets 90% of institutional credit

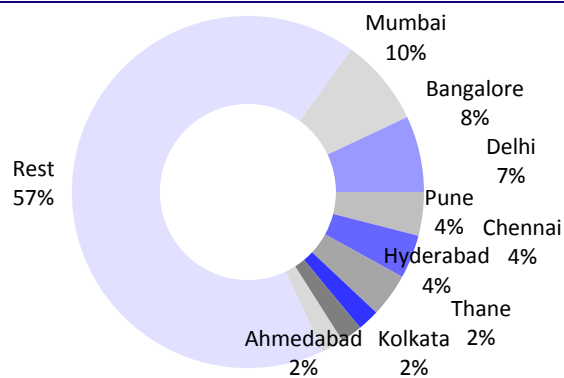


Source: Company, MOSL

Exhibit 64: Acute housing shortage

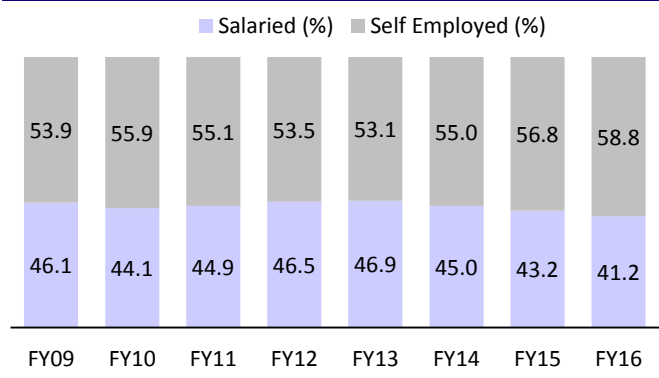
Factors	Shortage (million)
No. of households without houses - 2012	4.2
No. of temporary houses - 2012	20.2
Shortage due to congestion - 2012	11.3
Shortage due to obsolescence - 2012	7.5
Additional housing shortage arising between 2012-2016	0.6
Total housing shortage	43.7
Total housing shortage (m)	21.9
Average cost of rural house (INR m)	0.6
Loan-to-value ratio	70%
Average loan per house (INR m)	0.42
Total financing requirement (INR b)	9,177

Exhibit 65: Top 10 cities form 43% of mortgage loan book



Source: Company, MOSL

Exhibit 66: Repco has highest proportion of self-employed customers among peers



Source: Company, MOSL

Value migration in Indian Jewelry sector



Case-VI: Durable Value Migration: Unbranded to branded Jewelry

Industry: Specialty Retail | **Driver of VM:** Un-organized to Organized shift |
Beneficiaries: Titan

Jewelry industry has seen massive value migration towards branded players in last 15 years

- The Indian Gems & Jewelry market is largely unorganized, with over 0.5m small players, but the market has been seeing a shift towards organized branded retailing in the last few years.
- In the last decade and half, value has been migrating from the unorganized trade towards branded players. India's organized jewelry market has been growing at 30-40% annually compared to 10% growth for the overall Gems & Jewelry sector. The share of the organized sector in the Jewelry market has grown substantially from 10% in 2008-09 to 22% in 2014-15.
- Growth in the organized market was led by regional chains, whose share grew from 7% in 2008-09 to 17% in 2014-15. The share of national chains grew from 3% to 5%.
- The migration towards branded players can largely be attributed to changes in consumer preferences, driven by higher aspirations, rising disposable incomes, and widely prevalent under-caratage in the unorganized segment.

Tanishq has led value migration in the sector

- Titan launched its jewelry division, *Tanishq* in 1996, with a range of jewelry and ornate watches for the European and American markets. However, as demand in the West declined due to slow economic growth followed by recession, *Tanishq* changed its business model and began focusing primarily on the Indian jewelry market, which was primarily unorganized, highly localized, and had no concept of branded jewelry. There were ~0.2m jewelers in India in the late 1990s.
- Since then, Titan has pioneered the Branded Jewelry concept in India, and has created a sizable leadership presence in the Jewelry segment, leveraging on its *Tata* brand equity. Competition exists in the segments, but Titan has continued to gain market share. The following are the key elements that contributed significantly to Titan's value migration journey in the segment:
 1. **Change in product positioning:** After realizing that it had gone wrong in terms of product offering in the initial stages, *Tanishq* changed its brand positioning from that of a westernized offering to an Indian traditional branded jeweler.
 2. **Gaining trust through purity:** There was no organized player in the jewelry business in India before Titan's *Tanishq* first set shop. Directly pitted against traditional jewelers offering similar ornaments, *Tanishq* decided to address the issue of gold purity to gain consumers' trust. In 1999, it introduced the

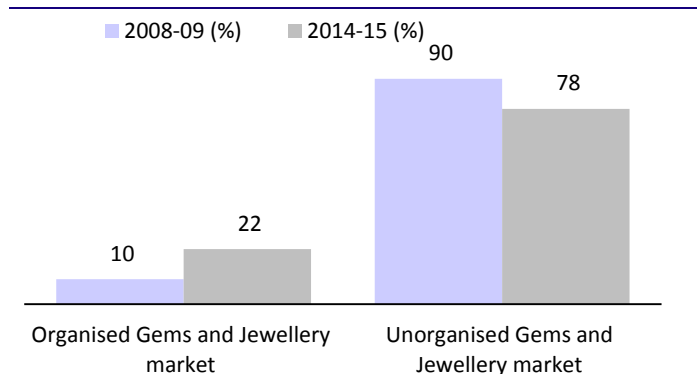
concept of karatmeters in its retail stores to give consumers a more trustworthy method to test the purity of gold than the traditional touchstone method. This enabled it to finally make a dent in the consumers' long-standing relationships with their traditional jewelers.

3. **Delivering value:** In 2000, *Tanishq* decided to have standard gold prices across its showrooms throughout the country. *Tanishq* had set up an ultra-modern, large-scale manufacturing unit in Hosur, Tamil Nadu, which helped it to charge the same price across the country.
4. **Creating brand:** Titan has been creating brands over the years, *Tanishq* being the biggest. It caters to India's mid-and-premium jewelry market, with a large footprint of 200+ stores pan-India (including two *Zoya* stores) spread across 111 towns.

Expect migration towards branded players to continue

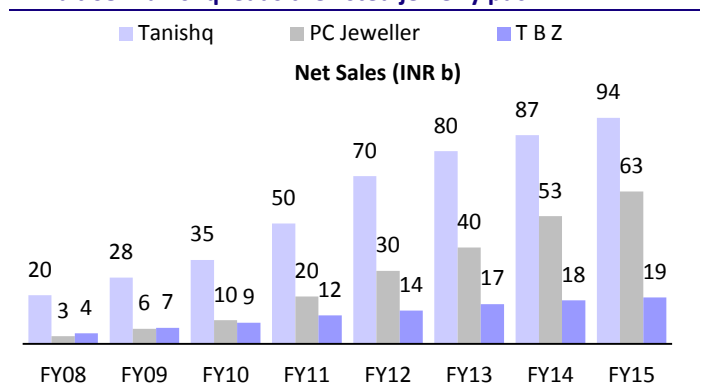
- The jewelry market growth in India will largely be led by retail branded players – the share of the organized segment in the overall Gems & Jewelry market is expected to be 35% over the next few years, given the urbanization trends and the emergence of online players. The regulatory clampdown on Black Money and introduction of stringent norms for cash purchase of jewelry has already hurt the un-organized trade in the last 18 months. De-monetization coupled with GST will hasten the shift towards organized players in our view as cost of doing business goes up for un-organized trade. The greater the compliance imposed on regional/un-organized trade, the more favorable the dynamics for the shift towards organized segment, in our view.
- The shift from unorganized to organized players will be further supported by recent regulations: (1) levy of 1% excise duty on gold jewelry, (2) mandatory hallmarking, and (3) quoting of PAN for jewelry purchases of over INR200k.

Exhibit 67: Share of organized segment has grown from 10% in 2008-09 to 22% in 2014-15



Source: Company, MOSL

Exhibit 68: Tanishq leads the listed jewelry pack



Source: Company, MOSL

Exhibit 69: Titan’s market cap expanded at 41% CAGR

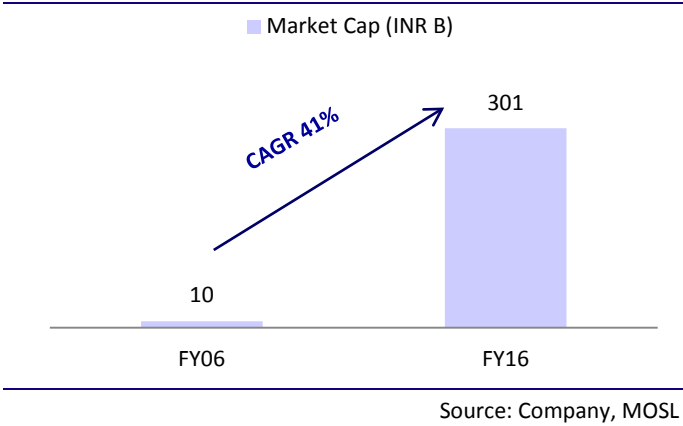
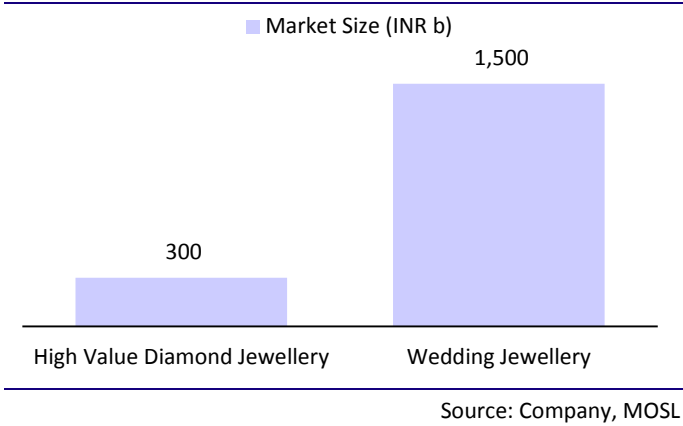


Exhibit 70: Market opportunity for Titan, going forward



Indian Logistics industry – Emergence of third party logistics providers

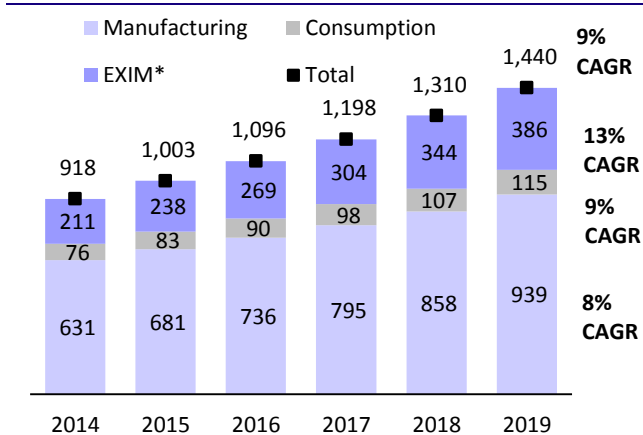
Industry: Logistics | **Driver of VM:** GST | **Beneficiaries:** Third party logistics players

- India logistics spend (as a % of GDP) is 12-14% as against ~8% in developed countries. This high cost is led by complex fragmented structure and high inefficiencies (infrastructure and policy) in the system.
- Third party logistics (3PL) services is an important factor to improve efficiencies – and we believe this will happen post GST as there will be economic incentive to do so.
- Shift to 3PL will be driven by (a) economics, (b) time savings and (c) better compliance for new technology platform.

3PL will promote hub-and-spoke model; business to shift from unorganized to organized sector

- **Consolidation of warehouses:** GST presents an opportunity for industry players to consolidate their warehouses and set up larger facilities, which will bring in supply chain efficiencies.
- **Re-evaluation of sourcing and manufacturing decisions:** Among other factors, sourcing and manufacturing decisions are presently dependent on indirect tax considerations. In the GST regime, due to fungibility of credits, these decisions shall be made from a supply chain perspective.
- 3PL providers typically specialise in integrated operation, warehousing and transportation services that can be scaled and customised based on market conditions and the demands and delivery service requirements for their products and materials.

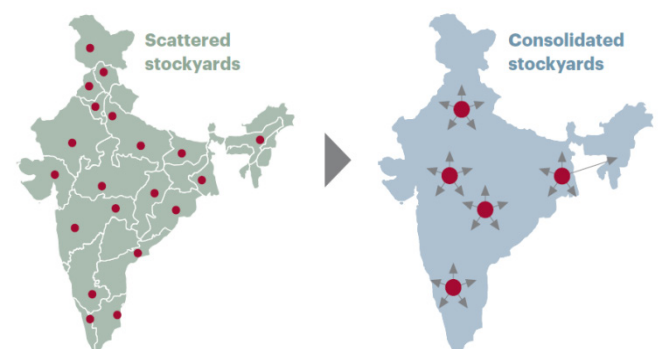
Exhibit 71: Warehousing demand in India expected to grow at 9% CAGR, implying addition of 520msf of addition (msf)



Source: Company, MOSL

Exhibit 72: GST will promote hub and spoke model leading to higher outsourcing

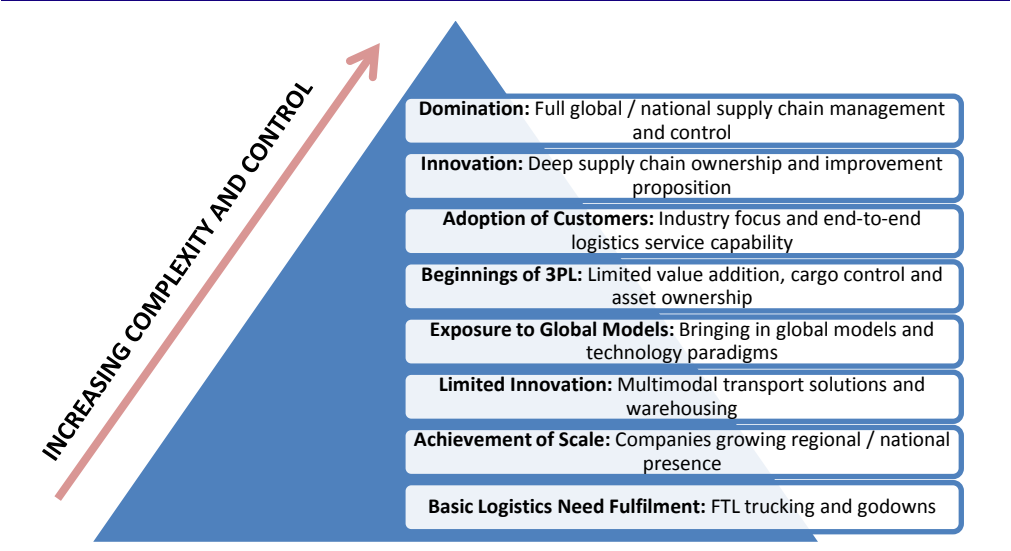
Automotive distribution could cluster close to demand



Source: A.T. Kearney analysis

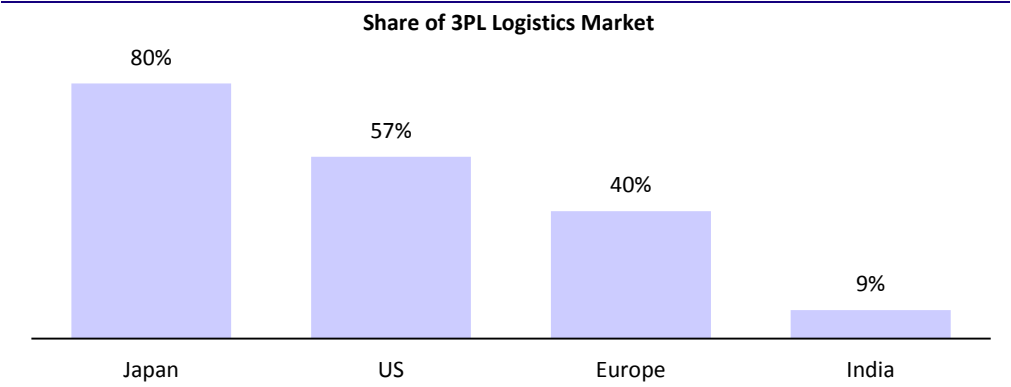
Source: Company, MOSL

Exhibit 73: Evolution of 3PL Market



Source: Industry, MOSL

Exhibit 74: Share of 3PL Logistic market



Source: Company, MOSL



Case-V: Pidilite Industries: Shift from commoditized to branded, innovation addresses unmet needs

Industry: Adhesives and Sealants | **Driver of VM:** From Unorganized/ Unbranded to Organized/Branded | **Play on VM:** Pidilite

What's the potential value migration?

In the adhesives and sealants businesses, value is migrating from small/local/unorganized/unbranded players to Pidilite.

What phase of value migration are we in currently?

- We reckon that around half of the adhesives market and more than half of the sealants market is unorganized/unbranded, which offers ample room for growth. Pidilite has over 70% share of the organized adhesives segment, with no significant competitor even in the unorganized segment. Smaller branded competitors include Jivanjor (Jubilant Group) and Araldite (Huntsman).
- Since 1959, Pidilite has been successfully creating and expanding categories via innovation. Two-thirds of its sales are derived from products and innovations pioneered by the company in India. Its dominant brands in the adhesives and sealants segments include Fevicol, M-Seal and Fevikwik.

What is the catalyst driving this value migration? How will Pidilite benefit?

- Three macro factors driving growth are:
 - Urbanization: Around 40% of India's population is expected to live in cities by 2030, up from 30% in 2008. Driven by urbanization and pick-up in GDP, the construction industry is expected record an 11% CAGR over the next six years, as against 9% between FY12 and FY15. Urbanization will drive strong demand for construction chemicals like adhesives and sealants for use in furniture and waterproofing.
 - GST implementation is expected to lead to better efficiencies, and faster shift from unorganized to organized players.
 - Increasing use of adhesives in new sectors: From nuts and bolts, the automobile industry is moving toward adhesives. Also, instead of sutures and stitches, the medical industry is moving toward adhesives. We believe such developments are opening up large markets for adhesive/sealant players.
- While macro factors contribute to growth, Pidilite is likely to be a key beneficiary of value migration from unorganized to organized players due to its:
 - In-house R&D
 - Innovative and clutter-breaking advertising
 - Focus on products that have low cost of usage but are extremely critical to edifice or procedure.
 - By far the widest network of 60,000 dealers in the country.
 - Strong relationships with carpenters, plumbers and distributors, who have been sustained and nurtured for generations.

What if the value migration plays out, who wins and who loses?

Pidilite will get an increasing share of the rapidly increasing pie as its moats help take market share away not only from unorganized players but also smaller branded players.

Exhibit 75: 40% of India's population expected to live in urban areas by 2030

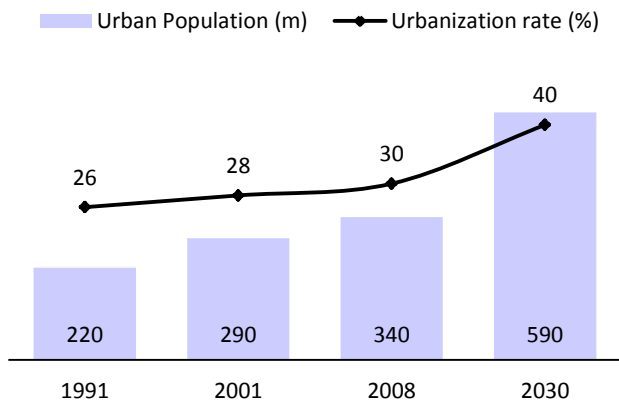


Exhibit 76: Construction industry expected to grow at 11% over FY15-21

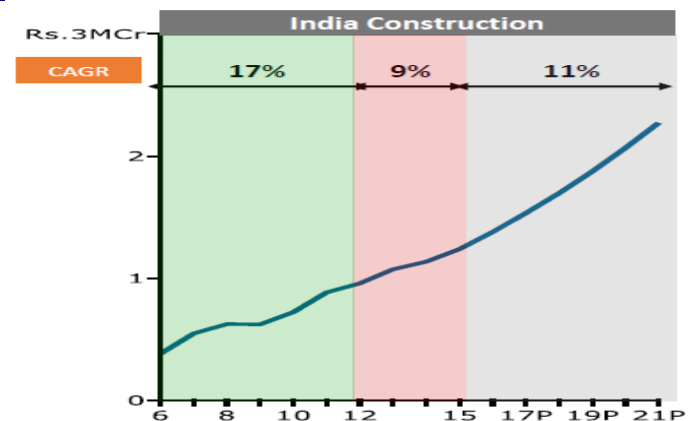


Exhibit 77: Volume growth superior to peers

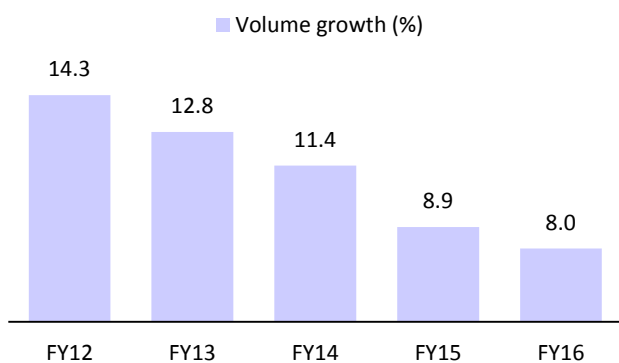


Exhibit 78: Sales CAGR of 19.2% in the past 10 years

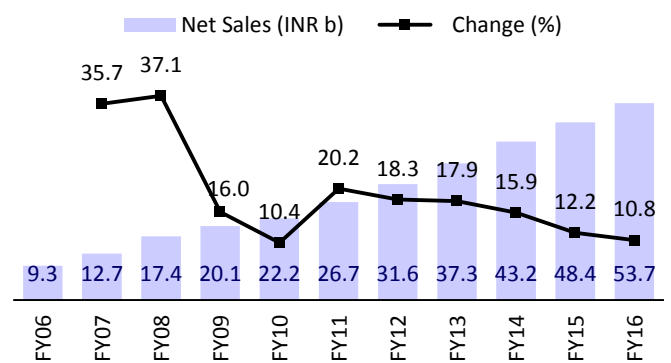


Exhibit 79: Gross margins have shown healthy improvement...

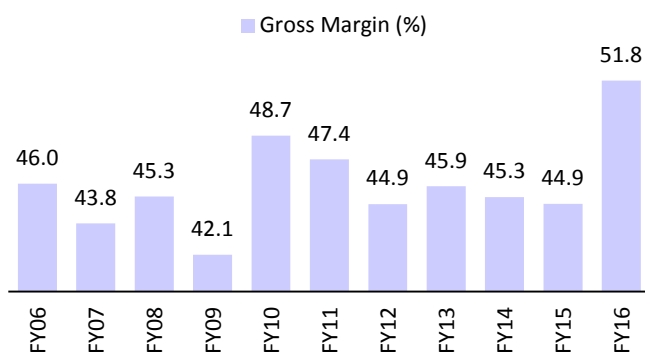
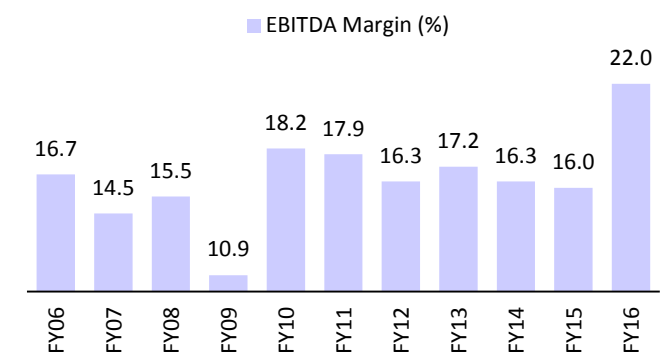


Exhibit 80: ...as have EBITDA margins





Case-VI: Shift from unorganized to organized sector in light electrical on account of GST

Industry: Consumer Electricals | **Driver of VM:** GST driven shift towards organized segment | **Play on VM:** Crompton Greaves Consumer, Havells

1. What's the potential value migration?

- The Government of India seems committed to replace all indirect taxes levied on goods and services by the center and the states with a common GST by April 2017. With GST implementation, it is anticipated that the tax base will be comprehensive as all goods and services will be taxable with minimum exemptions.
- In India, there is significant presence of unorganized segment in Light Electricals. We estimate that in FY16, unorganized segment constituted ~25% of overall industry sales, though down from ~40% in FY10. This primarily constitutes cheap imports from China and local players that typically do not pay taxes and are outside the ambit of tax authorities.

2. What phase of value migration are we in currently?

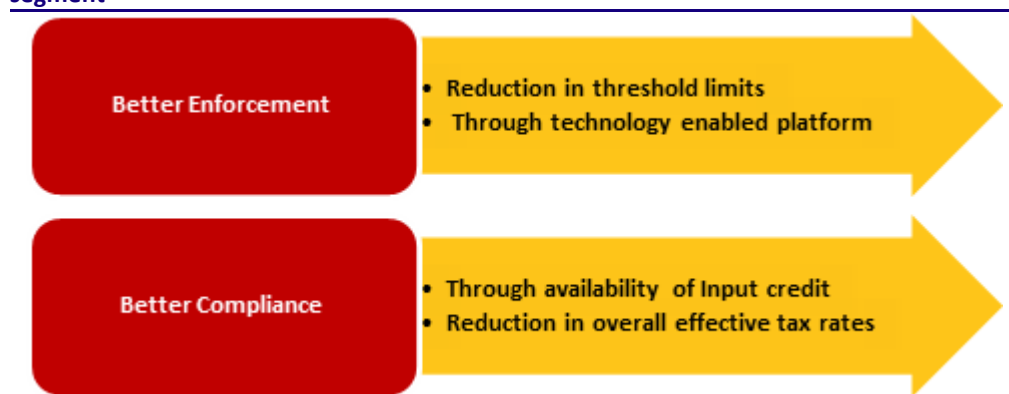
- Constitutional amendment bill has been passed by the Lower as well as Upper houses. The GST bill needs to be ratified by at least 15 state legislatures out of 29 before the President notifies GST Council, which will decide new tax rate and other issues. The central government has set a deadline of April, 2017 for its rollout.

3. What will be the catalyst for driving this value migration?

- Successful implementation of GST from April 2017 would bring unorganized players under the tax ambit, which will help to substantially narrow down the price differential between organized and unorganized segments.

4. What if this value migration plays out?

- GST implementation is expected to narrow the large indirect tax differential between organized and unorganized players. This would be achieved by ensuring better compliance and enforcement by:
 1. Reducing threshold limit for exemption from indirect taxes to INR1m under GST from INR15m under the current excise duty regime.
 2. Tracking the flow of GST credit in the entire value chain using technology platforms.
 3. Ensuring availability of seamless input credit.
 4. Reducing overall effective tax rates.
- As a result of GST, unorganized sector is expected to come under the ambit of taxes and therefore the price difference between organized and unorganized segments would reduce substantially. This would, in turn, lead to a shift in consumer preference from unorganized to organized sector. While this shift has already been going on over past few years, GST would act as a catalyst to accelerate this change.
- Key beneficiaries of this shift in Light Electricals space are Havells, Crompton Consumer Electricals, V Guard and Bajaj Electricals.

Exhibit 81: Measures that will lead to shift of trade from unorganized to organized segment**Exhibit 82: Unorganized players as % of overall category sales for light electricals**

Description	FY06	FY10	FY15
Fans	60%	40%	25%
Lighting	75%	60%	40%
Pumps	55%	45%	30%
Domestic Switchgear	60%	20%	<5%
Industrial Switchgear	40%	30%	20-25%
Switches	75%	50%	30%

Source: Havells, Frost, Industry, MOSLe

Value migration unleashed by Technology

Disruptive value migration

Technology is one of the most common catalysts of value migration. Various industries have seen significant value accretion (depletion) owing to changes in underlying technology. The pace of disruption across sectors has increased manifold resulting in massive churn in the winners/losers. We expect several winners to emerge going forward driven by Technology led Value Migration in Banking, Telecom, Media and e-commerce sectors. We discuss them in details in this section.

The Indian telecom space has seen explosion of data, which has caused some shift away from voice toward data. Though growth in data has slowed down in recent quarters, from a trend perspective this shift is well and truly underway.



Case-IX: Telecom – from voice to data

Industry: Telecom | **Driver of VM:** Voice to Data | **Play on VM:** Telcos: BHARTI, BHIN

1. What's the potential value migration?

- FY17-22 marks 'The Ultimate Disruption' in the USD29b Indian telecom market. Historically, voice revenues have dominated the business models of telcos, with data being an ancillary offering. Currently, ~77% of Indian telcos' revenues are derived from voice segment. With expectation of a 2% CAGR decline of voice revenues over FY17-22E and data revenue growth of ~31% over the aforementioned period, overall industry is likely to grow at 9%.
- Incremental data revenue should be ~INR1,254b, while incremental industry revenue is pegged at INR1113b over FY17-22E, implying incremental data contribution of over 110% of incremental industry wireless revenues.
- While smaller operators face virtual extinction given their inadequacy in terms of data spectrum, even the top-3 incumbents need to significantly change their current business design as changing consumer communication preferences increasingly push the value from voice to data.

2. What phase of value migration are we in currently?

- While data user base is expected to treble from ~324m in FY16 to ~1.04b in FY22E, traffic growth would be supported by 3G becoming the default access technology for mobile data compared to 2G currently (average data usage by a 3G user is 0.8-1GB per monthly, ~2x of a 2G data user).
- While only 132m out of the 324m wireless data users are on broadband (largely 3G) currently, mobile broadband (3G+4G) users will constitute bulk of the 1.04b data user base by FY22E. Data user penetration is expected to increase from ~31% in FY16 to ~81% in FY22E, with mobile broadband users expected to dominate the user mix (mobile broadband penetration in FY16 was ~31%).

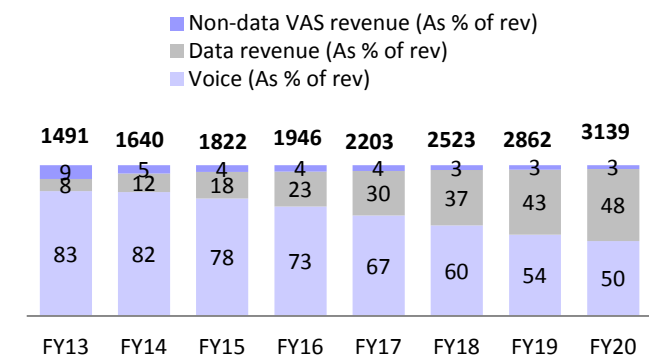
- Share of data revenue has grown from 13.7% in FY15 to 17.5% in FY16. Data revenue is expected to grow 3x from INR337b in FY16 to over INR1t in FY22E, contributing ~57% of the estimated USD47b telecom industry revenue by FY22E.

3. What will be the catalyst for driving this value migration?

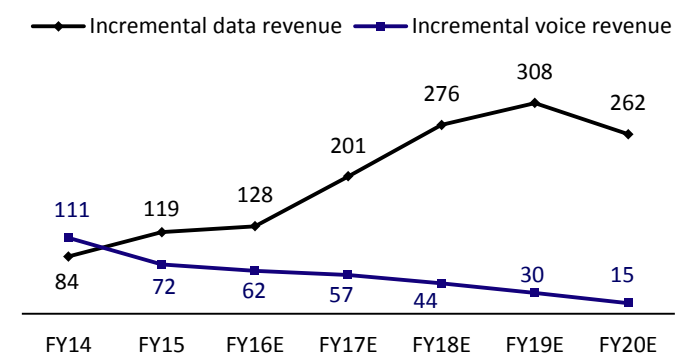
- The entry of a deep-pocketed new-bee Reliance Jio has forced incumbents to aggressively roll out data networks and re-align their business design/networks from being traditionally tailored for voice to increasingly cater to explosive data demand as data climbs up the consumer priorities list for communication and as market value of telcos increasingly gets linked to data growth.
- Affordable (sub-INR4000) VoLTE-enabled smartphone penetration is only de-bottlenecking the device barrier for consumers.
- The threat from OTT voice, which is expected to get increasingly competitive as data realization per MB drops from current levels, can significantly disrupt the voice market and the entry of a non-voice legacy operator like Reliance Jio is only going to accelerate VoIP.

4. What if this value migration plays out? Who wins and who loses?

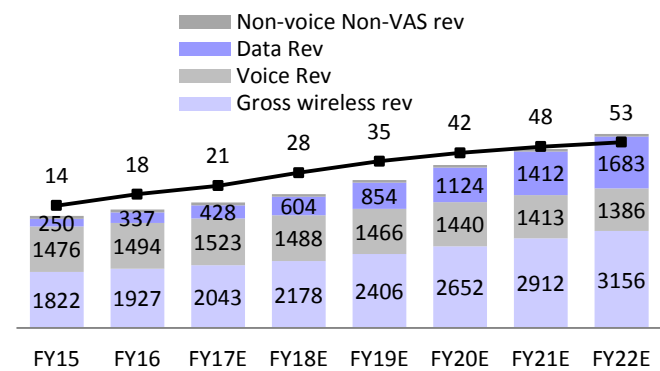
- Companies with superior spectrum and fiber portfolio will be well positioned to capture maximum value in the changing telecom landscape. Bharti Airtel and Reliance Jio have invested the highest in spectrum and fiber assets, and this should hold them in good stead as the business design moves from ensuring ubiquitous voice network coverage to offering true broadband data service.
- Bharti has the highest investment in data spectrum among all operators, with data spectrum spanning 900MHz, 1,800MHz, 2,100MHz and 2,300MHz bands. 98% of Bharti's footprint (all circles except Kerala) is covered with 2100 3G spectrum. In addition, Bharti would be using 900MHz spectrum in select circles for 3G. Bharti is the only other large operator except Reliance JIO to have a significant 2300 MHz band 4G footprint; it also covers 62% of its revenue footprint with 4G 1800 band spectrum.
- Reliance JIO has the most comprehensive 4G spectrum portfolio spanning across 800, 1800, and 2300MHz spectrum bands. It has the second highest investment in data spectrum
- Among the tower companies, BHIN – the market leader enjoying 40%+ of the Indian telecom tower base – is well placed to play the data capex cycle as the urgency to roll out networks among telcos is palpable.

Exhibit 83: Telecom industry revenue mix

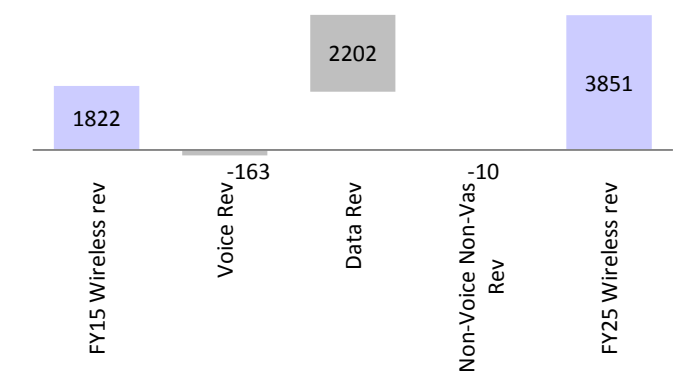
Source: MOSL

Exhibit 84: India wireless: Incremental voice v/s data revenue

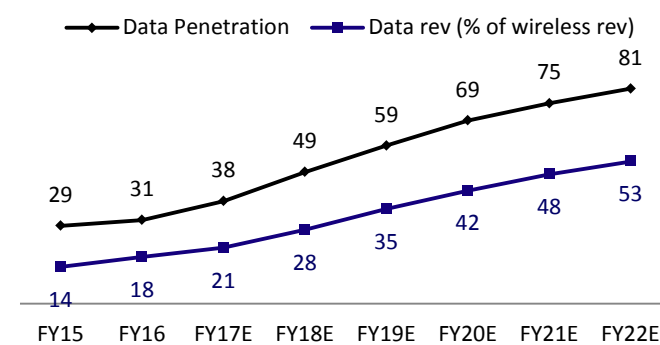
Source: MOSL

Exhibit 85: Industry wireless revenue split (%)

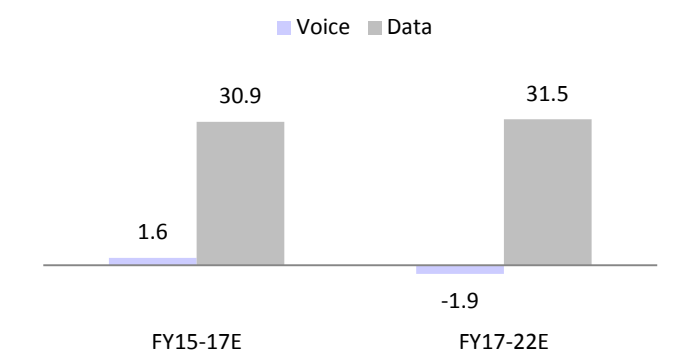
Source: MOSL

Exhibit 86: FY15-18E incremental wireless revenue analysis

Source: MOSL

Exhibit 87: Data penetration and share (%)

Source: MOSL

Exhibit 88: Growth trend in voice and data

Source: MOSL



Value migration in Media: Content shift from physical to digital

Internet ecosystem evolving

Internet usage has evolved from large devices like PCs and laptops to handheld devices. Smartphones have revolutionized the use of internet. Telco's growing data network penetration, currently standing at 55% has played a pivotal role in supporting the growth of internet usage on the go. Additionally, smartphone penetration at about 30% of active subscribers has further accelerated data usage on handheld devices.

Usage on small devices to change consumption pattern

Content consumption patterns are changing. The television has traditionally served as the primary screen for consumers while other screens (tablets, mobile phones, etc) have remained secondary. This is changing. Soon, size will not matter – consumer preference is shifting to multiple screens of varying sizes that work seamlessly together. For media firms, this has substantial implications. Firstly, TV, film and print companies need to enable linear content on digital formats. Secondly, all linear content does not work seamlessly on all digital formats. Thus, different formats need to be integrated to address the digital Indian. Thirdly, existing media companies will face competition not from their traditional TV and print peers, but from any content creating company.

Smartphones and tablets have taken a large share of consumers' time, substituting the time towards newspapers and TV. This has forced many media companies to shift towards digital platforms. Going forward, the market will be bifurcated between content creator and distributor, where content would be king. Content creators, content aggregators as well as content distribution platforms may co-exist in the value chain to serve the consumer.

Demand for differentiated/niche content increasing

India's content viewership has transcended from one channel (Doordarshan) to three Hindi GEC channels to six major Hindi GEC channels to movies and regional channels and several more genres over the past two decades. As content viewership further fragments, the need for differentiated/niche content will only increase and economics will dictate the mode/platform for content delivery.

Pull platforms to satiate neglected long-tail/niche content demand

The biggest shortcoming of linear programming is its inability to cater to the long-tail/niche content demand due to unfavorable economics. This need gap is increasingly being filled by pull platforms such as YouTube, DailyMotion, Spuul, Google Play, BigFlix, etc. The mobile phone ("second screen") is increasingly becoming the preferred mode for content delivery. Mobile video viewership in India is expected to grow from 0.06 Exabytes in 2015 to 1.2 Exabytes (source: CISCO VNI) and will account for 72% of mobile data traffic by 2020, up from 38-42% in 2015.

Increasing “individual escapist” psyche among Indians encouraging mobile content consumption

While no immediate cannibalization of TV viewership is expected, as seen in other mature markets, the time spent online is expected to increase manifold in India as well. The use of mobile devices for content consumption is a direct manifestation of increasing personal escapism. A 2014-Deloitte study suggests that ~45% of Indians are expected to increase their content consumption on mobiles/tablets in CY20 from ~17% in CY14.

DNA (device, network and access) getting smarter – a much-needed enabler

While bandwidth constraints remain, with average broadband speed being ~2.5mbps in India. Just about 14% of broadband connections have speeds of >4mbps – this is the lowest amongst APAC nations. India’s digital infrastructure is set for an overhaul, with the impending 4G network rollouts by major telcos. The smartphone base has reached 280m-300m, nearly 30% of the overall active subscriber base and is expected to reach ~690m in FY20. Trends in key emerging markets (China, South Africa, Brazil) suggest that at 25-35% smartphone penetration levels, data growth more than doubles YoY; a lion’s share of this growth is expected to be video-led for India. Broadband coverage has reached 55% of 2G coverage, data prices have dropped 60-70% over FY12-16 following RJIO’s entry, and smartphone prices have breached the sub-USD50 price point. All these are much-needed enablers for the online video consumption story.

Burgeoning digital/mobile ad budgets a testimony to online video explosion

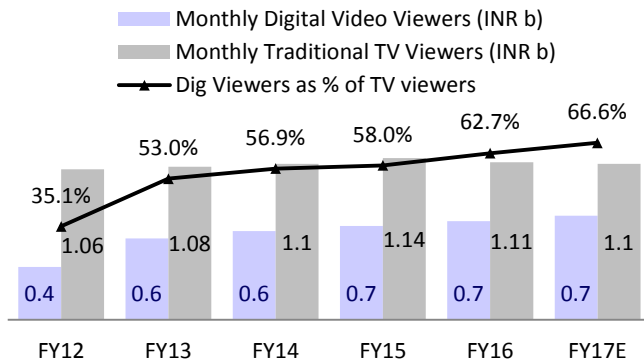
As consumers have increasingly become platform-agnostic for their content consumption, the digital/mobile screen seems set to gain critical mass and serve as a great tool to increase the reach efficiency of advertisements through cross-platform advertising. This is reflected in the ever burgeoning digital/mobile ad budgets of advertisers. Digital ad spends grew at a CAGR of 43% to INR60b over CY10-15 and are expected to grow at ~33% to INR255b over FY15-20 (from 33% of TV ad spends in CY15 to ~70% of TV ad spends). Mobile ad spends are expected to grow at a CAGR of ~62% from INR9b in CY15 to INR102b in CY20. A lion’s share of these spends is expected to be on online video advertisements.

Broadcasters’ OTT launches a hedge against audience exodus

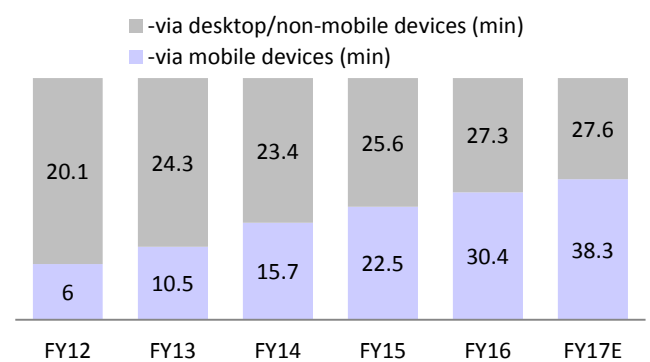
A slew of OTT platform launches, some by major broadcasters (HotStar, Spuul, Netflix, Muvizz, Hooq, Eros Now, Box TV, Sony Liv, Yupp TV, Ditto TV, Ogle, Hungama play, Amazon Prime, Viacom18’s Voot, ALT) over the last two years also validates the shift in consumer preferences from appointment-based viewing to time-shifted viewing. Due to this, syndication revenues for film libraries are expected to increase.

IP-based content owners to benefit, as content consumption shifts from “push” to “pull” platforms

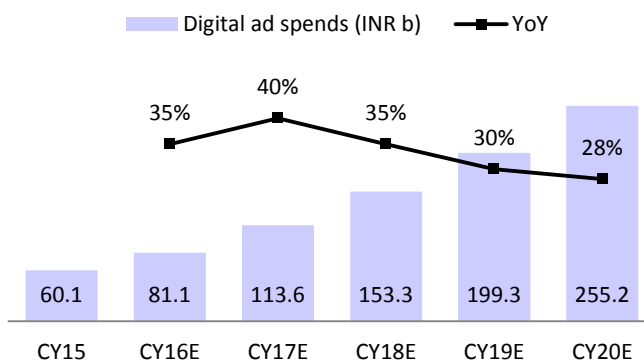
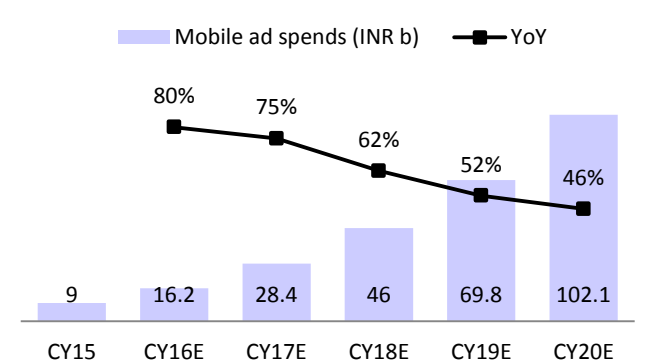
Relevant genres from a content consumption standpoint in India can be bracketed as Hindi GEC, Hindi Movies, Sports, Regional, News, Niche. As content consumption increasingly shifts online, IP-content such as movies, which has relatively sticky viewership, could see a surge in takers.

Exhibit 89: Global viewership increased from 1/3rd to 2/3rd of TV viewership over FY12-16

Source: Company, MOSL

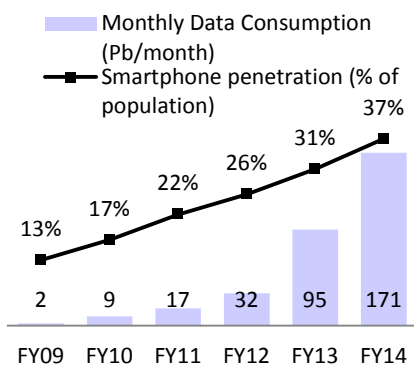
Exhibit 90: Mobile outpaces desktop in daily time spent per viewer

Source: Company, MOSL

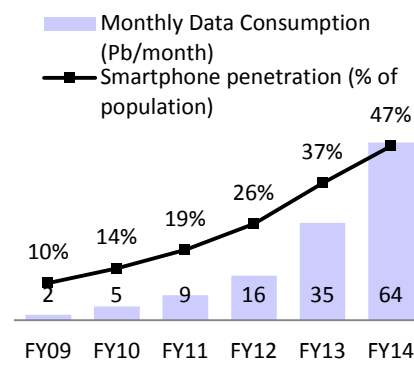
Exhibit 91: India: Digital ad spends to grow at 33% CAGR over CY15-20ESource: www.eMarketer.com**Exhibit 92: India Mobile ad spends to grow at over 11x over CY15-20E**Source: www.eMarketer.com**Exhibit 93: Within the digital ad spends, Video ad spends ballooning**

	FY12	FY13	FY14	FY15
Search	34%	38%	30%	29%
Social Media	10%	13%	18%	18%
Display	41%	29%	23%	17%
Video	5%	7%	12%	17%
Mobile	7%	10%	14%	16%
Email	3%	3%	3%	3%

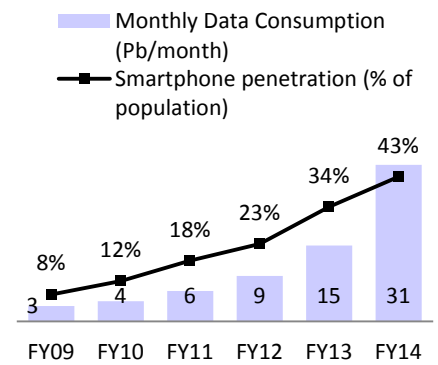
Source: www.eMarketer.com

Exhibit 94: China: Data consumption more than doubles post FY12

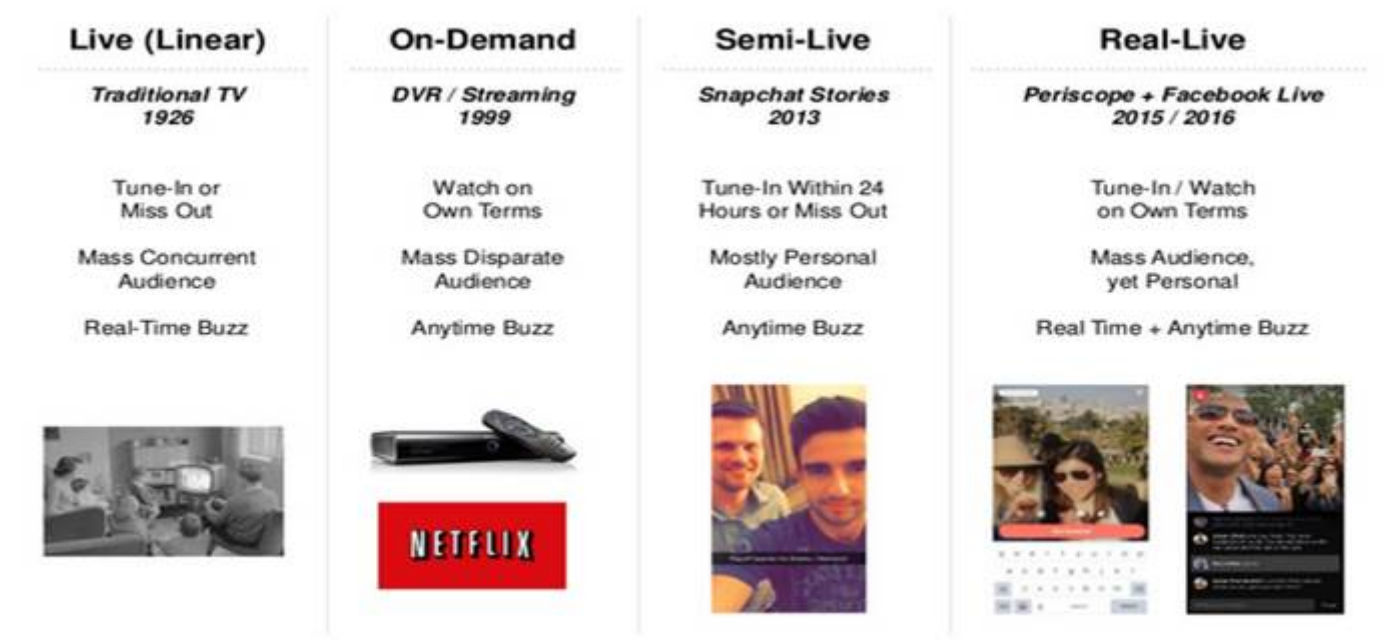
Source: Deloitte

Exhibit 95: Brazil: Data consumption more than doubles post FY12

Source: Deloitte

Exhibit 96: South Africa: Data consumption more than doubles post FY13

Source: Deloitte

Exhibit 97: Video consumption to increasingly shift from appointment-based viewing to on-demand viewing

Source: MOSL

E-commerce: Demonetization boost; proliferation of digital payment augurs well

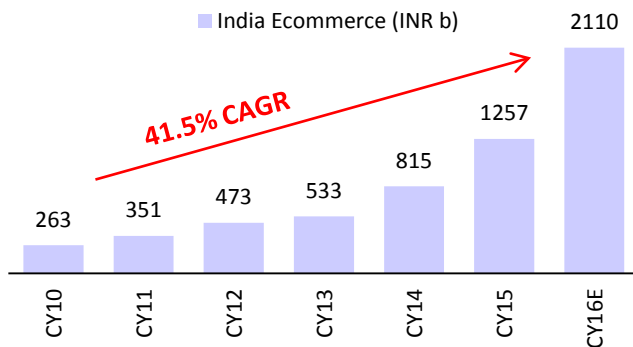
E-commerce has gained rapid strides in India in the last four years. Rising penetration of smartphones, convenience of shopping from the comfort of home (or office), explosion of choices for customers, non-stop customer offers/lower prices and aggressive investments by incumbent players have led to strong growth in the e-commerce industry. Government's de-monetization initiative will also herald a new phase with greater encouragement and incentives for digital payments. E-commerce industry is an obvious beneficiary of the thrust towards greater digital payments, in our view.

Cash on Delivery had its logic in Nascent industry...

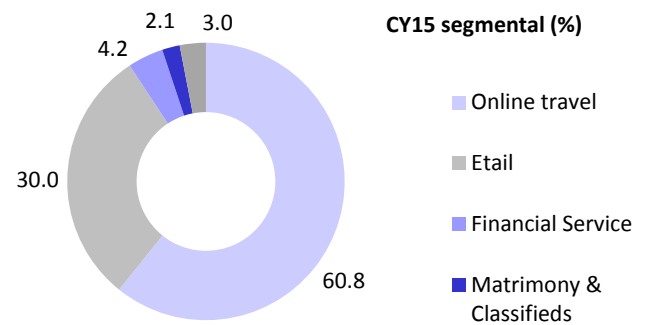
Demonetization has adversely affected the CoD business for the industry which drove ~70% of the transactions. The main factor behind opting for CoD was paying once the order is delivered, given the risk of returns in cases of damaged goods, counterfeits and prolonged delivery timelines. However, E-commerce companies such as Amazon and Snapdeal among others have introduced alternatives. Snapdeal launched 'wallet on delivery' through FreeCharge last month. Amazon halted its CoD for a couple of days following demonetization. It resumed the service two days later while also training its agents to help customers who opt for card payments at the time of delivery. Electronic payments at doorstep went up by a factor of 10x in the span of two days – a clear indication that customers are able to adapt to electronic payment methods, by assisting people shift to making payments electronically online. While an impediment in the short term, this will likely be a blessing in disguise in the long run for the industry, for which CoD was a necessary evil considering the cash-driven economy. Digital payments is way more efficient for the companies.

... But now even tier-II and tier-II may well realign

While cash indeed is the lifeblood of the ecosystem as we move down the tiers, and impact on businesses in these segments may be higher, the move by the Central government will hasten the process of financial inclusion in the markets outside of metros. At Shopclues (more dependent on lower tier cities), CoD business dropped 30% post demonetization, while prepaid orders went up by 15-20%.

Exhibit 98: Indian Ecommerce market has grown 42 CAGR in last six years

Source: IAMAI, MOSL

Exhibit 99: Online travel and Etail account for lion's share of the market

Source: IAMAI, MOSL

Short term pain for long term gain

While it boosts sales of online companies, it obstructs their cash flows and makes it difficult to scale operations. There are several additional costs involved with this payment method and the risk of returns and thefts with this form of payment are higher. This should help e-commerce companies to reduce overhead costs and other risks associated with the COD model. The challenge over the near-to-medium term is that only a small percentage (12%) of the population owns Credit or Debit cards.

The boost in combination with GST

Tax laws in India have failed the e-commerce sector by not providing enough clarity / guidelines on taxation for typical e-commerce sector transactions like e-wallet, cash-on-delivery, gift vouchers, drop-shipment (direct delivery of goods from the e-commerce company vendor to the customer) etc. Clarity for E-commerce industry continued to remain elusive for charging either VAT/CST or Service tax, depending on categorizing their offerings into goods or services. Both VAT and service tax authorities exercise right over such digital transactions leading to disputes and never-ending litigations. GST could hold the key to unlock the issues faced by the e-commerce sector. Combine the efficiency of digital payments with the benefits from GST for the sector, the nascent industry may be shifting gears from small steps from big leaps.

Value migration due to lifestyle changes

Change in consumption habits driving value migration

When consumers' disposable income rises in emerging economies, the propensity to spend it on discretionary goods goes up. Lifestyle changes which follow the emerging income patterns create natural winners in various industries. Rising incomes, coupled with changing aspirations, have fuelled an uptick in consumption across discretionary and non-discretionary segments. This is driving value migration in consumer-oriented industries like Airlines, Apparels, Healthcare and Movie Exhibition. We discuss some of the potential winners in details in this section.

Inter-industry value migration in Transport industry

Inter-industry value migration, while rare, is typically initiated by factors like cost, technology, and convenience. In India, the Transport industry has seen value migration from Railways to Airlines and from Roads to Railways. Within the Airlines industry, value has migrated from full-service carriers to low cost carriers.



Case-VIII: Value migration from Railways to Airlines

Industry: Transportation | **Driver of VM:** Cost, Convenience | **Beneficiaries:** Indigo
Value Migration: Rail to Air

Railways, given the lack of options had a monopoly in the long-distance domestic travel in India despite issues of seat availability and travel time. The situation started to change after India's economic liberalization in 1991 which also subsequently opened the Aviation sector for private players. Within no time, the availability and increasing affordability of air travel led to incremental passenger shift from rail to air. This was further accelerated by the entry of no-frills low cost carriers (LCC's). Thus the combination of "need + availability + affordability" is playing an important role in rail to air value migration.

Shift from rail to air travel led by convenience and economics

- In India, rail used to be the preferred mode of transport for long distance travel due to economics, comfort and non-availability of the air travel option.
- Air travel has emerged as an option in the last decade, with the emergence of private airlines, which offer significant comfort/time advantage over rail.
- Increase in disposable incomes, living standards and value of time have raised demand for air travel for both business and tourism in India.
- Shift from rail travel to air travel is being driven by (a) capacity constraints of Indian Railways (tickets need to be booked 2-3 months in advance), and (b) comparable fares. Air travel costs have remained nearly stable due to competition and are now falling due to lower ATF prices.
- While economics will be the key driving factor for air travel, other factors like increased business travel, increasing disposable income, higher share of earning population (time-pressed) will continue to drive this shift, in our view.

Indigo best placed to capitalize on this trend

- InterGlobe Aviation, operating the *IndiGo* brand, is the market leader by a distance in domestic aviation with 40% share and still gaining. It is set to comfortably ride the domestic passenger CAGR of 12% over the next decade, potentially making India the 3rd largest aviation market in the world.
- *IndiGo* is the only airline in India to be profitable for the last eight years and we believe this sustainable advantage is due to its unique fleet strategy, which significantly reduces its aircraft ownership cost and makes it the lowest-cost operator.

Exhibit 100: Indigo's positioning vis-à-vis competition

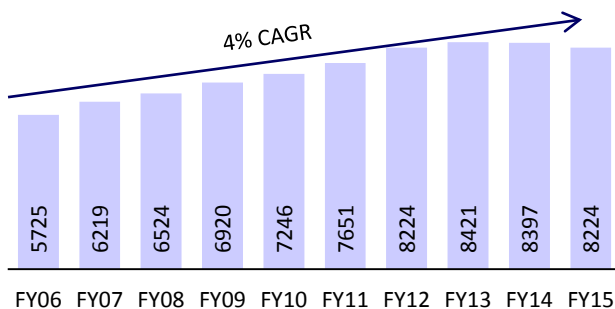


Exhibit 101: Price based discounting to protect share



Exhibit 102: Passengers carried by Indian railways have been growing at 4% CAGR since FY06

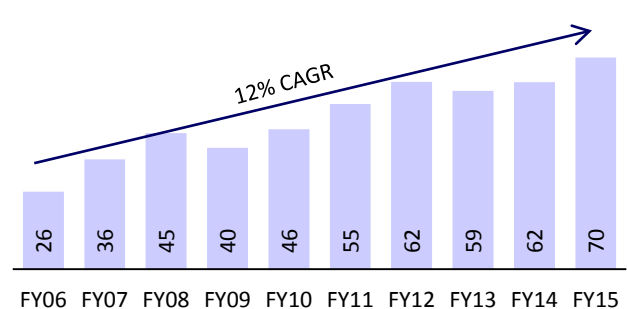
Passenger carried by railways (million)



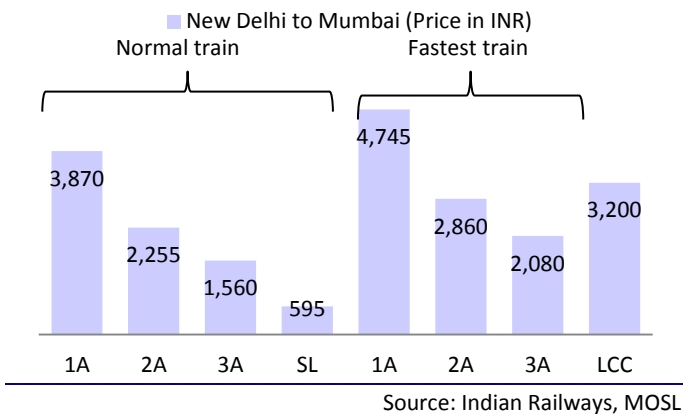
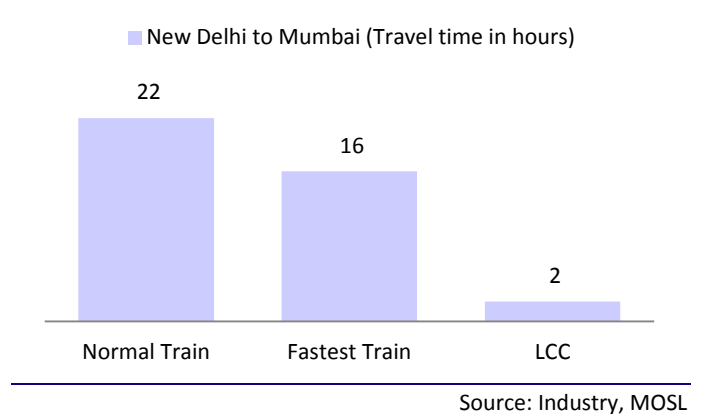
Source: Indian Railways, MOSL

Exhibit 103: Domestic air passengers have grown at 12% CAGR since FY06

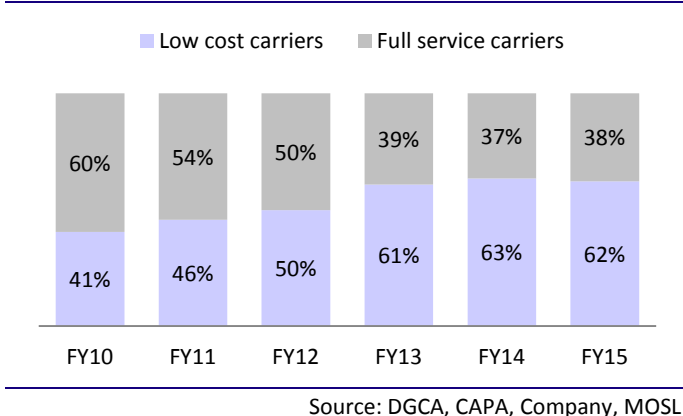
Passenger carried by airways (million)



Source: DGCA, MOSL

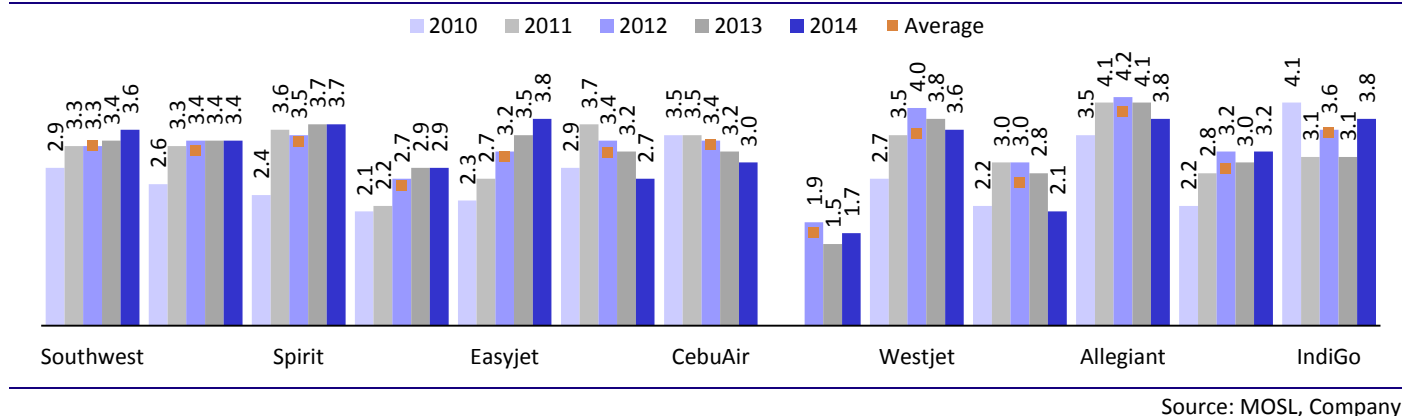
Exhibit 104: LCCs ticket prices comparable to train tickets**Exhibit 105: Air travel saves significant time****Shift from full service carriers to low cost carriers**

- Due to lower fares, within airlines, market share began shifting towards low cost carriers. This shift was more evident in developing economies, where passengers are more price-sensitive. Difference in market shares between the developing South-East Asian countries and the developed North-East Asian countries (Japan, Korea, etc.) highlights this trend.

Exhibit 106: In line with the global trend, value is migrating to LCCs even in India**Exhibit 107: IndiGo the only domestic airline profitable for last 7 years**

	FY09	FY10	FY11	FY12	FY13	FY14	FY15
IndiGo	Yes	Yes	Yes	Yes	Yes	Yes	Yes
SpiceJet	No	Yes	Yes	No	No	No	No
Jet Airways	No	No	No	No	No	No	No
GoAir	No	No	Yes	No	Yes	Yes	Yes
Air India	No	No	No	No	No	No	No
Kingfisher	No	No	No	No	Ceased Operations		

Source: Company, MOSL

Exhibit 108: Comparing RASK less CASK (ex-fuel) – IndiGo has superior profitability track record even versus global LCCs (USc)

Upheaval in US airline industry; migration towards low cost carriers

In the 18 years to 1978, when the US Airline industry was regulated, the operating revenue of 11 national carriers had grown from <USD10b to USD30b. However, profits did not grow commensurately.

On intra-state routes, several small airlines (Southwest, etc.) operated a low cost business model and passed the savings to consumers. Prices were low enough to compete with other modes of transport (trains, buses). Leisure and price-sensitive corporate travellers preferred these local airlines.

As the airline deregulation took place in 1978, competitive intensity shot up. Players fought for attractive routes. Larger players that operated via hub-and-spoke business design and used big planes achieved some cost savings, but still had a high cost structure overall.

On the other hand, smaller players that had lower cost structures and competed on price had flexibility. Southwest Airlines was the leader among low cost carriers. It benefitted from its formula of 'low fares no frills' approach. It was one of the few profitable carriers in the US. This business model satisfied the customer priority.

For national carriers, the route competition had intensified and it led to some carriers giving up services between several city pairs. Price wars began when new players entered the transcontinental market, leading to losses. When jet fuel prices doubled in 1979-80, major airlines fell into financial troubles.

A new airline emerged to take on Southwest and beat it at its own game. However, it succumbed. The airline, People Express, drove fares lower and concentrated on vacationers and price-sensitive travelers. Cost structure was thriftier than Southwest. However, People Express started floundering after initial success (it had revenue of USD1b by 1985). It expanded rapidly, resulting in chaos (inefficient traffic handling, delayed flights, crowded terminals). It even expanded into the strong markets of national carriers like United and American. They reacted by undercutting People Express. To further compound problems, People Express bought expensive Boeing planes. Eventually, faced with higher debt, it merged with Texas Air.

Major airlines nonetheless continued its business design, investing in new routes. This resulted in similar actions by various players and added debt to the balance sheets. Demand was not sufficient to justify investment in new planes. Higher fixed costs drove major carriers towards price competition. All of this resulted in operating margins of major carriers correcting drastically from ~6% in 1978 to -2.5% in 1990. As profitability pressure increased, several steps followed – acquisitions, bankruptcy, differentiated initiatives like frequent flyer programs.

However, the troubles of major airlines were aiding the growth of Southwest, which stuck to its business model. It maintained its low cost business model and expanded judiciously. It targeted markets where competition from major carriers would not hurt profitability and built leadership positions in those markets. Several major carriers later tried to mimic Southwest's business model.



Case-VIII: Value Migration in the Indian Apparel industry

Industry: Apparel | **Driver of VM:** From Unbranded to branded | **Play on VM:** Positive for Arvind, Page Industries and Aditya Birla Fashion and Retail Limited

1. What's the potential value migration?

- India's apparel market (which contributes 5.5% of India's GDP) stood at USD41b in 2013 which is expected to grow to USD64b by 2018 and USD102b by 2023 implying a CAGR of 9% over 2013-23. The growth will be driven by increase in both per capita consumption as well as the average spends on apparel.
- The growing reach beyond the major urban centers and the development of alternative retail channels like e-commerce and omni concept will continue to drive the growth of the branded apparel category.

2. What phase of value migration are we currently?

- The Indian apparel retail landscape is currently at an evolutionary phase, with radical changes occurring in apparel retailing and distribution. Apparel constitutes 28% of organized retail market which is expected to grow at 18% CAGR over next 5 years which implies higher pace of growth for branded apparel market compared to overall apparel market CAGR of 9%.
- Currently, menswear is the biggest segment within the apparel market; however, kidswear and womenswear are growing more rapidly. It is estimated that, within another decade, the womenswear category will catch up with menswear, in terms of size. The share of Menswear is expected to decline from 42% in 2013 to 39% in 2023 while share of Womenswear and Childrenswear increase from 38% to 39% and 20% to 22% respectively from 2013 to 2023.
- The innerwear segment is only 8.1% of the apparel industry but is the fastest growing segment at ~11 CAGR in the past 15 years and is expected to grow 13% CAGR between 2013-2023. 48% of the segment is still unorganized while even within the organized innerwear segment only 20% is the premium and fashion segment.

3. What will be the catalyst for driving this value migration?

- With the disruptive growth of direct selling, home shopping, and e-tailing channels, the fashion and lifestyle segment is witnessing a shift away from traditional channels towards alternative retailing avenues which is also leading to a shift from unbranded to branded. Additionally, acceptance of Private Labels is growing rapidly owing to their affordable prices and reasonable quality.
- The rapid penetration of Internet-supporting devices is contributing immensely to the growth of alternative retail.
- These catalysts boost growth that is already being driven by rising incomes, favourable demographics, higher urbanization and greater awareness of fashion through media and distribution expansion by the top fashion brands.

4. What if this value migration plays out?

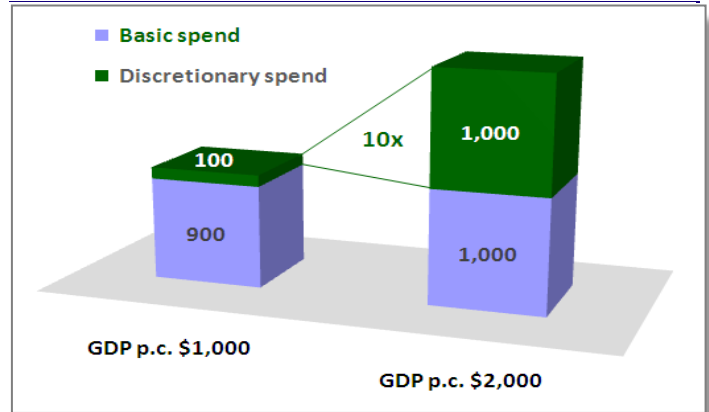
- Arvind, Page Industries and ABFRL with dominant brand franchises will be the big beneficiaries.

Exhibit 109: Rapid penetration of internet enabled device

Users internet enabling device	2013	2023E
PC/Laptop Users	57	226
Mobile phone users	402	675
Smartphone users	54	607
Tablet users	5	82

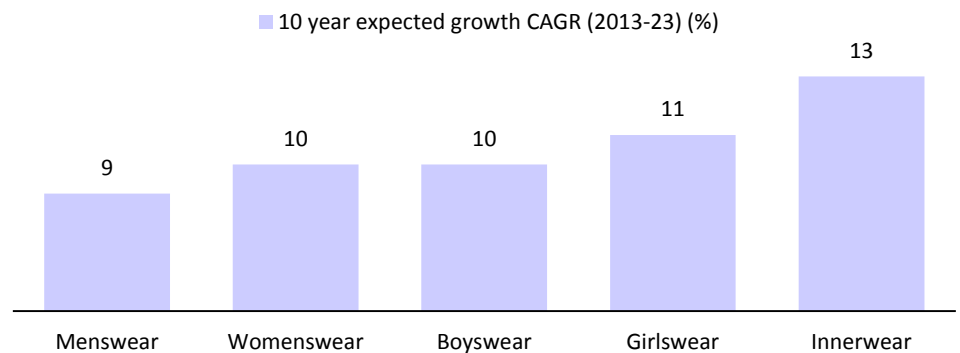
Source: Company, MOSL

Exhibit 110: Discretionary spends to drive growth



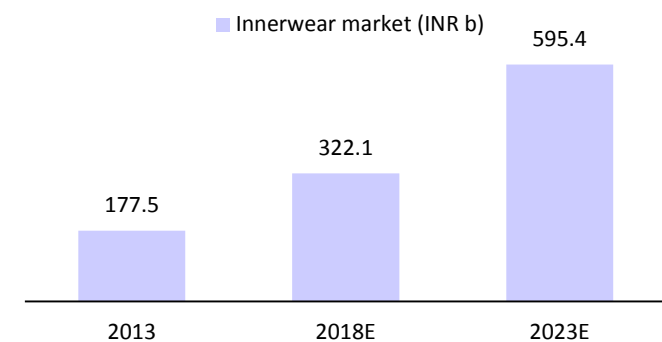
Source: Company, MOSL

Exhibit 111: Healthy growth rates expected in various sub-segments of Apparel category



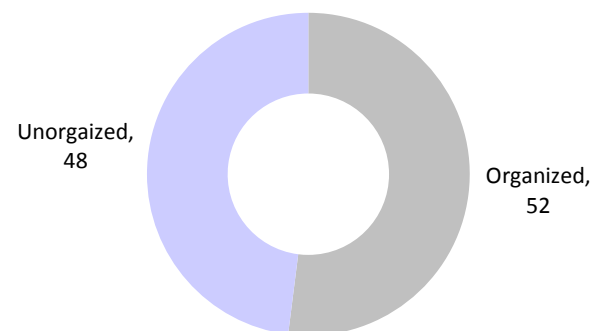
Source: Company, MOSL

Exhibit 112: Branded innerwear is likely to show rapid growth



Source: Company, MOSL

Exhibit 113: ...as half of the market is still unorganized



Source: Company, MOSL



Value Migration in Indian Diagnostic Services

Industry: Diagnostic Services | Driver of VM: Lifestyle changes | Play on VM: Dr. Lal Pathlabs, SRL

1. What's the potential value migration?

- Based on industry estimates, India's diagnostics market was valued at USD6b in FY2015. It is expected to exhibit a 15% CAGR over next five years to reach USD12b by FY2020, despite unavailability of certain high-end tests in India.
- The diagnostic landscape in India is highly fragmented with Institutional diagnostic chains having market share of only 6-7% of total market (Dr Lal, SRL, metropolis, etc.).
- Share of institutional chain network will continue to improve in the Indian diagnostic market which was historically dominated by standalone and hospital based centers.
- According to Crisil, institutional diagnostic chains is set to deliver revenue growth of ~19% CAGR between FY15-18E (vs industry growth of ~15%) on the back of technological advancement, robust balance sheet and increase in evidence based treatment.

2. What phase of value migration are we currently?

- Institutional diagnostic chains have outpaced local diagnostic service providers on the back of better brand recognition, rich test mix, and improving affordability/ awareness.
- Having said that, local and regional players still account for more than 90% of total market. This is primarily because of weak regulatory environment.
- Though we have witnessed, multiple steps taken by the Government in the Pharma segment over the last 5 years, diagnostic services have not come under regulatory gamut yet. We believe regulations regarding quality assurance/ control (whenever it comes) will provide a critical advantage to the institutional players against local service providers.

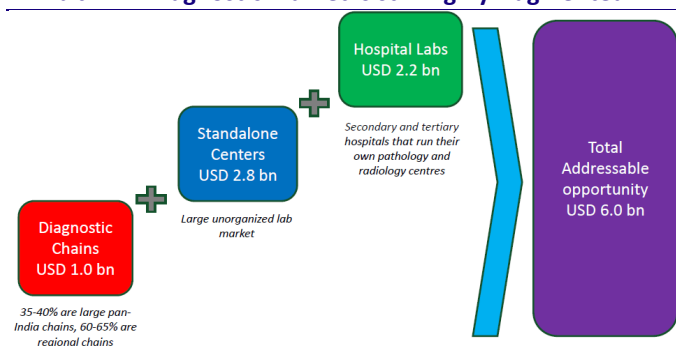
3. What will be the catalyst for driving this value migration?

- Factors such as an underpenetrated Indian healthcare market, rising income levels and increasing health awareness among consumers provide existing players with ample opportunities of growth.
- Rising proportion of geriatric population (60+ years), increasing incidence of lifestyle-related diseases, growth in medical tourism and increasing penetration of health insurance in the country also significantly boost demand for diagnostic services.
- The overall market for wellness and preventive diagnostics was estimated at 6%-8% of the total diagnostic services market in 2014-2015. The preventive healthcare market is poised to grow faster than the diagnostic industry owing to increased health insurance coverage. As per CRISIL estimates, this segment is expected to grow to INR48b in FY18 from INR26.4b in FY15, implying CAGR of 23%-25%.

4. What if this value migration plays out? Who wins and who losses?

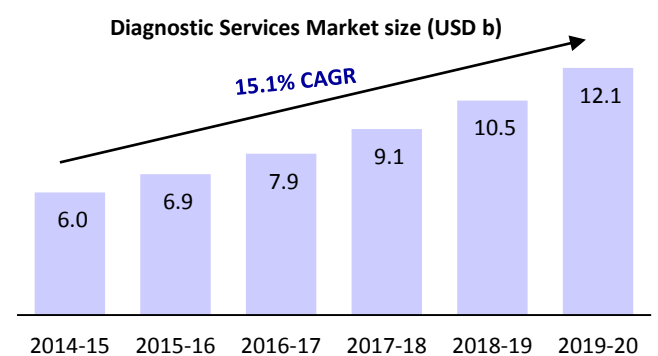
- Share of institutional chain network (which currently stands at just 6% of total market) will continue to improve in the Indian diagnostic market which was historically dominated by standalone and hospital based centers.
- According to Crisil, institutional diagnostic chains is set to deliver revenue growth of ~19% CAGR between FY15-18E (vs industry growth of ~15%) on the back of technological advancement, robust balance sheet and increase in evidence based treatment.
- We believe large institutional players like Dr Lal and SRL are poised to capitalize on strong inherent demand and shift from unorganized to institutional segment.

Exhibit 114: Diagnostic market is still highly fragmented



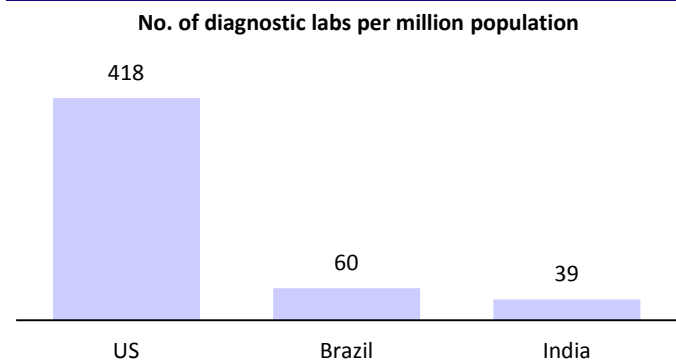
Source: AIOCD, MOSL

Exhibit 115: Diagnostic services industry to grow at 15% CAGR over FY15-20E



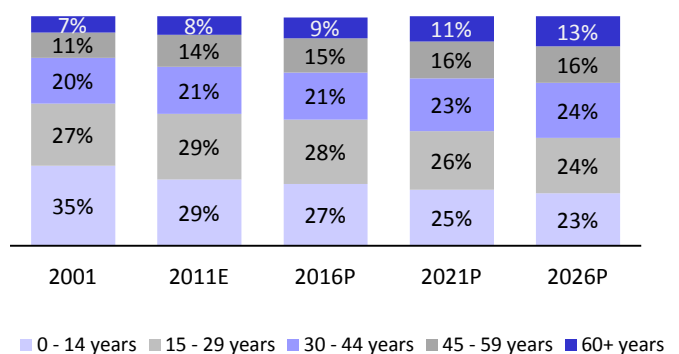
Source: AIOCD, MOSL

Exhibit 116: Diagnostic presence relatively under penetrated



Source: AIOCD, MOSL

Exhibit 117: Geriatric population increasing at faster rate than rest of the population



Source: AIOCD, MOSL



Case-VII: Value migration from single screen to multiplex

Industry: Movie Exhibition | **Driver of VM:** Unorganized to Organized | **Play on VM:** PVR

The movie exhibition industry has seen a shift in trend from single-screen theatres to multiplexes. Despite multiplexes forming just ~21% of total screens in India, their share in net box office collections value-wise stands at 70%. There are close to 1,800 multiplex screens. On an industry level, ~100-150 screens are added in multiplexes annually, which is one-third of the pace at which single screens are closing down. On the other hand, the number of single screens has declined to 7,600 from 9,000 around five years back. With near saturation in several metropolitan and tier-I markets, the focus is now shifting to the next 40 cities, which are experiencing rapid urbanization and greater economic growth.

Industry offers large untapped opportunity

India's screen density (screens per million population), per capita frequency and per capita spend on movies are way below the global average, indicating ample headroom for growth. Screen penetration in India stands at 8 per million, versus 31 per million in China and 125 per million in the US. The biggest Bollywood release of 2015, *Bajrangi Bhaijaan* (which saw domestic collection of more than INR3b), was viewed across 4,200 screens by merely 2% of the total Indian population. Multiplexes are likely to be the key beneficiary of this potential, as unviable cost dynamics and unfavorable tax regime have forced many single-screen theatres to shut down or convert to multi-screen properties.

Single screens facing challenging times

Single screens are facing challenging times. The number of single screens reduced from ~8,700 in 2010 to ~7,700 in 2014, with multiplex screens doubling from ~888 to ~1,700 during the same period. Multiplexes have key advantages over single screens with respect to better infrastructure and overall movie going experience, namely (a) picture quality, (b) surround sound systems, (c) air conditioning, (d) parking spaces, (e) quality of food and beverages and (f) online ticketing to enhance consumer convenience and curb black marketing.

Exhibit 118: Mix between single-screen and multiplexes

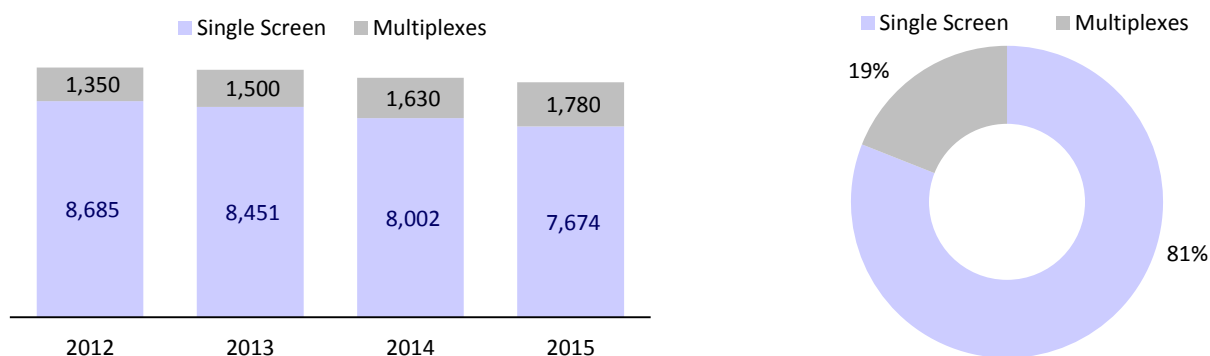
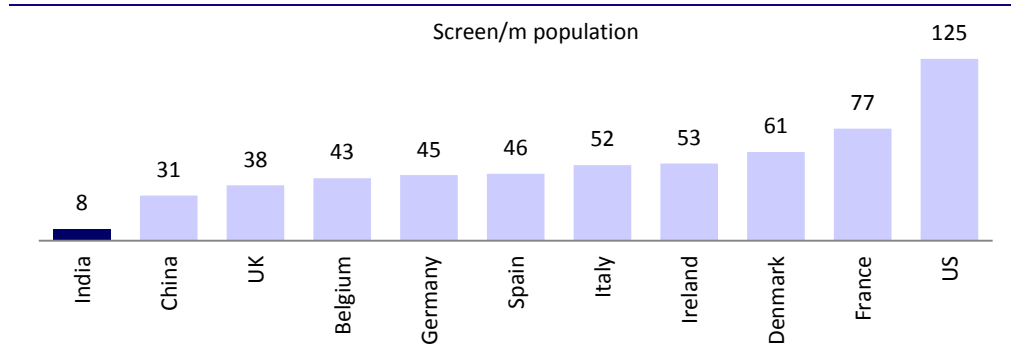
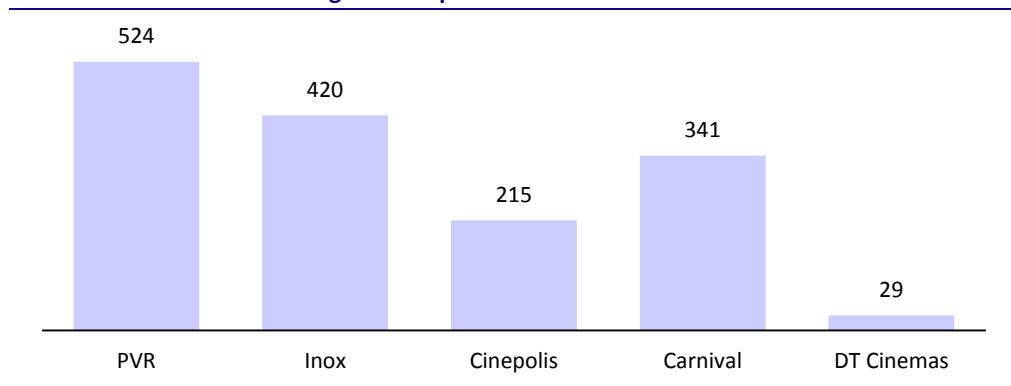


Exhibit 119: Screen penetration in India is a fraction of even developing countries

- Location of the screen/multiplex plays an important role in determining footfalls, ATPs and SPHs, given that there is no content differentiation across peers. PVR being the pioneer and largest player in the business is benefiting from its premium positioning. Given heavy capex requirements (INR20-25m/screen), the industry is largely consolidated in nature with top four players controlling 70% of total multiplex screens. The top players are thus aggressively adding screens and looking for inorganic growth opportunities.
- PVR has guided for screen additions of 50-60 annually, and also plans to reach 1,000 screens in the next few years. Growth in same screens is expected to be led by ATP and SPH, as the occupancy rate generally peaks out at 33-35%.

Exhibit 120: PVR is India's largest multiplex chain

Reverse Value Migration in Logistics industry

- Reverse value migration is driven by changes implemented by losers of the value migration trend. When those changes satisfy customer priorities again and make economic sense, value migrates back to where it belonged initially.
- In the earlier sections, we discussed reverse value migration prevalent in the two-wheeler industry (from motorcycles to scooters). We notice a similar VM that is underway in freight transportation.



Case-X: Rail to Road; expected to reverse from road to rail

Industry: LOGISTICS | **Driver of VM:** Dedicated Freight Corridor | **Play on VM:** Concor; GDPL

1. What was the value migration?

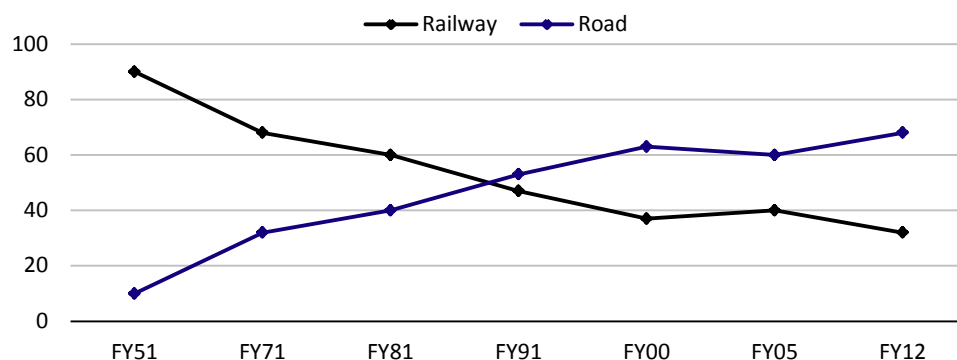
- Rail to road: Share of rail in freight transportation has declined from ~70% in 1970s, 60% in 1980s to ~30% now.
- Despite being an efficient mode of transport, rail lost freight transportation market share to roads, led by (a) high railway freight (due to cross-subsidization of passenger tickets); (b) unreliable schedule of freight trains (passenger train get first right of railway use); and (c) poor last-mile connectivity (lack of coordination in infrastructure development).
- This has added to India's logistics cost share in GDP at 14%, versus international benchmark of 8-10%.

2. What will change now?

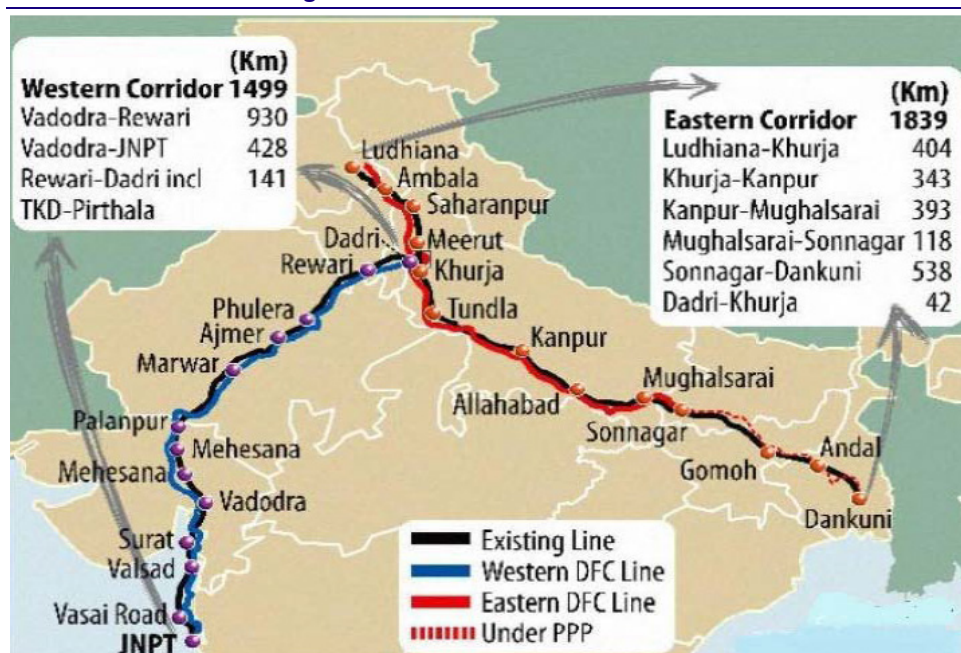
- Indian government has recognized the burden of road transport on the economy and initiated construction of dedicated rail freight corridor.
- While the plan is to have a quadrilateral dedicated freight corridor connecting four corners of India, currently it is building two corridors - connecting Delhi to Mumbai in West India and Kolkata in East India.
- Dedicated freight corridor promises to be a 'game changer' for improving competitiveness of Indian manufacturing. DFC plans to run freight trains in India on time tables. Travel time for goods transportation between Mumbai and Delhi would decline from 60 hours currently to just 18 hours.
- These rail freight corridors are expected to complete by 2019 and, with the right haulage charge, will help to partially bring freight traffic back from road to rail.

3. What if this value migration plays out? Who wins and who loses?

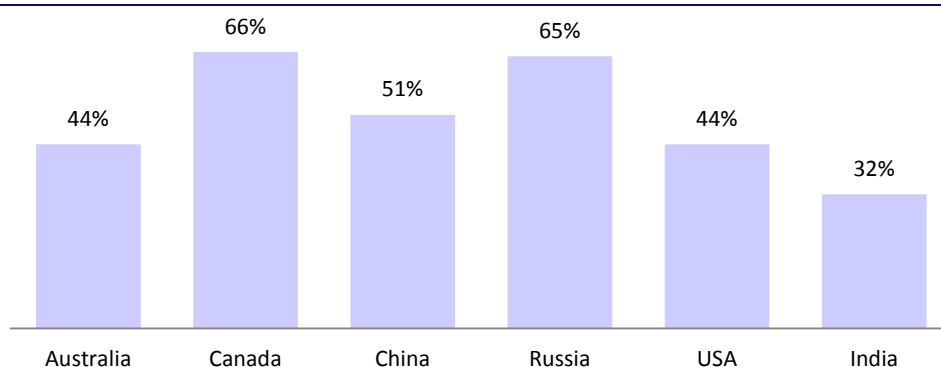
- Direct beneficiaries of this value migration from road to rail will be container train operators (CTO) – Container Corporation (CCRI IN) and Gateway Distriparks (GDPL IN), which have 75% and ~10% market share, respectively.
- CTOs would benefit from higher asset utilization, cost savings and time savings, leading to higher volumes and profitability.

Exhibit 121: Rail has lost significant market share to road in last few decades

Source: NTDP

Exhibit 122: Dedicated freight corridors will connect Delhi to Mumbai and Kolkata

Source: DFCCIL

Exhibit 123: Share of rail in freight transport significantly lags other countries

Source: World Bank; NTPDC; EXIM Bank; 2012



Case-XI: Value Migration: From Steel to Aluminum

Industry: Aluminum | **Driver of VM:** Substitution of Steel | **Play on VM:** Hindalco

What is the potential value migration?

Aluminum is increasingly becoming a metal of choice for automakers. By using aluminum – which has a superior weight-to-strength ratio – as a substitute for steel, weight of a vehicle can be reduced by as much as 50%, which in turn helps lower fuel consumption and CO2 emission.

According to Duckers, the use of aluminum in vehicles will increase from ~175kg in 2015 to more than 225kg by 2025. This implies that aluminum demand from autos will more than triple from ~11mt in 2015 to ~35mt by 2025. Aluminum is now also the preferred metal in sheet work. Demand for auto grade rolled products is estimated to increase exponentially from ~1-1.5mt currently to ~8mt by 2025.

What phase of value migration are we in currently?

Aluminum is the youngest metal whose use started only ~100 years ago. Auto manufacturers started using this metal in heat exchangers in 1980s, and then in wheels and engines in 1990s. Aluminum was largely used in cast parts until recently, and we note that the substitution of steel by aluminum in body sheet work began in 2010. Novelis began the development work many years before that with the introduction of technologies like fusion. Fords' F-150, Jaguar and Land Rover are the early adopters, thus marking the beginning of a new wave of substitution.

What will be the catalyst for driving this value migration?

Regulations in the US (such as Corporate Average Fuel Economy, or CAFE) and Europe on reducing CO2 emission are driving automakers' relentless focus on improving fuel efficiency in vehicles. CAFE requires fuel efficiency to increase from 27.5mpg in 2010 to 54.5mpg by 2025, ~5% improvement annually.

Aluminum has advantage v/s steel as it (a) has superior weight-to-strength ratio, (b) has better handling and metallurgy, (c) is safer as it can absorb more energy and (d) has better corrosion resistance and surface quality. Therefore, we believe the substitution will also spread to midsize and smaller vehicles.

What if this value migration plays out? Who wins and who loses?

Hindalco is the biggest beneficiary, in our view. Hindalco's subsidiary Novelis has been leading the steel sheet substitution in close association with auto makers in the US and Europe. The share of high-margin auto grade sheets in its product mix has increased from low-single-digits few years ago to 16% in FY16. The share is likely to increase further to 25% over the coming few years to meet exponential growth in demand for which capacity has already been created.

Hindalco's primary smelting business too has become highly cost competitive. Cost of production has moved into first quartile of the global cost curve. Hindalco has now turned free cash flow positive after a hiatus of 10 years, which will drive de-leveraging and equity value. Free cash flow to market cap yield is very attractive.

Exhibit 124: Aluminum use in automobiles

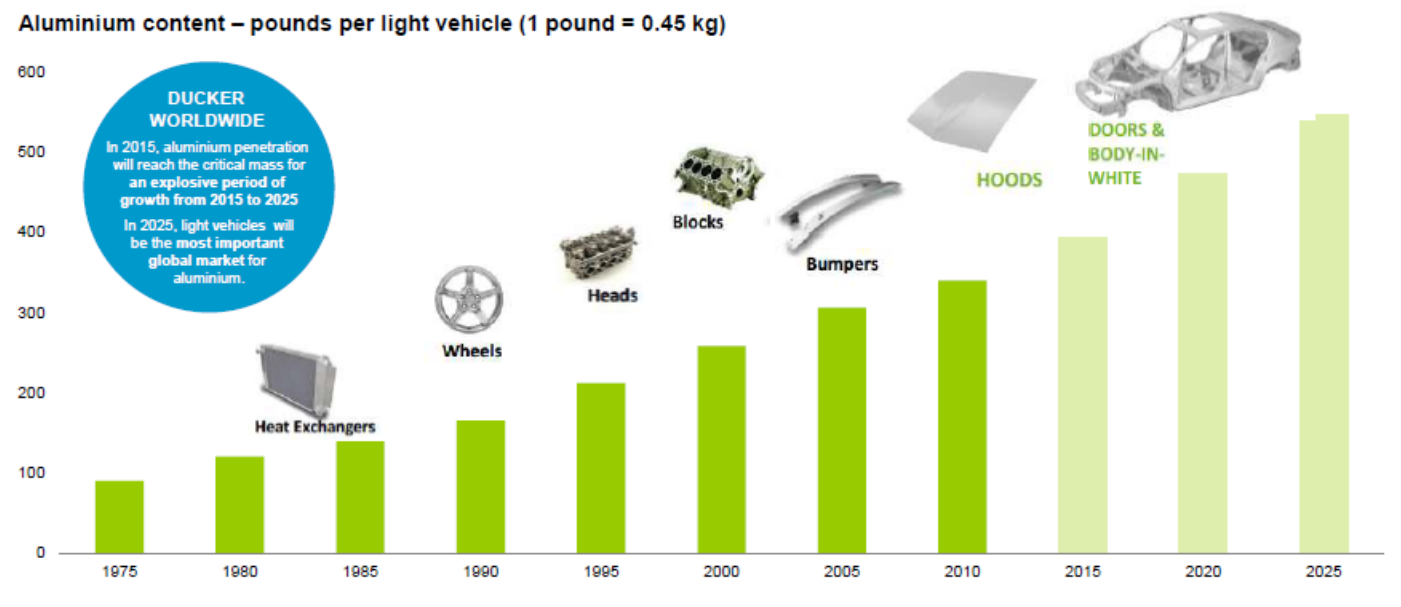


Exhibit 125: Global aluminum auto use

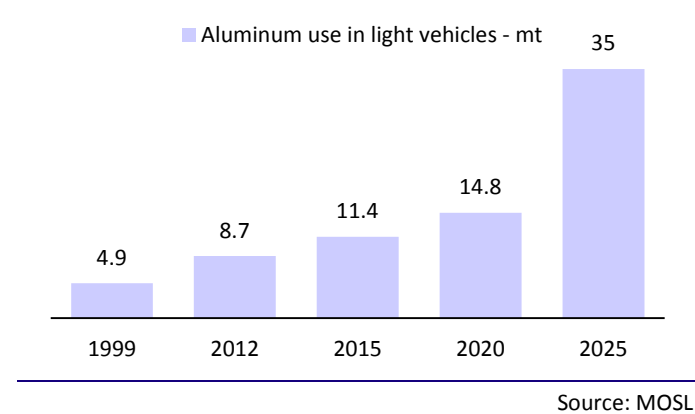


Exhibit 126: Rolled aluminum product auto use

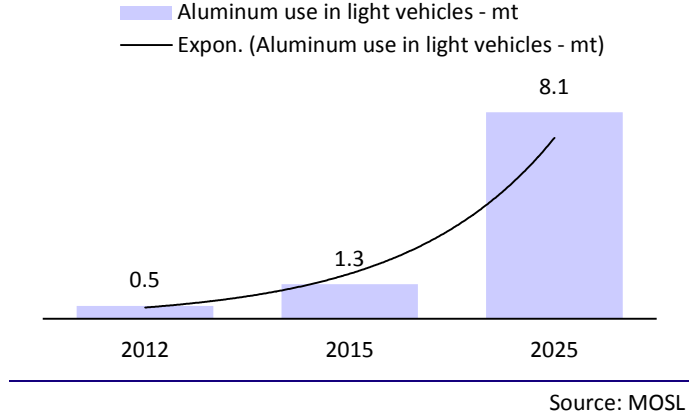


Exhibit 127: Rolled products' use in light vehicles to grow exponentially

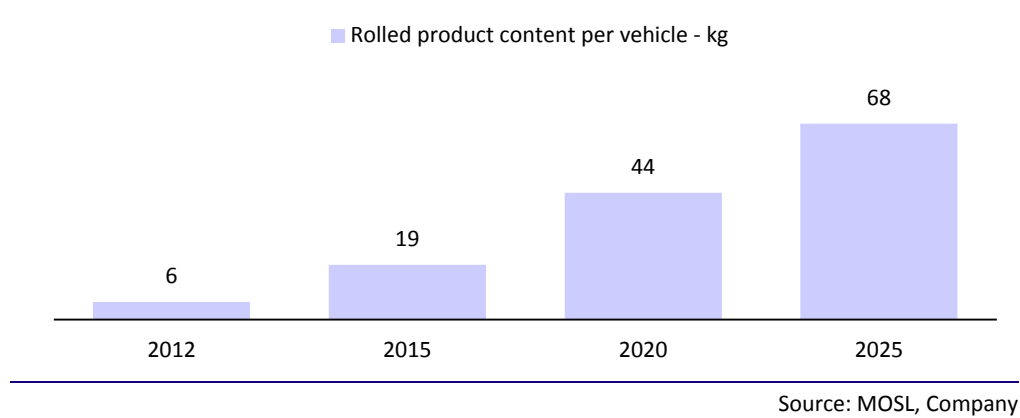
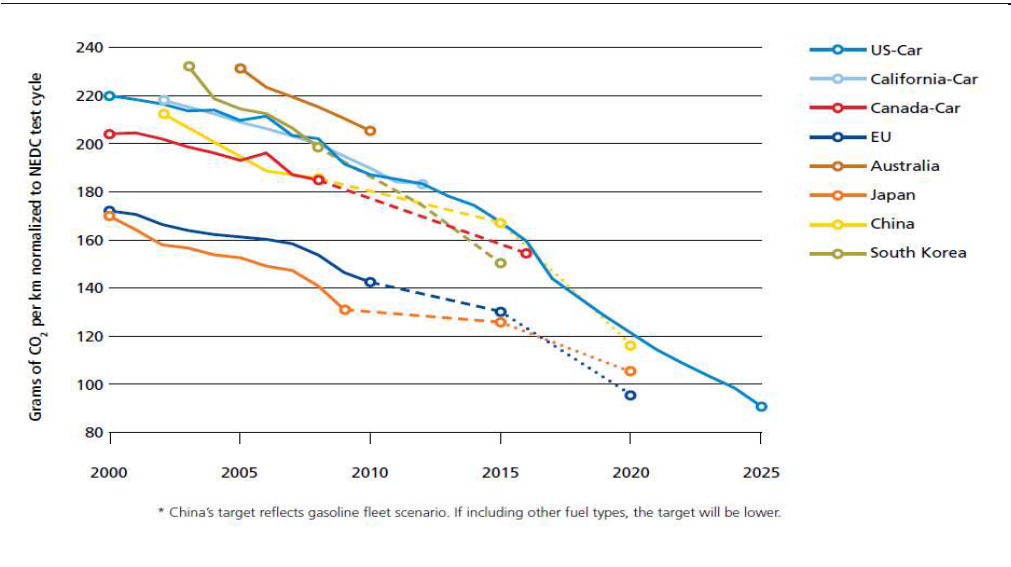


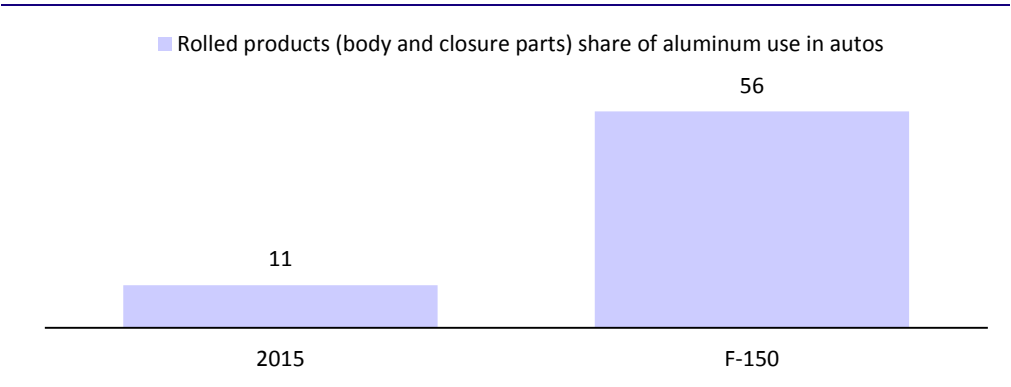
Exhibit 128: Regulations are driving automakers’ relentless focus on improving fuel efficiency



Source: MOSL, Hydro

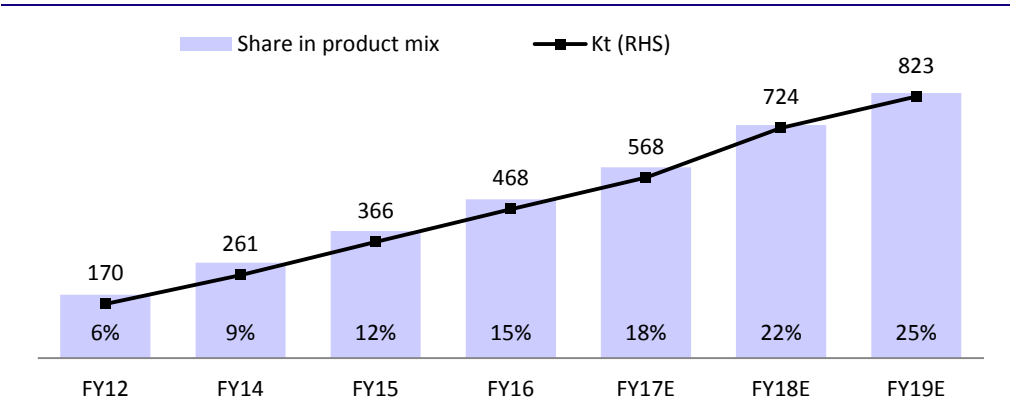
Body and closure parts represented ~11% of aluminum used in autos in US, as against more than 50% share in case of all-aluminum F-150 truck.

Exhibit 129: Rolled products share of aluminum components used in autos in US



Source: MOSL, Company

Exhibit 130: Auto product share in product mix for Novelis

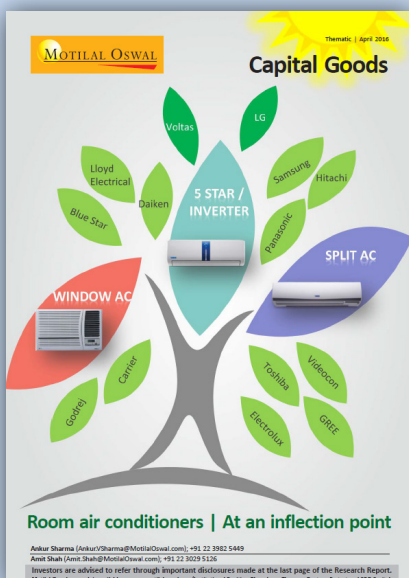
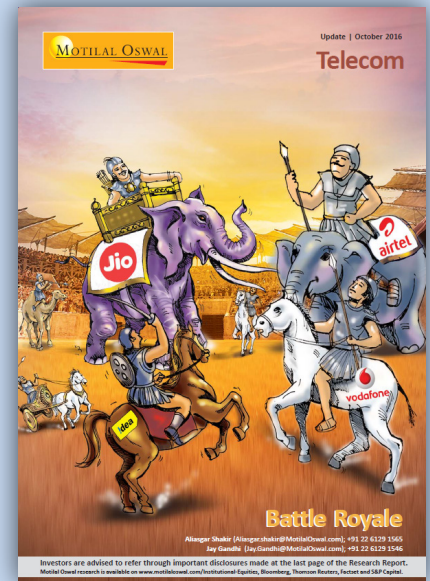
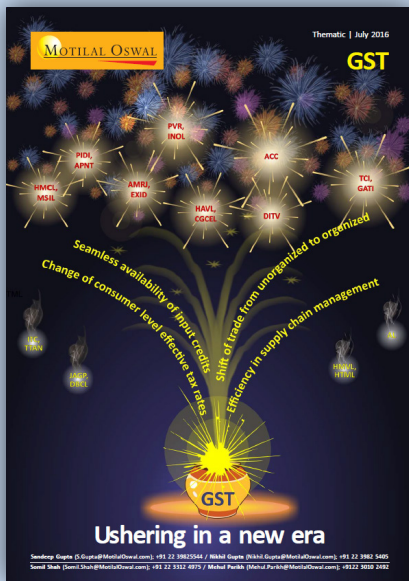
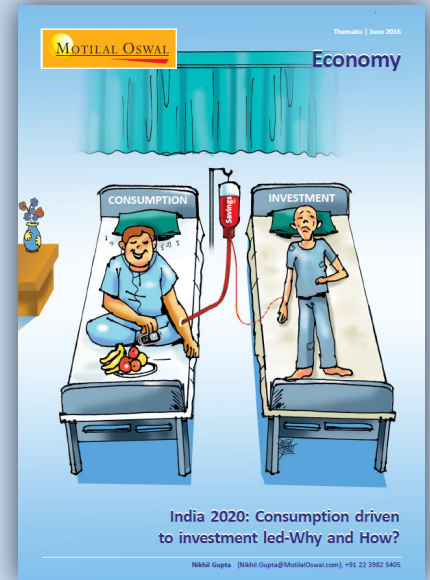


Source: MOSL, Company

Abbreviations used in the report

PBs: Private Sector Banks
PSBs: Public sector banks
SFB: Small Finance Banks
HFC: Housing Finance Companies
BFSI: Banking, Financial Sector and Insurance
IOPs: India-origin providers
RPO: renewable purchase obligation
RGO: renewable generation obligation
CERC: Central electricity regulatory commission
SERC: State electricity regulatory commission
BTG: Boiler Turbine Generator
FMCG: Fast moving consumer goods
PSU: Public Sector Undertaking
RBI: Reserve Bank of India
NHB: National Housing Board
3PL: Third Party Logistics
VoLTE: Voice over Long-Term Evolution
VoIP: Voice over Internet Protocol
CoD: Cash on Delivery
LCC: low coast carriers
DFC: Dedicated Freight Corridor
CTO: container train operators

THEMATIC/STRATEGY RESEARCH GALLERY



NOTES

NOTES

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SEBI pursuant to a complaint from client Shri C.R. Mohanraj alleging unauthorized trading, issued a letter dated 29th April 2014 to MOSL notifying appointment of an Adjudicating Officer as per SEBI regulations to hold inquiry and adjudge violation of SEBI Regulations; MOSL replied to the Show Cause Notice whereby SEBI granted us an opportunity of Inspection of Documents. Since all the documents requested by us were not covered we have requested to SEBI vide our letter dated June 23, 2015 to provide pending list of documents for inspection.

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